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This document presents a summary of the facility-wide groundwater monitoring conducted in July 2010. Included in the report are:

- Summary of the groundwater elevations and water level measurements taken for each of the wells sampled.
- Analytical summary tables presenting the analytes detected above the method detection limit for this monitoring event.
- QA/QC and data verification reports for the event.

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FINAL
FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

REPORT ON THE JULY 2010 SAMPLING EVENT

RAVENNA ARMY AMMUNITION PLANT,
RAVENNA, OHIO

MARC Contract Number W912QR-04-D-0036
Delivery Order 0006

Prepared for

U.S. Army Corps of Engineers
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January 28, 2011

FWGWMP July 2010 Final Sampling Event Report
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OHARNG – RTLS/ENV – Ohio Army National Guard Ravenna Training and Logistics Site/Environmental
RVAAP – Ravenna Army Ammunition Plant
USACE – U.S. Army Corps of Engineers
USAEC – U.S. Army Environmental Center
NGB – National Guard Bureau
EQM – Environmental Quality Management, Inc.

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LIST OF GENERAL ACRONYMS

ADR	Automatic Data Review
AOC	Area of Concern
BRAC	U.S. Army Base Realignment and Closure Office
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
DOD	Department of Defense
EQM	Environmental Quality Management, Inc.
EPA	Environmental Protection Agency
FWGWMP	Facility-Wide Groundwater Monitoring Plan
FWGWMPP	Facility-Wide Groundwater Monitoring Program Plan
FWSAP	Facility-Wide Sampling and Analysis Plan
GOCO	Government Owned, Contractor Operated
IDW	Investigative Derived Waste
IRP	Installation Restoration Program
LCS	Laboratory Control Sample
LCG	Louisville Chemistry Guidelines
MARC	Multiple Award Remediation Contract
MCL	Maximum Contaminant List
MDL	Method Detection Limit
MS/MSD	Matrix spike/matrix spike duplicate
NGB	National Guard Bureau
OHARNG	Ohio Army National Guard
PCB	Polychlorinated biphenyl
PQL	Practical Quantitation Limit
PRG	Preliminary Remediation Goal
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RVAAP	Ravenna Army Ammunition Plant
SRC	Site Related Contaminant
SVOC	Semi-volatile Organic Compound
TAL	Target Analyte List
TOC	Top of Casing
USACE	U.S. Army Corps of Engineers
USP&FO	United States Property and Fiscal Officer
VOC	Volatile Organic Compound

LIST OF AREA OF CONCERN ACRONYMS

B12	Building 1200
BKG	Background
CBL	C-Block
CBP	Central Burn Pits
CP	Cobbs Pond
DA2	Demolition Area #2
EBG	Erie Burning Grounds
FBQ	Fuze and Booster Quarry
LNW	Landfill North of Winklepeck
LL	Load Line
MBS	Mustard Burial Site
NACA	National Advisory Committee for Aeronautics
NTA	NACA Test Area
RQL	Ramsdell Quarry Landfill
WBG	Winklepeck Burning Grounds

SECTION 1

INTRODUCTION

1.1 Facility Description

Past Department of Defense (DOD) activities at the Ravenna Army Ammunition Plant (RVAAP) date to 1940 and include the manufacturing, loading, handling and storage of military explosives and ammunition. Until 1999, the RVAAP was identified as a 21,419-acre installation. The property boundary was resurveyed by the Ohio Army National Guard (OHARNG) over a two year period from 2002 and 2003 and the actual total acreage of the property was found to be 21,683.289 acres. As of February 2006, a total of 20,403 acres of the former 21,683 acre RVAAP have been transferred to the United States Property and Fiscal Officer (USP&FO) for Ohio for use by the OHARNG as a military training site. The current RVAAP consists of 1,280 acres in several distinct parcels scattered throughout the confines of the OHARNG Camp Ravenna Joint Military Training Center (Camp Ravenna). The RVAAP and Camp Ravenna are collocated on contiguous parcels of property and the Camp Ravenna perimeter fence completely encloses the remaining parcels of the RVAAP. Camp Ravenna is in northeastern Ohio within Portage and Trumbull Counties, approximately 4.8 kilometers (3 miles) east-northeast of the city of Ravenna and approximately 1.6 kilometers (1 mile) northwest of the city of Newton Falls (Figure 1-1). The RVAAP portions of the property are solely located within Portage County. Camp Ravenna (inclusive of the RVAAP) is a parcel of property approximately 17.7 kilometers (11 miles) long and 5.6 kilometers (3.5 miles) wide bounded by State Route 5, the Michael J. Kirwan Reservoir, and the CSX System Railroad on the south; Garret, McCormick, and Berry roads on the west; the Norfolk Southern Railroad on the north; and State Route 534 on the east (see Figures 1-1 and 1-2). Camp Ravenna is surrounded by several communities: Windham on the north; Garrettsville 9.6 kilometers (6 miles) to the northwest; Newton Falls 1.6 kilometers (1 mile) to the southeast; Charlestown to the southwest; and Wayland 4.8 kilometers (3 miles) to the south. When the RVAAP was operational Camp Ravenna did not exist and the entire 21,683-acre parcel was a government-owned, contractor-operated (GOCO) industrial facility. The RVAAP Installation Restoration Program (IRP) encompasses investigation and cleanup of past activities over the entire 21,683 acres of the former RVAAP and therefore references to the RVAAP in this document are considered to be inclusive of the historical extent of the RVAAP, which is inclusive of the combined acreages of the current Camp Ravenna and RVAAP, unless otherwise specifically stated.

1.2 Project Description

1.2.1 Historical Monitoring

In 2004 the U.S. Army and the Ohio EPA finalized the Facility-Wide Groundwater

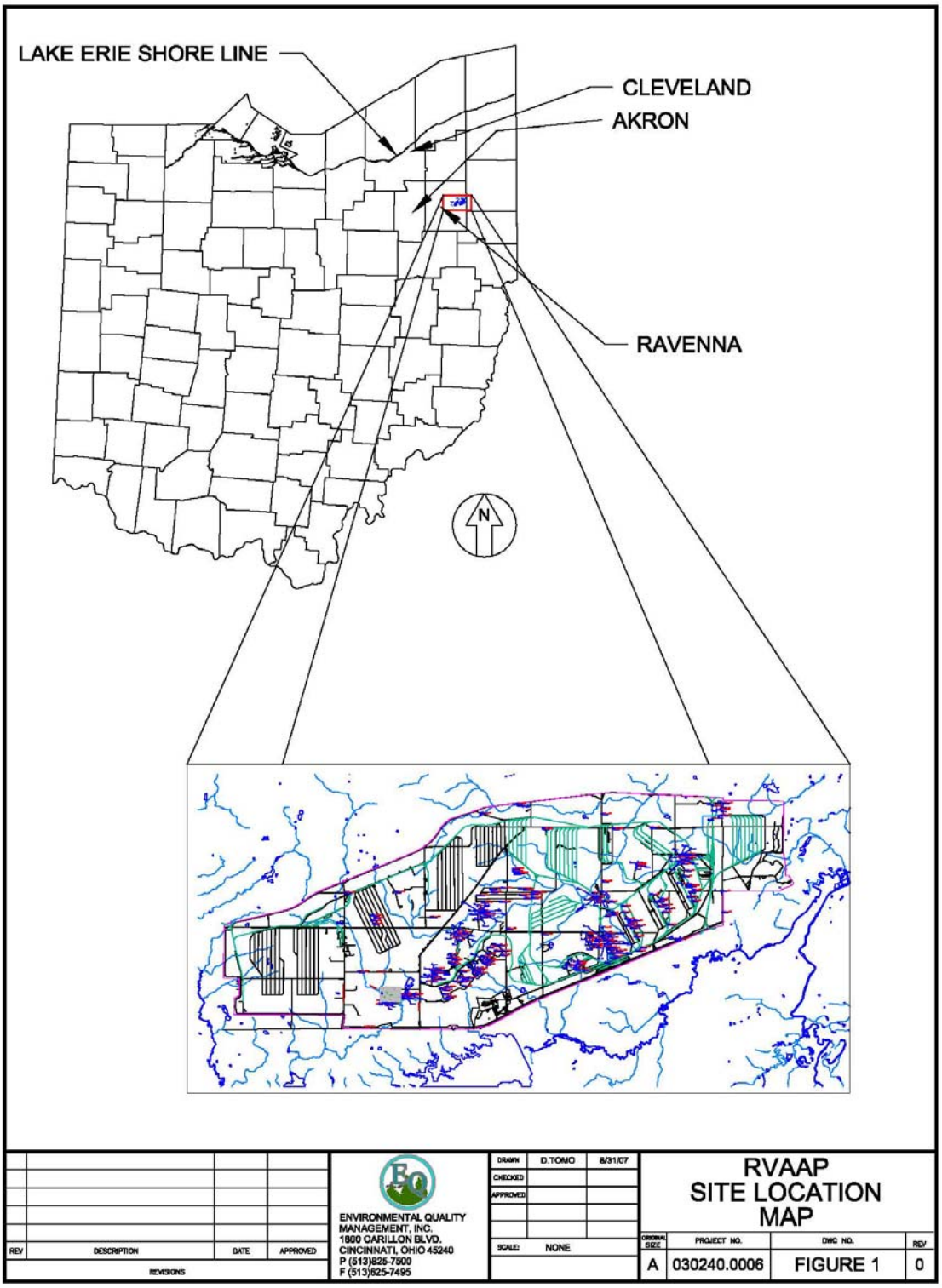


Figure 1-1 General Location Map

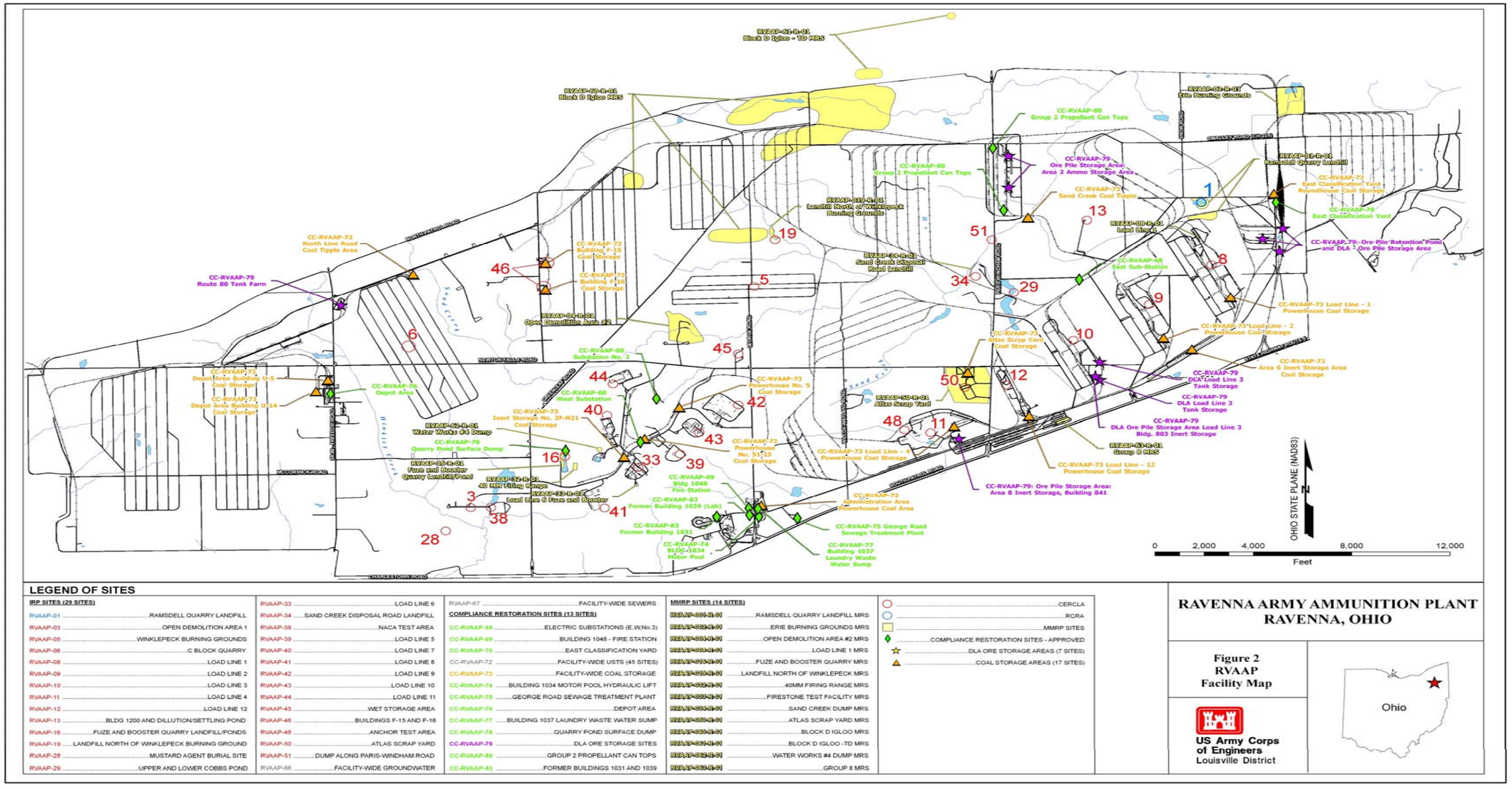


Figure 1-2 RVAAP Facility Map

Monitoring Program (FWGWMP) Plan which details the requirements of the program. The FWGWMP was initiated in 2005 with three consecutive quarters of FWGWMP well sampling. Quarterly sampling has continued through the current monitoring event. The initial FWGWMP wells identified for monitoring were sampled once every quarter, with the exception of the 5 Resource Conservation and Recovery Act (RCRA) wells that include Ramsdell Quarry Landfill (RQL) wells RQLmw-007, -008, and -009, and two Demolition (DA) Area 2 wells, DA2mw-DETmw-003 and DETmw-004. The RQL and DA2 wells are sampled twice a year, during the second (April) and fourth (October) sampling events.

Details of the program design and requirements are contained in the *RVAAP Facility-Wide Groundwater Monitoring Program Plan,* Portage Environmental, September 2004. This document contains the Facility-Wide Sampling and Analysis Plan (FWSAP), Site Safety and Health Plan, and Quality Assurance Project Plan addenda that pertain to the proposed work. Additional details pertaining to performance of field and laboratory activities are contained in the *RVAAP Facility-Wide Sampling and Analysis Plan/Quality Assurance Project Plan (FWSAP)*, SAIC, March 2001. As detailed in the FWGWMPP, the initial monitoring program consisted of the sampling of 36 wells specified in Table 4-1 of the FWGWMPP. Fourteen of these wells are "Background Wells"; the remainder are wells situated at various Areas of Concern (AOCs) at RVAAP. The first sampling event for this project was conducted in April 2005. The results of the previous FWGWMP sampling events are presented in the reports referenced in Section 4 of this report. The final assessment monitoring event for the initial well sampling and analysis was completed in October 2007.

On October 22, 2007 the United State Army Corps of Engineers (USACE) submitted to the Ohio Environmental Protection Agency (EPA) the *Draft Proposal to Update the Facility-Wide Ground Water Monitoring Program* (USACE October 2007) at the Ravenna Army Ammunition Plant. This proposal presented recommendations for modifications to the FWGWMP, the Director's Final Findings and Orders, and the Conceptual Plan in Appendix F of the Findings and Orders as presented below.

Section 3.1.2.2 of the FWGWMP Plan establishes a protocol for adding and removing wells from the FWGWMP: "Future wells installed as part of individual AOC investigations conducted under the ongoing Comprehensive Environmental Response Compensation and Liability Act (CERCLA) process at RVAAP will be evaluated for incorporation into the FWGWMP upon completion of at least four quarterly groundwater sampling events to be conducted as part of the Remedial Investigation (RI) phase at each AOC. The frequency of the initial sampling events may be other than quarterly if agreed upon by the Army and Ohio EPA". Based on this protocol the USACE notified the Ohio EPA on December 12, 2007 that the wells to be sampled would be changed effective with the January 2008 monitoring event. The Ohio EPA provided concurrence with this change in an email dated January 8, 2008. The Ohio EPA was notified of an additional change on February 27, 2008 increasing the number of wells to be sampled for the April 2008 event. The Ohio EPA was notified on March 21, 2008 that the number of FWGWMP wells to be sampled in April 2008 (and the July 2008, October 2008, and

January 2009 events) would be increased to 132 plus the 5 RCRA wells sampled semi-annually (in order to complete 4 quarters of sampling for each of the 132 wells.

Beginning with the April 2009 sampling event the remaining wells on the list contained in the *Draft Proposal to Update the Facility-Wide Ground Water Monitoring Program* (USACE October 2007) were sampled.

1.2.2 Current Monitoring

A revised list of wells to be sampled during 2010-2011 was submitted to the Ohio EPA in early 2010. The lists of wells to be sampled, as well as scheduling issues were discussed with the Ohio EPA in a telephone conference verified in a subsequent email on 26 May 2010. A copy of the email and the well sampling schedule for 2010-2011 is presented in Appendix A. The list of FWGWMP wells monitored for the July 2010 event is presented in Appendix B.

1.3 Scope of Work for the July 2010 Sampling Event

Environmental Quality Management, Inc. (EQM) was contracted (MARC Contract Number W912QR-04-D-0036) by the Louisville District USACE to conduct the FWGWMP monitoring program beginning in April 2007. The objective of this project is to continue quarterly monitoring under the RVAAP Facility-Wide Groundwater Monitoring Program. The following tasks were performed during the July 2010 sampling event in accordance with specifications contained in the FWGWMPP, the FWSAP, and the Scope of Work written by the USACE:

- Performed groundwater sampling at the 51 wells identified in Appendix B.
- Performed laboratory analysis for the collected samples.
- Verified, validated and reduced the laboratory analytical data produced for the event (exclusive of the quality assurance samples analyzed by RTI).
- Prepared the Investigative Derived Waste (IDW) Characterization and Disposal Report for the IDW collected during monitoring activities.
- Prepared and submitted the quarterly monitoring report for the sampling event.

1.4 Report Presentation

This report presents the results of the July 2010 sampling event. The report is structured in the following way:

- Section 1.0 – Introduction.
- Section 2.0 – Description of Project Activities. This section describes project-specific details not contained in the FWSAP and FWGWMPP on how the tasks described above were performed.

- Section 3.0 – Results of Investigation. The results of the sampling event are summarized, groundwater elevation measurements, analytical results, data verification/validation information.
- Section 4.0 – Summary of Results
- Section 5.0 – References.

The appendices contain the following items:

- Appendix A - Correspondence Documenting the Current Monitoring Well Schedule.
- Appendix B – List of Wells Sampled During the July 2010 Event.
- Appendix C – Water Level Measurements/Field Log Book and Purge Records/Daily Quality Control Reports.
- Appendix D – Data Verification Reports/Laboratory Data Sheets.
- Appendix E – Investigation-Derived Waste (IDW) Characterization and Disposal Plans.
- Appendix F – Reporting Limits that Currently Do Not Meet the RVAAP Quality Assurance Project Plan (QAPP) Practical Quantitation Limits (PQLs) and/or Region 9 Preliminary Remediation Goals (PRGs).
- Appendix G - Correspondence & Comment/Response Table

SECTION 2

PROJECT ACTIVITIES

2.1 Groundwater Level Monitoring

Depth to water from the top of the inner casing was measured in the 51 FWGWMP wells to be sampled on July 8 2010. Water level measurements were taken with a Herron Dipper-T or Enviro Inspector electronic water-level indicator. The depth to the bottom of the well from the top of the inner casing was also measured with the electronic water level indicator.

The results of the groundwater level monitoring for the FWGWMP wells sampled during this monitoring event are presented in Section 3.1 and Appendix C. The monitoring well location map, identified as Plate 1, is included with this report. Potentiometric maps created from groundwater measurements from all RVAAP monitoring wells in January 2010 are presented on Plates 2 and 3. The potentiometric maps were generated from the January 2010 water level measurements taken from all 237 facility wells and the six deep Sharon Conglomerate wells. These maps are updated on a yearly basis. The water levels from the quarterly events are not included in these plates. Additionally, the groundwater elevations from the new Sharon Conglomerate wells were evaluated and determined not to be representative of either the Homewood aquifer or the upper portion of the Sharon aquifer. These wells were installed with their screened intervals positioned at the basal portion of the Sharon Conglomerate sandstone. Therefore the groundwater elevations collected from these wells were used to determine the potentiometric contours for a separate map (Plate 4) as described below.

To determine if groundwater elevations of Sharon Conglomerate wells (as determined in January 2010) are representative of the Sharon or Homewood Aquifers, the groundwater elevation data are compared as indicated on the attached table.

As the table indicates the groundwater elevation of water in the Homewood Aquifer (well LL10mw-003) is more than 78 feet higher than the Sharon Conglomerate well (well SCFmw-1). This demonstrates that the Homewood Aquifer and Sharon Conglomerate are not representative of the same hydraulic unit. If in the same hydraulic unit, the water levels would be expected to be much the same.

There are five Sharon Conglomerate wells that are located through the Sharon (Sandstone) Aquifer. The groundwater elevations of the five Sharon Aquifer wells are 1.28 to 24.57 feet higher than the Sharon Conglomerate groundwater elevations at the same locations. The average elevation difference is over 9 feet. Again this groundwater elevation difference indicates that the Sharon Conglomerate and the Sharon Aquifer are not the same hydraulic unit.

It should be noted that the groundwater elevations from the deep wells are used for purging and sampling purposes and not necessarily for deep aquifer flow direction, however a separate potentiometric map has been produced to show flow direction for the deep wells. This potentiometric map for the Sharon Conglomerate wells is included as Plate 4.

Comparison of Groundwater Elevation, Sharon Conglomerate and Sharon and Homewood Aquifers

Well ID	Monitored Zone Groundwater Elevation (ft, msl)			Difference (ft)
	Sharon Conglomerate	Sharon Sandstone	Homewood	
SCFmw-1	1030.94	-	1109.29	+ 78.35
SCFmw-2	964.16	969.20	-	+ 5.04
SCFmw-3	948.98	950.26	-	+ 1.28
SCFmw-4	943.47	955.00 *	-	+ 11.53
SCFmw-5	947.85	952.52	-	+ 4.67
SCFmw-6	947.43	972.00 *	-	+ 24.57

All water-level elevations (ft, msl) are January 2010. Sharon Sandstone and Homewood water-level elevations are nearest well to physical location of Sharon Conglomerate Well except as noted (*). Elevation is from potentiometric map (Plate 3).
" + " indicates that Sharon Sandstone or Homewood elevation is higher

2.2 Groundwater Sampling

All identified quarterly monitoring wells were sampled between July 8-15, 2010. Wells were sampled using micropurge techniques in accordance with the specifications contained in the FWGWMPP and FWSAP. The wells were micropurged until certain groundwater parameters (i.e., temperature, specific conductivity, pH, and dissolved oxygen) had stabilized. The groundwater parameters were measured using a Horiba U-22 with flow cells or equivalent. Groundwater parameter measurements obtained during micropurging are presented in Appendix C.

High turbidity values (999 ntu) were noted at 4 of the Load Line 12 wells. These wells were:

LL12mw-113 LL12mw-128
Ll12mw-243 Ll12mw-244

These wells have historically been high turbidity wells. Three of these wells were redeveloped prior to sampling because of elevated sediment accumulation (i.e. >1-foot), however as discussed in Section 3.1.1 the wells never visibly cleared or had turbidity readings less than 999 ntu. It should be noted that high turbidity readings are not

necessarily and indicator of nonrepresentative (i.e., formation) groundwater as stated in the Ohio EPA Technical Guidance Manual for groundwater ***"Turbidity,*** *which is the visible presence of suspended mineral and organic particles in a ground water sample, also is not an indicator of ground water chemical stabilization and does not distinguish between stagnant casing water and formation water."* During the purging of these wells EQM continued purging after the normal stabilization parameters have reached stabilization (turbidity is not a stabilization parameter). Purging was continued in an attempt to reach turbidity values that are within 10% of each other. It should be noted that groundwater samples are filtered as part of the FWGWMP sampling, thereby reducing the effect of suspended particles in the groundwater.

Groundwater samples were collected with bladder pump micropurge equipment with the exception of LL1mw-067 and LL1mw-085 which were sampled using a Teflon bailer. Equipment and sampling details are contained in Appendix C. Groundwater samples were collected in laboratory supplied containers and stored in iced coolers for shipment in accordance with FWSAP and FWGWMPP specifications. All coolers were received by the laboratory at temperatures within the prescribed limits of the FWGWMP.

Filtered metals samples collected through the bladder pump used an inline 0.45 micron filter emptying directly into sample bottles containing nitric acid. For the samples collected using a bailer the sample was poured from the bailer into a decontaminated holding vessel and then filtered using a hand-pump through a 0.45 micron filter into sample bottles containing nitric acid. All sampling procedures for the filtered metals were conducted in accordance with Section 4.3.5 of the *Facility-Wide Sampling and Analysis Plan for Environmental Investigations at the Ravenna Army Ammunition Plant* March 2001.

2.3 Laboratory Analysis

Laboratory analyses on all primary samples and associated quality control samples were performed by TestAmerica Laboratories. Table 2-1 presents the analytical methods used to analyze the groundwater samples.

All quarterly groundwater samples were analyzed for the following parameters: explosives, propellants (nitrocellulose and nitroguanidine), cyanide, volatile organic compounds (VOCs), semi-volatile compounds (SVOCs), target analyte list (TAL) metals (filtered), pesticides, and polychlorinated biphenyls (PCBs). The Load Line 12 and Sharon Conglomerate Formation wells were also analyzed for nitrate/nitrites.

Quality control (QC) samples were collected from the following wells:

SCFmw-004 – Duplicate sample	SCFmw-003 – MS/MSD
LL1mw-065 – Duplicate Sample	LL1mw-064 – MS/MSD
LL2mw-265 – Duplicate Sample	LL2mw-261 – MS/MSD
LL3mw-234 – Duplicate Sample	LL3mw-232 – MS/MSD

LL12mw-107 – Duplicate Sample
LL12mw-245 – Duplicate Sample
LL12mw-088 – MS/MSD
LL12mw-128 – MS/MSD

Table 2-1 Analytical Methods

CONSTITUENTS	METHOD[1]
Polychlorinated Biphenyls (PCBs)	GC Semivolatile Organics (8082)
Pesticides	GC Semivolatile Organics (8081A)
Base/Neutrals and Acids (SVOCs)	GC/MS Semivolatile Organic (8270C)
Volatile Organic (VOCs)	GC/MS Volatile Organics (8260B)
Nitroguanidine (Propellants)	Organic Compounds by UV/HPLC (8330 modified)
Nitrate/Nitrite	General Chemistry (353.2)[2]
Nitroaromatics & Nitramines: (Explosives)	GC Semivolatile Organics Explosives (8330)
Nitrocellulose as N (Propellant)	General Chemistry (WS-WC-0050
Cyanide, (Total)	General Chemistry (9012A)
Metals (Magnesium, Manganese, Barium, Nickel, Potassium, Silver, Sodium, Vanadium, Chromium, Calcium, Cobalt, Copper, Arsenic, Lead, Selenium)	Inductively Coupled Plasma (6010B)
Metals (Antimony, Iron, Beryllium, Thallium, Zinc, Cadmium, Aluminum)	Inductively Coupled Plasma Mass Spectrometry (6020)
Metals (Mercury)	(7470A, Cold Vapor) - Liquid

1 = USEPA SW846
2 = EPA Methods for Chemical Analysis of Water and Waste

All samples were picked up from the facility and delivered to the laboratory in iced coolers by a TestAmerica courier under proper chain-of-custody procedures (Appendix D). Laboratory analyses on all quality assurance (QA) samples were performed by RTI Laboratories in Livonia Michigan. Six QA samples were collected for this sampling event from the same wells where the duplicate samples were collected.

All QA samples were shipped in iced coolers via overnight delivery service under proper chain-of-custody procedures.

Table 2-2 presents the QA Table summary for all samples collected for the July 2010 monitoring event. This table presents in tabular form all analyses and associated QA/QC. The Daily Quality Control Reports are presented in Appendix C.

Laboratory results are summarized in Section 3.2. Laboratory data sheets, including QA/QC information are contained in Appendix D.

2.4 Data Verification/Validation

Data from TestAmerica were verified in accordance with project specifications by EQM chemists Angye Dragotta, and Eric Corbin using the Automatic Data Review (ADR) program. Data validation/verification is summarized in Section 3.3. The Data Verification/Validation Summary Reports are presented in Appendix D.

2.5 Investigation Derived Waste

An Investigation Derived Waste (IDW) Report was prepared for the sampling and water level measurement activities discussed in section 3. Purge water was collected at each well location in 5-gallon buckets and transferred to 55-gallon drums located inside Building 1036. No more than four gallons were purged from any well. Instruments and equipment were decontaminated after purging and sampling each monitoring well. Decontamination fluids were collected in separate, AOC-designated 55-gallon drum stored inside Building 1036. Pending analysis of the monitoring well samples, IDW fluids will be stored in the 55-gallon drums until the IDW Report is approved. The IDW will then be disposed of in accordance with FWSAP requirements. The IDW Report is presented in Appendix E.

Table 2-2 QA Table for July 2010 Sampling Event

	Contractor Laboratory							Government Laboratory		Requested Laboratory Analysis					
Sample Locations	Primary Lab Sample ID	Date	Sample Type	Assoc. QC Dup Number	Assoc. QC Rinsate Number	Assoc. QC Trip Blank Number	MS / MSD	QA Lab Sample ID	Assoc. QC Trip Blank Number	VOCs	SVOCs	Explosives & Propellants	Pesticides / PCBs	Filtered Metals / Cyanide	Nitrate / Nitrite
LL2mw-059	FWGLL2mw-059C-1531-GW/GF	07/08/10	GW		EQUIPRinse1-1578	FWGTeam1-Trip				X	X	X	X	X	
LL2mw-060	FWGLL2mw-060C-1532-GW/GF	07/08/10	GW		EQUIPRinse1-1578	FWGTeam1-Trip				X	X	X	X	X	
LL3mw-232	FWGLL3mw-232C-1540-GW/GF	07/08/10	GW		EQUIPRinse1-1578	FWGTeam1-Trip	Yes			X	X	X	X	X	
LL3mw-234	FWGLL3mw-234C-1541-GW/GF	07/08/10	GW	DUP3-1568	EQUIPRinse1-1578	FWGTeam2-Trip		FWGLL3mw-234C-1575S-GW/GF	TRIP BLANK	X	X	X	X	X	
LL3mw-236	FWGLL3mw-236C-1542-GW/GF	07/08/10	GW		EQUIPRinse1-1578	FWGTeam1-Trip				X	X	X	X	X	
LL3mw-239	FWGLL3mw-239C-1543-GW/GF	07/08/10	GW		EQUIPRinse1-1578	FWGTeam2-Trip				X	X	X	X	X	
LL4mw-196	FWGLL4mw-196C-1544-GW/GF	07/08/10	GW		EQUIPRinse1-1578	FWGTeam2-Trip				X	X	X	X	X	
LL4mw-197	FWGLL4mw-197C-1545-GW/GF	07/08/10	GW		EQUIPRinse1-1578	FWGTeam1-Trip				X	X	X	X	X	
SCFmw-006	FWGSCFmw-006C-1520-GW/GF	07/08/10	GW		EQUIPRinse1-1578	FWGTeam2-Trip				X	X	X	X	X	X
LL2mw-262	FWGLL2mw-262C-1534-GW/GF	07/09/10	GW		EQUIPRinse1-1578	FWGTeam1-Trip				X	X	X	X	X	
LL2mw-263	FWGLL2mw-263C-1535-GW/GF	07/09/10	GW		EQUIPRinse1-1578	FWGTeam1-Trip				X	X	X	X	X	
LL2mw-266	FWGLL2mw-266C-1537-GW/GF	07/09/10	GW		EQUIPRinse1-1578	FWGTeam2-Trip				X	X	X	X	X	
LL2mw-267	FWGLL2mw-267C-1565-GW/GF	07/09/10	GW		EQUIPRinse1-1578	FWGTeam2-Trip				X	X	X	X	X	
LL12mw-088	FWGLL12mw-088C-1546-GW/GF	07/12/10	GW		EQUIPRinse2-1579	FWGTeam1-Trip	Yes			X	X	X	X	X	X
LL12mw-113	FWGLL12mw-113C-1548-GW/GF	07/12/10	GW		EQUIPRinse2-1579	FWGTeam1-Trip				X	X	X	X	X	X
LL12mw-153	FWGLL12mw-153C-1550-GW/GF	07/12/10	GW		EQUIPRinse2-1579	FWGTeam2-Trip				X	X	X	X	X	X
LL12mw-154	FWGLL12mw-154C-1551-GW/GF	07/12/10	GW		EQUIPRinse2-1579	FWGTeam2-Trip				X	X	X	X	X	X
LL12mw-183	FWGLL12mw-183C-1553-GW/GF	07/12/10	GW		EQUIPRinse2-1579	FWGTeam1-Trip				X	X	X	X	X	X
LL12mw-188	FWGLL12mw-188C-1558-GW/GF	07/12/10	GW		EQUIPRinse2-1579	FWGTeam1-Trip				X	X	X	X	X	X
LL12mw-242	FWGLL12mw-242C-1560-GW/GF	07/12/10	GW		EQUIPRinse2-1579	FWGTeam3-Trip				X	X	X	X	X	X
LL12mw-245	FWGLL12mw-245C-1563-GW/GF	07/12/10	GW	DUP5-1570	EQUIPRinse2-1579	FWGTeam3-Trip		FWGLL12mw-245C-1577S-GW/GF	TRIP BLANK	X	X	X	X	X	X
LL2mw-265	FWGLL2mw-265C-1536-GW/GF	07/12/10	GW	DUP2-1567	EQUIPRinse2-1579	FWGTeam2-Trip		FWGLL2mw-265C-1574S-GW/GF	TRIP BLANK	X	X	X	X	X	
LL12mw-107	FWGLL12mw-107C-1547-GW/GF	07/13/10	GW	DUP4-1569	EQUIPRinse3-1580	FWGTeam3-Trip		FWGLL12mw-107C-1576S-GW/GF	TRIP BLANK	X	X	X	X	X	X
LL12mw-128	FWGLL12mw-128C-1549-GW/GF	07/13/10	GW		EQUIPRinse3-1580	FWGTeam1-Trip	Yes			X	X	X	X	X	X
LL12mw-182	FWGLL12mw-182C-1552-GW/GF	07/13/10	GW		EQUIPRinse3-1580	FWGTeam3-Trip				X	X	X	X	X	X
LL12mw-184	FWGLL12mw-184C-1554-GW/GF	07/13/10	GW		EQUIPRinse3-1580	FWGTeam3-Trip				X	X	X	X	X	X
LL12mw-185	FWGLL12mw-185C-1555-GW/GF	07/13/10	GW		EQUIPRinse3-1580	FWGTeam3-Trip				X	X	X	X	X	X
LL12mw-186	FWGLL12mw-186C-1556-GW/GF	07/13/10	GW		EQUIPRinse3-1580	FWGTeam2-Trip				X	X	X	X	X	X
LL12mw-187	FWGLL12mw-187C-1557-GW/GF	07/13/10	GW		EQUIPRinse3-1580	FWGTeam1-Trip				X	X	X	X	X	X
LL12mw-189	FWGLL12mw-189C-1559-GW/GF	07/13/10	GW		EQUIPRinse3-1580	FWGTeam2-Trip				X	X	X	X	X	X
LL12mw-243	FWGLL12mw-243C-1561-GW/GF	07/13/10	GW		EQUIPRinse3-1580	FWGTeam1-Trip				X	X	X	X	X	X
LL12mw-244	FWGLL12mw-244C-1562-GW/GF	07/13/10	GW		EQUIPRinse3-1580	FWGTeam1-Trip				X	X	X	X	X	X
LL12mw-246	FWGLL12mw-246C-1564-GW/GF	07/13/10	GW		EQUIPRinse3-1580	FWGTeam3-Trip				X	X	X	X	X	X
SCFmw-003	FWGSCFmw-003C-1517-GW/GF	07/13/10	GW		EQUIPRinse3-1580	FWGTeam2-Trip	Yes			X	X	X	X	X	X
LL1mw-064	FWGLL1mw-064C-1521-GW/GF	07/14/10	GW		EQUIPRinse4-1581	FWGTeam3-Trip	Yes			X	X	X	X	X	
LL1mw-065	FWGLL1mw-067C-1522-GW/GF	07/14/10	GW	DUP1-1566	EQUIPRinse4-1581	FWGTeam1-Trip		FWGLL1mw-067C-1573S-GW/GF	TRIP BLANK	X	X	X	X	X	
LL1mw-067	FWGLL1mw-067C-1523-GW/GF	07/14/10	GW		EQUIPRinse4-1581	FWGTeam1-Trip				X	X	X	X	X	
LL1mw-078	FWGLL1mw-078C-1524-GW/GF	07/14/10	GW		EQUIPRinse4-1581	FWGTeam3-Trip				X	X	X	X	X	
LL1mw-080	FWGLL1mw-080C-1525-GW/GF	07/14/10	GW		EQUIPRinse4-1581	FWGTeam1-Trip				X	X	X	X	X	
LL1mw-081	FWGLL1mw-081C-1526-GW/GF	07/14/10	GW		EQUIPRinse4-1581	FWGTeam3-Trip				X	X	X	X	X	
LL1mw-083	FWGLL1mw-083C-1528-GW/GF	07/14/10	GW		EQUIPRinse4-1581	FWGTeam3-Trip				X	X	X	X	X	
LL1mw-084	FWGLL1mw-084C-1529-GW/GF	07/14/10	GW		EQUIPRinse4-1581	FWGTeam2-Trip				X	X	X	X	X	
SCFmw-001	FWGSCFmw-001C-1515-GW/GF	07/14/10	GW		EQUIPRinse4-1581	FWGTeam2-Trip				X	X	X	X	X	X
SCFmw-002	FWGSCFmw-002C-1516-GW/GF	07/14/10	GW		EQUIPRinse4-1581	FWGTeam2-Trip				X	X	X	X	X	X
LL1mw-082	FWGLL1mw-082C-1527-GW/GF	07/15/10	GW		EQUIPRinse5-1582	FWGTeam1-Trip				X	X	X	X	X	
LL1mw-085	FWGLL1mw-085C-1530-GW/GF	07/15/10	GW		EQUIPRinse5-1582	FWGTeam1-Trip				X	X	X	X	X	
LL2mw-261	FWGLL2mw-261C-1533-GW/GF	07/15/10	GW		EQUIPRinse5-1582	FWGTeam3-Trip	Yes			X	X	X	X	X	
LL2mw-269	FWGLL2mw-269C-1538-GW/GF	07/15/10	GW		EQUIPRinse5-1582	FWGTeam1-Trip				X	X	X	X	X	
LL2mw-270	FWGLL2mw-270C-1539-GW/GF	07/15/10	GW		EQUIPRinse5-1582	FWGTeam3-Trip				X	X	X	X	X	
SCFmw-004	FWGSCFmw-004C-1518-GW/GF	07/15/10	GW	DUP6-1571	EQUIPRinse5-1582	FWGTeam2-Trip		FWGSCFmw-004C-1572S-GW/GF	TRIP BLANK	X	X	X	X	X	X
SCFmw-005	FWGSCFmw-005C-1519-GW/GF	07/15/10	GW		EQUIPRinse5-1582	FWGTeam2-Trip				X	X	X	X	X	X

SECTION 3

RESULTS

3.1 Groundwater Elevations

Groundwater elevations for the 14 FWGWMP quarterly wells were obtained on July 8 2010 as described in Section 2.1. The groundwater elevations for the FWGWMP wells are presented in Table 3-1. The monitoring well location map, identified as Plate 1, is included with this report. Facility-wide groundwater potentiometric maps (Plates 2, and 3) based on all RVAAP groundwater measurements taken during the January 2010 event are also included in this report.

3.1.1 Sediment Accumulation

EQM has reviewed the historical sediment accumulation footages and the description of bottom for the wells currently being sampled. Based on this evaluation the following wells were redeveloped during the during the July 7-8, 2010 timeframe:

LL12mw-113
LL12mw-186
LL12mw-243
LL12mw-244
Ll12mw-245

The results of the redevelopment activities are presented in Table 3-2. As noted in Section 2.2 the wells never visibly cleared or had turbidity readings less than 999 ntu. However the sediment levels in the wells were reduced such that the well depths were restored to the reported construction depths. The problem of high turbidity is an ongoing issue at Load Line 12. Several of the wells have been redeveloped more than once. While the wells continue to exhibit high turbidity even after redevelopment it should be noted that high turbidity readings are not necessarily an indicator of nonrepresentative (i.e., formation) groundwater as stated in the Ohio EPA Technical Guidance Manual for groundwater ***"Turbidity****, which is the visible presence of suspended mineral and organic particles in a ground water sample, also is not an indicator of ground water chemical stabilization and does not distinguish between stagnant casing water and formation water*."

Additionally, in order to minimize turbid samples, low flow purging and sampling techniques are used. The pumps are suspended at least one foot above the bottom of the well to avoid agitation of the sediment potentially accumulating in the well sump. EQM will continue to monitor any high turbidity readings and make a determination for future redevelopment and other evaluation of any affected wells.

Table 3-1 July 2010 FWGMP Monitoring Well Measurements

Well	Monitoring Zone	Top of Casing (TOC) Elevation[a] (ft)	2009 Annual Groundwater Elevation (Jan/2009) (ft)	2010 Annual Groundwater Elevation (Jan/2010) (ft)	2010 Quarterly Groundwater Elevation (Jul/2010) (ft)	Depth to Water (ft below TOC) Jul/2010	Reported Construction Depth from TOC[a] (ft)	Jul/2010 Measured Depth from TOC (ft)	Jul/2010 Sediment Accumulation (ft)	Jul/2010 Description of Bottom
Loadline 1										
LL1mw-064	Unconsolidated	935.1	932.95	931.96	932.61	2.49	21.1	21.56	-0.46	Hard
LL1mw-065	Unconsolidated	944.41	932.47	931.15	931.62	12.79	23.4	23.66	-0.26	Hard
LL1mw-067	Sharon	980.36	959.42	958.01	960.66	19.70	25.6	25.68	-0.08	Hard
LL1mw-078	Sharon	995.84	961.88	960.01	962.60	33.24	41.1	40.9	0.20	Hard
LL1mw-080	Sharon	996.27	985.65	983.56	984.31	11.96	22.0	22.34	-0.34	Hard
LL1mw-081	Sharon	998.92	967.02	965.26	968.48	30.44	41.9	41.97	-0.07	Hard
LL1mw-082	Sharon	1006.45	975.1	969.68	977.76	28.69	41.8	41.49	0.31	Hard
LL1mw-083	Sharon	995.2	960.2	958.23	961.29	33.91	41.7	41.4	0.30	Hard
LL1mw-084	Sharon	998.73	969.48	966.17	969.30	29.43	39.3	39.02	0.28	Hard
LL1mw-085	Sharon	996.84	960.67	958.44	960.51	36.33	44.7	45.19	-0.49	Hard
Loadline 2										
LL2mw-059	Sharon	966.67	952.09	951.51	952.74	13.93	21.8	21.86	-0.06	Hard
LL2mw-060	Sharon	961.57	951.61	950.26	950.66	10.91	20.9	20.76	0.14	Hard
LL2mw-261	Sharon	1011.4	1004.48	1004.36	1,004.07	7.33	21.9	22.42	-0.52	Hard
LL2mw-262	Sharon	1012.62	1003.81	1002.99	1,003.71	8.91	22.3	22.6	-0.30	Hard
LL2mw-263	Sharon	1011.47	1003.32	1002.95	1,002.16	9.31	23.0	23.4	-0.40	Hard
LL2mw-265	Sharon	961.24	951.42	949.94	950.70	10.54	23.8	24.38	-0.58	Hard
LL2mw-266	Sharon	1016.28	1004.38	1003.84	1,003.89	12.39	22.2	22.67	-0.47	Hard
LL2mw-267	Sharon	1014.81	1005.81	1005.22	1,004.43	10.38	22.0	22.66	-0.66	Hard
LL2mw-269	Sharon	1011.62	994.95	994.73	994.07	17.55	29.4	30.23	-0.83	Hard
LL2mw-270	Sharon	1010.18	1002.56	1002.23	1,000.47	9.71	20.3	22.36	-2.06	Hard
Loadline 3										
LL3mw-232	Sharon	1000.41	978.28	977.35	980.88	19.53	38.8	39.77	-0.97	Medium
LL3mw-234	Sharon	1006.56	996.45	996.69	995.87	10.69	22.1	22.64	-0.54	Hard
LL3mw-236	Sharon	1011.17	993.88	992.45	994.73	16.44	26.2	26.55	-0.35	Hard
LL3mw-239	Sharon	1003.5	978.55	976.89	978.28	25.22	36.8	36.93	-0.13	Medium
Loadline 4										
LL4mw-196	Unconsolidated	984.55	971.83	970.98	970.77	13.78	21.4	21.76	-0.36	Hard
LL4mw-197	Unconsolidated	985.46	971.30	970.60	970.72	14.74	22.7	23.58	-0.88	Hard
Loadline 12										
LL12mw-088	Unconsolidated	981.06	973.62	973.29	974.64	6.42	27.1	27.38	-0.28	Soft
LL12mw-107	Unconsolidated	980.15	970.30	969.64	971.26	8.89	33.1	33.65	-0.55	Hard
LL12mw-113	Sharon Shale	980.18	975.04	974.84	973.47	6.71	25.0	25.25	-0.25	Soft
LL12mw-128	Unconsolidated	978.24	968.12	966.35	968.50	9.74	33.3	33.99	-0.69	Medium
LL12mw-153	Unconsolidated	977.85	971.62	971.17	971.85	6	25.0	25.05	-0.05	Hard
LL12mw-154	Unconsolidated	979.06	970.12	969.4	970.35	8.71	28.7	28.66	0.04	Hard
LL12mw-182	Unconsolidated	984.42	974.18	973.47	974.44	9.98	37.7	38.1	-0.40	Medium
LL12mw-183	Sharon Shale	982.98	970.35	969.46	970.80	12.18	36.0	36.28	-0.28	Hard
LL12mw-184	Unconsolidated	983.16	970.45	969.52	970.80	12.36	31.2	31.34	-0.14	Hard
LL12mw-185	Unconsolidated	981.31	973.07	972.32	974.36	6.95	23.2	23.23	-0.03	Hard

Table 3-1 July 2010 FWGMP Monitoring Well Measurements

Well	Monitoring Zone	Top of Casing (TOC) Elevation[a] (ft)	2009 Annual Groundwater Elevation (Jan/2009) (ft)	2010 Annual Groundwater Elevation (Jan/2010) (ft)	2010 Quarterly Groundwater Elevation (Jul/2010) (ft)	Depth to Water (ft below TOC) Jul/2010	Reported Construction Depth from TOC[a] (ft)	Jul/2010 Measured Depth from TOC (ft)	Jul/2010 Sediment Accumulation (ft)	Jul/2010 Description of Bottom
LL12mw-186	Sharon Shale	978.31	972.97	972.59	971.06	7.25	21	21	0.00	Hard
LL12mw-187	Unconsolidated	979.94	970.42	969.53	970.29	9.65	29.4	29.89	-0.49	Hard
LL12mw-188	Unconsolidated	980.63	976.45	976.53	974.94	5.69	22.2	22.08	0.12	Medium
LL12mw-189	Sharon Shale	978.04	974.62	974.79	971.84	6.2	19.6	19.95	-0.35	Medium
LL12mw-242	Unconsolidated	981.2	972.68	972.01	971.95	9.25	28.3	28.75	-0.45	Medium
LL12mw-243	Unconsolidated	980.79	971.16	970.76	972.29	8.5	25.7	25.4	0.30	Soft
LL12mw-244	Unconsolidated	980.65	970.54	969.65	970.40	10.25	32.1	32.65	-0.55	Soft
LL12mw-245	Unconsolidated	980.04	971.11	971.16	972.40	7.64	30.5	30.29	0.21	Medium
LL12mw-246	Unconsolidated	984.83	967.87	966.62	968.49	16.34	34.3	34.98	-0.68	Medium
SCFmw-001	Sharon Congolmerate	1,120.71	NM	1,030.94	1,031.65	89.06	213.61	215.90	-2.29	Hard
SCFmw-002	Sharon Congolmerate	984.56	NM	964.17	965.39	19.17	149.65	149.85	-0.20	Hard
SCFmw-003	Sharon Congolmerate	958.47	NM	948.98	949.68	8.79	139.65	137.90	1.75	Hard
SCFmw-004	Sharon Congolmerate	944.17	NM	943.47	943.46	0.71	112.47	112.50	-0.03	Hard
SCFmw-005	Sharon Congolmerate	960.80	NM	947.85	949.32	11.48	156.41	156.39	0.02	Hard
SCFmw-006	Sharon Congolmerate	965.92	NM	947.43	947.92	18	88.32	88.35	-0.03	Hard

a = Elevations are in feet above mean sea level (amsl)
NM = New wells added to the sampling schedule, not measured in all quarters
Note: CPmw-002 was an artesian well with a negative water level.

Table 3.2. July 2010 Redevelopment Results

Well ID	Reported Construction Depth (ft)	January 2009 Well Depth Measurement (ft)	July 09 Well Depth Measurement (ft)	January 2010 Well Depth Measurement (ft)	July 2010 Well Depth Measurement Pre-Redevelopment (ft)	July 2010 Well Depth Measurement Post-Redevelopment (ft)	Current Description of Bottom/Comments
LL12mw-113	25.0	19.62	25.1	21.42	21.41	25.15	gray silt, high turbidity
LL12mw-186	21.0	20.99	N/A	20.68	20.8	21.11	brown then gray silt, pumps dry but fast recharge
LL12mw-243	25.7	24.65	25.86	25.38	25.54	25.86	hard, pumps dry, gray silt, high turbidity
LL12mw-244	32.1	29.34	32.77	31.94	31.92	32.2	gray silt, high turbidity
LL12mw-245	30.5	29.98	30.43	30.15	30.1	30.48	pumps dry, gray silt, high turbidity

3.2 Summary of Analytical Results

Summaries of laboratory analytical results are presented in Tables 3-3, 3-4, 3-6, 3-7, and 3-8. Appendix D presents the Laboratory Data Sheets**.** A brief summary of the detected compounds and elements are presented in the following sub-sections. The data presented in the tables are the validated and verified data. Data verification and validation is discussed in Section 3.3 and Appendix D. While reviewing the summary of analytical results please note the following:

- The screening levels referenced in the analytical summary tables are the 40 CFR Part 141 National Primary Drinking Water Regulations, Maximum Contaminant Levels (MCLs); and the Region 9 Preliminary Remediation Goals (PRGs) for tap water. MCLs are referenced as the screening criteria (for constituents not having an MCL, the Region 9 PRG is used). Also used as screening levels for metals are the RVAAP Facility-Wide Background Criteria referenced in Table 3-5.

- As discussed in Section 3.3, under the data validation process data are qualified by EQM's validator following the guidelines and qualifier requirements set forth by the FWSAP, QAPP and the current Louisville Chemistry Guidelines (LCG) (i.e., data are either accepted or requalified per the requirements of the LCG). This results in the flags designated by EQM sometimes differing from those in the laboratory data sheets. The flags designated by the validator override any laboratory flagging of the data by the laboratory. For a complete explanation of the data qualifiers used for each constituent refer to Section 3.3 and to the Data Verification Summary Reports found in Appendix D.

- Tables 3-3, 3-4, 3-6, 3-7, and 3-8 now contain a column comparing the analytical results to the USEPA Regional Screening Level (RSL) Summary Table (May 2010). This table was developed by the USEPA to replace the Region 9 Preliminary Remediation Goals (PRGs) and The Region 3 Risk Based Cleanup (RBC) table. At this time the RSLs are presented for informational purposes only; however, should be adopted shortly. The Region 9 PRGs were used as the facility screening criteria as of the time of this publication.

- For purposes of consistency, all detected concentrations that are elevated above both the method detection limit (MDL) and the above referenced screening levels are called out in the following text. In the tables, the compounds and elements that were detected above the method detection limit are presented in bold numbers. This includes constituents flagged as estimated.

- Several analytical methods used to analyze a number of explosives, VOCs, metals, SVOCs, and pesticides currently do not meet the RVAAP QAPP reporting limits or Region 9 preliminary remediation goals (PRGs). Tables listing the reporting limits that currently do not meet the RVAAP QAPP PQLs and/or Region 9 PRG levels are presented in Appendix F.

3.2.1 Explosives and Propellants

Explosive and propellant compound analytical results are summarized in Table 3-3. The following compounds were detected at concentrations above the method detection limits:

- 1,3,5-Trinitrobenzene – LL1mw-067 (0.038 µg/L J B), LL1mw-078 (0.47 µg/L J B), LL1mw-080 µg/L J) LL1mw-083 (9.2 µg/L J), LL1mw-084 (5.9 µg/L J), LL2mw-059 (0.11 µg/L), LL3mw-236 (0.032 µg/L J), LL3mw-239 (0.34 µg/L J), LL12mw-107 (0.058 µg/L J), LL12mw-182 (0.031 µg/L J), LL12mw-245 (0.057 µg/L J). There is no MCL for 1,3,5-Trinitrobenzene. The Region 9 PRG is 1,100 µg/L.

- 1,3-Dinitrbenzene – LL1mw-080 (0.93 µg/L), LL1mw-084 (0.37 µg/L J). There is no MCL for 1,3-Dinitrobenezene. The Region 3 PRG is 3.6 µg/L.

- 2,4,6-Trinitotoluene –LL1mw -080 (0.92 µg/L), LL1mw-083 (5.0 µg/L J), LL1mw-084 (9.2 µg/L J), LL2mw-261 (0.058 µg/L J), LL2mw-267 (0.27 µg/L), LL3mw-236 (0.31 µg/L J), LL3mw-239 (0.26 µg/L J). There is no MCL for 2,6-Trinitrotoluene. The Region 9 PRG is 2.2 µg/L.

- 2,4-Dinitotoluene – LL1mw-080 (0.71 µg/L), LL1mw-081 (0.058 µg/L J B), LL1mw-083 (3.1 µg/L J), LL1mw-084 (1.8 µg/L J), LL2mw-059 (0.25 µg/L), LL3mw-239 (0.11 µg/L). There is no MCL for 2,4-Dinitrotoluene. The Region 9 PRG is 73 µg/L.

- 2-Amino-4,6-dintirotoluene – LL1mw-080 (5.6 µg/L), LL1mw-081 (1.6 µg/L), LL1mw-083 (16 µg/L J), LL1mw-084 (14 µg/L J), LL2mw-059 (0.31 µg/L), LL2mw-060 (0.45 µg/L), LL2mw-267 (1.3 µg/L), LL3mw-234 (0.41 µg/L J), LL3mw-236 (0.17 µg/L), LL3mw-239 (0.63 µg/L). There is no MCL or Region 9 PRG for 2-Amino-4,6-dintirotoluene.

- 4-Amino-2,6-dintirotoluene – LL1mw-080 (7.9 µg/L), LL1mw-081 (2.2 µg/L). LL1mw-083 (36 µg/L J), LL1mw-084 (32 µg/L J), LL2mw-059 (0.29 µg/L), LL2mw-060 (0.54 µg/L), LL2mw-267 (1.1 µg/L), LL3mw-234 (0.78 µg/L J), LL3mw-236 (0.33 µg/L), LL3mw-239 (0.95 µg/L). There is no MCL or Region 9 PRG for 4-Amino-2,6-dintirotoluene.

- 2,6-Dinitotoluene – LL1mw-080 (0.89 µg/L J), LL1mw-083 (1.3 µg/L J), LL1mw-084 (0.82 µg/L J), LL3mw-234 (0.062 µg/L J). There is no MCL for 2,6-Dinitrotoluene. The Region 9 PRG is 36 µg/L.

- 2-Nitrotoluene – LL1mw-083 (0.18 µg/L J). There is no MCL for 2-Nitrotoluene. The Region 9 PRG is 0.049 µg/L.

- 4-Nitrotoluene – SCFmw-006 (0.18 µg/L J), LL1mw-084 (0.18 µg/L J). There is no MCL for 4-Nitrooluene. The Region 9 PRG is 0.66 µg/L.

- Nitroglycerine – SCFmw-002 (0.37 µg/L J). There is no MCL for Nitroglycerine. The Region 9 PRG is 4.8 µg/L.

- HMX – LL1mw-081 (0.44 µg/L B), Ll1mw-083 (0.061 µg/L J B), LL1mw-084 (0.25 µg/L J B), LL2mw-059 (0.14 µg/L J B), LL2mw-262 (0.078 µg/L J B), LL2mw-263 (0.078 µg/L J B), LL2mw-267 (1.1 µg/L), LL3mw-234 (0.083 µg/L J B), LL3mw-239 (0.19 µg/L B). LL4mw-197 (0.041 µg/L J B), LL12mw-153 (0.055 µg/L J), LL12mw-188 (0.052 µg/L J). There is no MCL for HMX. The Region 9 PRG is1800 µg/L).

- RDX – LL1mw-078 (0.095 µg/L J), LL1mw-080 (88 µg/L J), LL1mw-081 (1.0 µg/L), LL1mw-084 (0.76 µg/L J), LL2mw-267 (1.1 µg/L), LL3mw-234 (0.58 µg/L J), LL3mw-239 (1.7 µg/L), LL12mw-188 (0.067 µg/L J). There is no MCL for RDX. The Region 9 PRG is 0.61 µg/L.

- Tetryl – LL2mw-270 (0.07 µg/L J B), LL12mw-107 (0.074 µg/L J), LL12mw-182 (0.068 µg/L J), LL12mw-184 (0.055 µg/L J), LL12mw-185 (0.075 µg/L J), LL12mw-186 (0.054 µg/L J), LL12mw-189 (0.059 µg/L J), LL12mw-242 (0.057 µg/L J B). There is no MCL for Tetryl. The Region 9 PRG is 360 µg/L.

- Nitrate/Nitrite – LL12mw-088 (0.02 mg/L J), LL12mw-107 (0.2 mg/L B), LL12 mw-113 (0.2 mg/L), LL12mw-182 (0.03 mg/L J B), LL12mw-184 (0.07 mg/L J B), LL12mw-185 (160 mg/L J), LL12mw-186 (0.04 mg/L J B), LL12mw-187 (1400 mg/L), LL12mw-188 (0.2 mg/L), LL12mw-189 (0.07 mg/L J B), LL12mw-244 (0.07 mg/L J B), LL12mw-245 (0.1 mg/L), LL12mw-246 (0.08 mg/L J B). The MCL and the Region 9 PRG for Nitrite are both 1.0 mg/L. The MCL and Region 9 PRG for Nitrate are 10 mg/L

- Nitrocellulose – LL12mw-185 (0.54 mg/L), LL12mw-187 (5.7 mg/L), LL12mw-189 (0.12 mg/L J). There is no MCL or Region PRG for nitrocellulose.

As shown in Table 3-3, the following explosives or propellants were detected at levels above the MCL or Region 9 PRGs during the July 2010 sampling:

- 2,4,6-Trinitotoluene at a concentration exceeding the Region 9 PRG of 2.2 µg/L at LL1mw-083 (5.0 µg/L J), LL1mw-084 (9.2 µg/L J).

- 2-Nitrotoluene – at a concentration exceeding the Region 9 PRG of 0.049 at LL1mw-083 (0.18 µg/L J).

- RDX at a concentration exceeding the Region 9 PRG of 0.61 µg/L at LL1mw-080 (88 µg/L J), LL1mw-081 (1.0 µg/L), LL1mw-084 (0.76 µg/L J), LL2mw-267 (1.1 µg/L), LL3mw-239 (1.7 µg/L).

- Nitrate/Nitrite at a concentration exceeding the Region 9 PRG of 1mg/L at LL12mw-185 (160 mg/L J) and LL12mw-187 (1400 mg/L).

Table 3-3. FWGWMP July 2010 Explosive and Propellant Analytical Results

Station ID					SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-001-1515-GW	FWGSCFmw-002-1516-GW	FWGSCFmw-003-1517-GW	FWGSCFmw-004-1518-GW	FWGSCFmw-005-1519-GW	FWGSCFmw-006-1520-GW
Date Collected					7/14/2010	7/14/2010	7/13/2010	7/15/2010	7/15/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.11 U	0.10 U	0.10 U	0.098 U	0.10 U	0.11 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.11 U	0.10 U	0.10 U	0.098 U	0.10 U	0.11 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.11 U	0.10 U	0.10 U	0.098 U	0.10 U	0.11 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.11 U	0.10 U	0.10 U	0.098 U	0.10 U	0.11 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.11 U	0.10 U	0.10 U	0.098 U	0.10 U	0.11 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.11 U	0.10 U	0.10 U	0.098 U	0.10 U	0.11 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.53 U	0.52 U	0.50 U	0.49 U	0.52 U	0.54 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.53 U	0.52 U	0.50 U	0.49 U	0.52 U	0.54 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.11 U	0.10 U	0.10 U	0.098 U	0.10 U	0.11 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.53 U	0.52 U	0.50 U	0.49 U	0.52 U	**0.18 J**
HMX	µg/L	NS	1800	1800	0.11 U	0.10 U	0.10 U	0.098 U	0.10 U	0.11 U
Nitrate-Nitrite	mg/L	1	1	3	0.02 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	µg/L	NS	3.4	0.12	0.11 U	0.10 U	0.10 U	0.098 U	0.10 U	0.11 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.69 U	**0.37 J**	0.65 U	0.64 U	0.68 U	0.70 U
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	20 U	20 UJ	20 UJ	20 U
PETN	µg/L	NS	NS	NS	0.69 U	0.67 U	0.65 U	0.64 U	0.68 U	0.70 U
RDX	µg/L	NS	0.61	0.61	0.11 U	0.10 U	0.10 U	0.098 U	0.10 U	0.11 U
Tetryl	µg/L	NS	360	150	0.11 U	0.10 U	0.10 U	0.098 U	0.10 U	0.11 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3. FWGWMP July 2010 Explosive and Propellant Analytical Results

Station ID					LL1mw-064	LL1mw-065	LL1mw-067	LL1mw-078	LL1mw-080	LL1mw-081
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-064C-1521-GW	FWGLL1mw-065C-1522-GW	FWGLL1mw-067C-1523-GW	FWGLL1mw-078C-1524-GW	FWGLL1mw-080C-1525-GW	FWGLL1mw-081C-1526-GW
Date Collected					7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.10 U	0.099 U	**0.038 JB**	**0.047 JB**	**1.3 J**	0.097 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.10 U	0.099 U	0.10 U	0.11 U	**0.93**	0.097 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.10 U	0.099 U	0.10 U	0.11 U	**0.92**	0.097 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.10 U	0.099 U	0.10 U	0.11 U	**0.71**	**0.058 JB**
2,6-Dinitrotoluene	µg/L	NS	36	37	0.10 U	0.099 U	0.10 U	0.11 U	**0.89**	0.097 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.10 U	0.099 U	0.10 U	0.11 U	**5.6**	**1.6**
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.50 U	0.50 U	0.52 U	0.54 U	0.50 U	0.48 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.50 U	0.50 U	0.52 U	0.54 U	0.50 U	0.48 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.10 U	0.099 U	0.10 U	0.11 U	**7.9**	**2.2**
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.50 U	0.50 U	0.52 U	0.54 U	0.50 U	0.48 U
HMX	µg/L	NS	1800	1800	0.10 U	0.099 U	0.10 U	0.11 U	**14**	**0.44 B**
Nitrate-Nitrite	mg/L	1	1	3	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	µg/L	NS	3.4	0.12	0.10 U	0.099 U	0.10 U	0.11 U	0.10 U	0.097 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.66 U	0.64 U	0.67 U	0.70 U	0.65 U	0.63 U
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	**1.3**	0.64 U	0.67 U	0.70 U	0.65 U	0.63 U
RDX	µg/L	NS	0.61	0.61	0.10 U	0.099 U	0.10 U	**0.095 J**	**88 J**	**1.0**
Tetryl	µg/L	NS	360	150	0.10 U	0.099 U	0.10 U	0.11 U	0.10 U	0.097 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3. FWGWMP July 2010 Explosive and Propellant Analytical Results

Station ID					LL1mw-082	LL1mw-083	LL1mw-084	LL1mw-085	LL2mw-059	LL2mw-060
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-082C-1527-GW	FWGLL1mw-083C-1528-GW	FWGLL1mw-084C-1529-GW	FWGLL1mw-085C-1530-GW	FWGLL2mw-059C-1531-GW	FWGLL2mw-060C-1532-GW
Date Collected					7/15/2010	7/14/2010	7/14/2010	7/15/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.098 U	**9.2 J**	**5.9 J**	0.10 U	**0.11**	0.097 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.098 U	0.098 UJ	**0.37 J**	0.10 U	0.097 U	0.097 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.098 U	**5.0 J**	**9.2 J**	0.10 U	0.097 U	0.097 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.098 U	**3.1 J**	**1.8 J**	0.10 U	**0.25**	0.097 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.098 U	**1.3 J**	**0.82 J**	0.10 U	0.097 U	0.097 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.098 U	**16 J**	**14 J**	0.10 U	**0.31**	**0.45**
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.49 U	**0.18 J**	0.52 U	0.51 U	0.48 U	0.48 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.49 U	0.49 UJ	0.52 U	0.51 U	0.48 U	0.48 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.098 U	**36 J**	**32 J**	0.10 U	**0.29**	**0.54**
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.49 U	0.49 UJ	**0.18 J**	0.51 U	0.48 U	0.48 U
HMX	µg/L	NS	1800	1800	0.098 U	**0.061 JB**	**0.25 JB**	0.10 U	**0.14 JB**	0.097 U
Nitrate-Nitrite	mg/L	1	1	3	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	µg/L	NS	3.4	0.12	0.098 U	0.098 UJ	0.10 U	0.10 U	0.097 U	0.097 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.64 U	0.64 UJ	0.68 U	0.66 U	0.63 U	0.63 U
Nitroguanidine	µg/L	NS	NS	3700	20 UJ	20 U	20 U	20 UJ	20 U	20 U
PETN	µg/L	NS	NS	NS	0.64 U	0.64 UJ	0.68 U	0.66 U	0.63 U	0.63 U
RDX	µg/L	NS	0.61	0.61	0.098 U	0.098 UJ	**0.76 J**	0.10 U	0.097 U	0.097 U
Tetryl	µg/L	NS	360	150	0.098 U	0.098 UJ	0.10 U	0.10 U	0.097 U	0.097 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3. FWGWMP July 2010 Explosive and Propellant Analytical Results

Station ID					LL2mw-261	LL2mw-262	LL2mw-263	LL2mw-265	LL2mw-266	LL2mw-267
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL2mw-261C-1533-GW	FWGLL2mw-262C-1534-GW	FWGLL2mw-263C-1535-GW	FWGLL2mw-265C-1536-GW	FWGLL2mw-266C-1537-GW	FWGLL2mw-267C-1565-GW
Date Collected					7/15/2010	7/8/2010	7/8/2010	7/12/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.098 U	0.098 U	0.098 U	0.11 U	0.10 U	0.11 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.098 U	0.098 U	0.098 U	0.11 U	0.10 U	0.11 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	**0.058 J**	0.098 U	0.098 U	0.11 U	0.10 U	**0.27**
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.098 U	0.098 U	0.098 U	0.11 U	0.10 U	**0.22**
2,6-Dinitrotoluene	µg/L	NS	36	37	0.098 U	0.098 U	0.098 U	0.11 U	0.10 U	0.11 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.098 U	0.098 U	0.098 U	0.11 U	0.10 U	**1.3**
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.49 U	0.49 U	0.49 U	0.53 U	0.50 U	0.53 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.49 U	0.49 U	0.49 U	0.53 U	0.50 U	0.53 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.098 U	0.098 U	0.098 U	0.11 U	0.10 U	**1.1**
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.49 U	0.49 U	0.49 U	0.53 U	0.50 U	0.53 U
HMX	µg/L	NS	1800	1800	0.098 U	0.098 U	**0.078 JB**	0.11 U	0.10 U	**1.1**
Nitrate-Nitrite	mg/L	1	1	3	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	µg/L	NS	3.4	0.12	0.098 U	0.098 U	0.098 U	0.11 U	0.10 U	0.11 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.64 U	0.64 U	0.64 U	0.69 U	0.66 U	0.69 U
Nitroguanidine	µg/L	NS	NS	3700	20 UJ	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	0.64 U	0.64 U	0.64 U	0.69 U	0.66 U	0.69 U
RDX	µg/L	NS	0.61	0.61	0.098 U	0.098 U	0.098 U	0.11 U	0.10 U	**1.1**
Tetryl	µg/L	NS	360	150	0.098 U	0.098 U	0.098 U	0.11 U	0.10 U	0.11 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3. FWGWMP July 2010 Explosive and Propellant Analytical Results

Station ID					LL2mw-269	LL2mw-270	LL3mw-232	LL3mw-234	LL3mw-236	LL3mw-239
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL2mw-269C-1538-GW	FWGLL2mw-270C-1539-GW	FWGLL3mw-232C-1540-GW	FWGLL3mw-234C-1541-GW	FWGLL3mw-236C-1542-GW	FWGLL3mw-239C-1543-GW
Date Collected					7/15/2010	7/15/2010	7/8/2010	7/8/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.098 U	0.10 U	0.097 U	0.10 U	**0.032 J**	**0.34 J**
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.098 U	0.10 U	0.097 U	0.10 U	0.098 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.098 U	0.10 U	0.097 U	0.10 U	**0.31 J**	**0.26 J**
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.098 U	0.10 U	0.097 U	0.10 U	0.098 U	**0.11**
2,6-Dinitrotoluene	µg/L	NS	36	37	0.098 U	0.10 U	0.097 U	**0.062 J**	0.098 U	0.10 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.098 U	0.10 U	0.097 U	**0.41 J**	**0.17**	**0.63**
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.49 U	0.52 U	0.48 U	0.50 U	0.49 U	0.52 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.49 U	0.52 U	0.48 U	0.50 U	0.49 U	0.52 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.098 U	0.10 U	0.097 U	**0.78 J**	**0.33**	**0.95**
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.49 U	0.52 U	0.48 U	0.50 U	0.49 U	0.52 U
HMX	µg/L	NS	1800	1800	0.098 U	0.10 U	0.097 U	**0.083 JB**	0.098 U	**0.19 B**
Nitrate-Nitrite	mg/L	1	1	3	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	µg/L	NS	3.4	0.12	0.098 U	0.10 U	0.097 U	0.10 U	0.098 U	0.10 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.64 U	0.67 U	0.63 U	0.66 U	0.64 U	0.67 U
Nitroguanidine	µg/L	NS	NS	3700	20 UJ	20 UJ	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	0.64 U	0.67 U	0.63 U	0.66 U	0.64 U	0.67 U
RDX	µg/L	NS	0.61	0.61	0.098 U	0.10 U	0.097 U	**0.58 J**	0.098 U	**1.7**
Tetryl	µg/L	NS	360	150	0.098 U	**0.070 JB**	0.097 U	0.10 U	0.098 U	0.10 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3. FWGWMP July 2010 Explosive and Propellant Analytical Results

Station ID					LL4mw-196	LL4mw-197	LL12mw-088	LL12mw-107	LL12mw-113	LL12mw-128
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL4mw-196C-1544-GW	FWGLL4mw-197C-1545-GW	FWGLL12mw-088C-1546-GW	FWGLL12mw-107C-1547-GW	FWGLL12mw-113C-1548-GW	FWGLL12mw-128C-1549-GW
Date Collected					7/8/2010	7/8/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.10 U	0.097 U	0.095 U	**0.058 J**	0.10 U	0.10 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.10 U	0.097 U	0.095 U	0.098 U	0.10 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.10 U	0.097 U	0.095 U	0.098 U	0.10 U	0.10 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.10 U	0.097 U	0.095 U	0.098 U	0.10 U	0.10 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.10 U	0.097 U	0.095 U	0.098 U	0.10 U	0.10 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.10 U	0.097 U	0.095 U	0.098 U	0.10 U	0.10 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.50 U	0.48 U	0.48 U	0.49 U	0.50 U	0.50 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.50 U	0.48 U	0.48 U	0.49 U	0.50 U	0.50 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.10 U	0.097 U	0.095 U	0.098 U	0.10 U	0.10 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.50 U	0.48 U	0.48 U	0.49 U	0.50 U	0.50 U
HMX	µg/L	NS	1800	1800	0.10 U	**0.041 JB**	0.095 U	0.098 U	0.10 U	0.10 U
Nitrate-Nitrite	mg/L	1	1	3	N/A	N/A	**0.02 J**	**0.2 B**	**0.2**	0.1 U
Nitrobenzene	µg/L	NS	3.4	0.12	0.10 U	0.097 U	0.095 U	0.098 U	0.10 U	0.10 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.65 U	0.63 U	0.62 U	0.64 U	0.65 U	0.65 U
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	0.65 U	0.63 U	0.62 U	0.64 U	0.65 U	0.65 U
RDX	µg/L	NS	0.61	0.61	0.10 U	0.097 U	0.095 U	0.098 U	0.10 U	0.10 U
Tetryl	µg/L	NS	360	150	0.10 U	0.097 U	0.095 U	**0.074 J**	0.10 U	0.10 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3. FWGWMP July 2010 Explosive and Propellant Analytical Results

Station ID					LL12mw-153	LL12mw-154	LL12mw-182	LL12mw-183	LL12mw-184	LL12mw-185
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-153C-1550-GW	FWGLL12mw-154C-1551-GW	FWGLL12mw-182C-1552-GW	FWGLL12mw-183C-1553-GW	FWGLL12mw-184C-1554-GW	FWGLL12mw-185C-1555-GW
Date Collected					7/12/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.12 U	0.098 U	**0.031 J**	0.097 U	0.10 U	0.098 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.12 U	0.098 U	0.098 U	0.097 U	0.10 U	0.098 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.12 U	0.098 U	0.098 U	0.097 U	0.10 U	0.098 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.12 U	0.098 U	0.098 U	0.097 U	0.10 U	0.098 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.12 U	0.098 U	0.098 U	0.097 U	0.10 U	0.098 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.12 U	0.098 U	0.098 U	0.097 U	0.10 U	0.098 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.59 U	0.49 U	0.49 U	0.48 U	0.51 U	0.49 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.59 U	0.49 U	0.49 U	0.48 U	0.51 U	0.49 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.12 U	0.098 U	0.098 U	0.097 U	0.10 U	0.098 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.59 U	0.49 U	0.49 U	0.48 U	0.51 U	0.49 U
HMX	µg/L	NS	1800	1800	**0.055 J**	0.098 U	0.098 U	0.097 U	0.10 U	0.076 J
Nitrate-Nitrite	mg/L	1	1	3	0.1 U	0.1 U	**0.03 JB**	0.1 U	**0.07 JB**	**160 J**
Nitrobenzene	µg/L	NS	3.4	0.12	0.12 U	0.098 U	0.098 U	0.097 U	0.10 U	0.098 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.54**
Nitroglycerin	µg/L	NS	4.8	3.7	0.77 U	0.64 U	0.64 U	0.63 U	0.66 U	0.64 U
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	0.77 U	0.64 U	0.64 U	0.63 U	0.66 U	0.64 U
RDX	µg/L	NS	0.61	0.61	0.12 U	0.098 U	0.098 U	0.097 U	0.10 U	0.098 U
Tetryl	µg/L	NS	360	150	0.12 U	0.098 U	**0.068 J**	0.097 U	**0.055 J**	**0.075 J**

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3. FWGWMP July 2010 Explosive and Propellant Analytical Results

Station ID					LL12mw-186	LL12mw-187	LL12mw-188	LL12mw-189	LL12mw-242	LL12mw-243
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-186C-1556-GW	FWGLL12mw-187C-1557-GW	FWGLL12mw-188C-1558-GW	FWGLL12mw-189C-1559-GW	FWGLL12mw-242C-1560-GW	FWGLL12mw-243C-1561-GW
Date Collected					7/13/2010	7/13/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.11 U	0.099 U	0.096 U	0.11 U	0.097 U	0.097 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.11 U	0.099 U	0.096 U	0.11 U	0.097 U	0.097 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.11 U	0.099 U	0.096 U	0.11 U	0.097 U	0.097 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.11 U	0.099 U	0.096 U	0.11 U	0.097 U	0.097 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.11 U	0.099 U	0.096 U	0.11 U	0.097 U	0.097 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.11 U	0.099 U	0.096 U	0.11 U	0.097 U	0.097 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.53 U	0.50 U	0.48 U	0.53 U	0.48 U	0.48 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.53 U	0.50 U	0.48 U	0.53 U	0.48 U	0.48 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.11 U	0.099 U	0.096 U	0.11 U	0.097 U	0.097 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.53 U	0.50 U	0.48 U	0.53 U	0.48 U	0.48 U
HMX	µg/L	NS	1800	1800	0.11 U	0.099 U	**0.052 J**	0.11 U	0.097 U	0.097 U
Nitrate-Nitrite	mg/L	1	1	3	**0.04 JB**	**1400**	**0.2**	**0.07 JB**	0.02 UJ	0.03 UJB
Nitrobenzene	µg/L	NS	3.4	0.12	0.11 U	0.099 U	0.096 U	0.11 U	0.097 U	0.097 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	**5.7**	0.50 U	**0.12 J**	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.69 U	0.64 U	0.62 U	0.69 U	0.63 U	**0.38 J**
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	0.69 U	0.64 U	0.62 U	0.69 U	0.63 U	0.63 U
RDX	µg/L	NS	0.61	0.61	0.11 U	0.099 U	**0.067 J**	0.11 U	0.097 U	0.097 U
Tetryl	µg/L	NS	360	150	**0.054 J**	0.099 U	0.096 U	**0.059 J**	**0.057 JB**	0.097 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3. FWGWMP July 2010 Explosive and Propellant Analytical Results

Station ID					LL12mw-244	LL12mw-245	LL12mw-246
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-244C-1562-GW	FWGLL12mw-245C-1563-GW	FWGLL12mw-246C-1564-GW
Date Collected					7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab
Analyte	Units						
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.10 U	**0.057 J**	0.098 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.10 U	0.097 U	0.098 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.10 U	0.097 U	0.098 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.10 U	0.097 U	0.098 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.10 U	0.097 U	0.098 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.10 U	0.097 U	0.098 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.51 U	0.48 U	0.49 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.51 U	0.48 U	0.49 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.10 U	0.097 U	0.098 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.51 U	0.48 U	0.49 U
HMX	µg/L	NS	1800	1800	0.10 U	0.097 U	0.098 U
Nitrate-Nitrite	mg/L	1	1	3	**0.07 JB**	**0.1**	**0.08 JB**
Nitrobenzene	µg/L	NS	3.4	0.12	0.10 U	0.097 U	0.098 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.66 U	0.63 U	0.64 U
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	0.66 U	0.63 U	0.64 U
RDX	µg/L	NS	0.61	0.61	0.10 U	0.097 U	0.098 U
Tetryl	µg/L	NS	360	150	0.10 U	0.097 U	0.098 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed

Table 3-3 FWGWMP July 2010 Explosive and Propellant Analytical Results

Data Qualifiers

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

U- The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

J- The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:

- Results detected above the laboratory MDL but less than the laboratory reporting limit.
- MS/MSD percent recoveries outside the acceptance criteria.
- Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

R- Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

UJ- This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

B- The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) “B” designation when used by the laboratory as an estimated value for inorganics.

3.2.2 Inorganic Elements

Inorganic elements analytical results are presented in Table 3-4. The inorganics detected in the samples included: aluminum, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, silver, sodium, vanadium, and zinc. The inorganic elements that were detected were compared to facility-wide background levels, and against elements that are considered as essential nutrients to determine if they are to be considered as Site Related Contaminants (SRCs). Calcium, magnesium, iron, potassium, and sodium were eliminated as potential SRCs because they are considered as essential nutrients. Site-specific background levels for inorganic elements are presented in Table 3-5. The inorganic elements that were detected were compared to the appropriate background criteria to determine if they were SRCs. The following inorganic elements were detected above the method detection limits and the background levels reported in Table 3-5:

Aluminum

- Bedrock Zone –. LL1mw-078 (110 µg/L), LL1mw-080 (45.2 µg/L J), LL1mw-083 (813 µg/L), LL2mw-059 (21.5 µg/L J), LL2mw-262 (24.9 µg/L), LL2mw-265 (26.4 µg/L J), LL2mw-266 (1060 µg/L), LL3mw-239 (46.6 µg/L J), LL12mw-113 (103000 µg/L), LL12mw-189 (298 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone – LL4mw-196 (22.8 µg/L J), LL12mw-128 (1960 µg/L) LL12mw-182 (29.5 µg/L J), LL12mw-188 (65 µg/L), LL12mw-244 (33700 µg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L. The MCL for aluminum is 200 µg/L. The Region 9 PRG is 36,000 µg/L.

Antimony

- Bedrock Zone – SCFmw-002 (0.15 µg/L J), LL2mw-060 (0.17 µg/L J), LL3mw-236 (0.15 µg/L J), LL12mw-113 (1.1 µg/L J). LL12mw-186 (0.45 µg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone – LL4mw-197 (0.16 µg/L J), LL12mw-128 (0.16 µg/L J), LL12mw-243 (0.63 µg/L J), LL12mw-244 (0.73 µg/L J), LL12mw-245 (0.29 µg/LJ). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L. The MCL for antimony is 6 µg/L. The Region 9 PRG is 15 µg/L.

Arsenic

- Bedrock Zone – SCFmw-001 (13.1 µg/L), SCFmw-002 (12.5 µg/L), SCFmw-006 (12.8 µg/L), L2mw-059 (6.4 µg/L), LL2mw-261 (11.2 µg/L), LL2mw-263 (15.4 µg/L), LL2mw-266 (5.6 µg/L), LL3mw-232 (3.5 µg/L J), LL12mw-113 (249 µg/L), LL12mw-183 (29.8 µg/L), LL12mw-189 (5.1 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone – LL12mw-088 (29.4 µg/L), LL12mw-128 (47.5 µg/L), LL12mw-153 (21.4 µg/L), LL12mw-154 (16.2 µg/L), LL12mw-182 (25.6 µg/L), LL12mw-184 (15.8 µg/L), LL12mw-244 (51.1 µg/L), LL12mw-246 (29.7 µg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 11.7 µg/L.

The MCL for arsenic is 10 µg /L. The Region 9 PRG is 0.045 µg/L.

Barium

- Bedrock Zone – LL12mw-113 (381 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 256 µg/L.
- Unconsolidated Zone – LL12mw-088 (383µg/L), LL12mw187 (281 µg/L), LL12mw-244 (221 µg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 82.1 µg/L.
  The MCL for barium is 2000 µg /L. The Region 9 PRG is 2600 µg/L.

Beryllium

- Bedrock Zone – LL1mw-083 (0.33 µg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone – Ll12mw-244 (1.4 µg/L).The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L.
  The MCL for beryllium is 4 µg /L. The Region 9 PRG is 75 µg/L.

Cadmium

- Bedrock Zone: - LL1mw-082 (0.18 µg/L J), LL1mw-083 (0.70 µg/L), LL2mw-266 (0.24 µg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: - None. The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L.
  The MCL for cadmium is 5 µg/L. There Region 9 PRG is 18 µg/L.

Chromium

- Bedrock Zone: - SCFmw-005 (3.0 µg/L J), LL12mw-113 (163 µg/L. The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: - LL12mw-244 (43 µg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 7.3 µg/L.
  The MCL is 100 µg/L. There Region 9 PRG is 110 µg/L.

Cobalt

- Bedrock Zone: -. LL1mw-081 (6.2 µg/L), LL1mw-082 (8.2 µg/L), LL1mw-083 (11.1 µg/L), LL2mw-059 (29.1 µg/L), LL2mw-261 (2.2 µg/L J), LL2mw-263 (3.2 µg/L J), LL2mw-265 (5.6 µg/L), LL2mw-266 (17 µg/L), LL2mw-267 (4.5 µg/L J), LL2mw-270 (7.2 µg/L), LL3mw-234 (1.5 µg/L J), LL12mw-113 (121 µg/L), LL12mw-186 (1.7 µg/L J), LL12mw-189 (1.9 µg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: - LL12mw-107 (1.8 µg/L J), LL12mw-128 (2.8 µg/L J), LL12mw-153 (2.0 µg/L J), LL12mw-187 (10.2 µg/L). LL12mw-188 (1.5 µg/L J), LL12mw-243 (1.5 µg/L J), LL12mw-244 (28.5 µg/L), LL12mw-245 (3.2 µg/L J). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L. There is no MCL for cobalt. The Region 9 PRG is 730 µg/L.

Copper

- Bedrock Zone: - LL12mw-113 (257 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
  The Groundwater Bedrock Zone Background Criteria is 0 µg/L.
- Unconsolidated Zone: - LL12mw-244 (48.3 µg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L.
  The MCL is 1,300 µg/L. The Region 9 PRG is 1,500 µg/L.

Lead

- Bedrock Zone: - LL12mw-113 (127 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: - LL12mw-128 (2.3 µg/L J), LL12mw-244 (26 µg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L.
  The MCL is 15 µg/L. The Region 9 PRG is 880 µg/L.

Manganese

- Bedrock Zone: - SCFmw-005 (1750 µg/L), LL1mw-081 (1830 µg/L), LL2mw-059 (5530 µg/L), LL2mw-263 (1450 µg/L), LL2mw-265 (1430 µg/L), LL2mw-266 (1390 µg/L), LL3mw-234 (2190 µg/L J), LL12mw-113 (5730 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 1,340 µg/L.
- Unconsolidated Zone: - LL12mw-185 (1380 µg/L), LL12mw-187 (2020 µg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 1,020 µg/L.
  The MCL for Manganese is 50 µg/L. The Region 9 PRG is 880 µg/L.

Nickel

- Bedrock Zone: - LL12mw-113 (283 µg/L) The Groundwater Bedrock Zone Background Criteria (filtered) is 83.4 µg/L.
- Unconsolidated Zone: - LL12mw-128 (4.8 µg/L J), LL12mw-153 (2.7 µg/L J), LL12mw-243 (2.7 µg/L J), LL12mw-244 (72.1 µg/L), LL12mw-245 (5.1 µg/L J). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L.
  There is no MCL for Nickel. The Region 9 PRG is 730 µg/L.

Silver

- Bedrock Zone – None. The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone – LL12mw-242 (1.9 µg/L J). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L.
  The MCL for Silver is 100 µg/L. The Region 9 PRG is 180 µg/L.

Vanadium

- Bedrock Zone: - LL12mw-113 (179 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 83.4 µg/L.). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.

- Unconsolidated Zone: - LL12mw-128 (2.5 µg/L J), LL12mw-244 (49 µg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L. There is no MCL for Vanadium. The Region 9 PRG is 36 µg/L.

Zinc

- Bedrock Zone: - LL12mw-113 (656 µg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 52.3 µg/L.
- Unconsolidated Zone: - LL12mw-244 (165 µg/L J). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 60.9 µg/L. The MCL for zinc is 5,000 µg/L. The Region 9 PRG is 11,000 µg/L.

Several inorganic compounds were detected at levels exceeding the MCLs and/or Region 9 PRGs. These included aluminum, manganese, arsenic, and iron for wells from all areas sampled. These compounds were also detected at concentrations exceeding the Facility-Wide Background Criteria for many of the wells. Table 4-1 in Section 4 presents a summary of all inorganic compounds and the associated wells that had detections exceeding MCLs or Region 9 PRGs.

The facility-wide groundwater conditions are still being evaluated, including background levels for all inorganic compounds. This will also include an evaluation of arsenic, iron, and manganese related to exceedances of the MCLs. The elevated concentrations of the subject parameters will be evaluated with respect to Ravenna's Draft Facility-Wide Clean-Up Goals (CUGs). To date there have been no elevated concentrations of the subject parameters found in the groundwater which would pose an immediate threat to human health or the environment. The evaluation of elevated concentrations of COCs is ongoing and includes a geochemical study to better characterize the groundwater quality as it pertains to metals at the site. This study will be completed in 2010. Additionally, further sampling at various facility wells will be conducted in 2010 to further gauge the extent of any contamination in the groundwater.

3.2.3 Volatile Organic Compounds (VOCs)

VOC analytical results are summarized in Table 3-6. The following VOCs were detected above the MDL for this sampling event.

- Acetone – SCFmw-003 (3.4 µg/L J B), SCFmw-006 (4.9 µg/L J B), LL2mw-266 (2.5 µg/LJ B), LL12mw-244 (1.1 µg/L J B). There is no MCL for acetone. The Region 9 PRG is 5,500 µg/L.

- 2-Butanone – LL12mw-243 (1.3 µg/L J B), LL12mw-244 (1.6 µg/L J B. There is no MCL for 2-Butanone. The Region 9 PRG is 7000 µg/L.

- Carbon Disulfide – SCFmw-001 (0.69 µg/L J), SCFmw-002 (0.34 µg/L J), SCFmw-005 (0.64 µg/L J). There is no MCL for Carbon Disulfide. The Region 9 PRG is 1000 µg/L.

- Carbon Tetrachloride – LL3mw-239 (0.37 μg/L J). The MCL for Carbon tetrachloride is 5 μg/L. The Region 9 PRG is 0.17 μg/L.

- Chloroform – LL3mw-239 (0.52 (μg/L J). There is no MCL for Chloroform. The Region 9 PRG is 0.17 μg/L.

- Toluene – LL12mw-244 (0.22 μg/LJ). The MCL for Toluene is 1000 μg/L. The Region 9 PRG is 720 μg/L.

As shown in Table 3-6, the following VOCs were detected at levels above the MCLs or Region 9 PRGs during the July 2009 sampling event:

- Carbon Tetrachloride at a concentration exceeding the Region 9 PRG of 0.17 μg/L at LL3mw-239 (0.37 μg/L J).
- Chloroform at a concentration exceeding the Region 9 PRG of 0.17 μg/L at LL3mw-239 (0.52 (μg/L J).

3.2.4 Semivolatile Organic Compounds (SVOCs)

SVOC analytical results are summarized in Table 3-7. The following SVOCs were detected above the MDL for this sampling event. Note that 2,4-Dinitrotoluene and 2,6-Dinitrotoluene are analyzed and reported under both SW-846 Methods 8330 (explosives and propellants and 8270 (SVOCs).

- Bis(2-Ethylhexyl)phthalate – SCFmw-001 (1.7 μg/L J B), SCFmw-002 (2.5 μg/L J B), SCFmw-003 (1.5 μg/L J B), SCFmw-004 (0.92 μg/L J B), SCFmw-006 (3.7 μg/L J B), LL1mw-064 (0.88 μg/L J B), LL1mw-065 (1.4 μg/L J B), LL1mw-067 (2.1 μg/L J B), LL1mw-078 (1.5 μg/L J B), LL1mw-080 (4.2 μg/L J B), LL1mw-081 (1.6 μg/L J B), LL1mw-082 (2.0 μg/L J B), LL1mw-083 (0.96 μg/L J B). LL1mw-084 (3.6μg/L J B), LL1mw-085 (2.5 μg/L J B), LL2mw-261 (0.87 μg/L J B), LL2mw-262 (1.1 μg/L J B), LL2mw-265 (2.5 μg/L J B), LL2mw-266 (5.8 μg/L J B), LL2mw-267 (2.3μg/L J B), LL2mw-269 (1.4 μg/L J B), LL3mw-232 (1.5 μg/L J B), LL3mw-239 (8.7 μg/L J B), Ll4mw-196 (8.2 μg/L J B), LL4mw-197 (1.1 μg/L J B), LL12mw-088 (2.4 μg/L J B), LL12mw-107 (3.0 μg/L J B), LL12mw-113 (1.9 μg/L J B), LL12mw -128 (2.3 μg/L J B), LL12mw-153 (1.3 μg/L J B), LL12mw-154 (1.5 μg/L J B), LL12mw-182 (4.9 μg/L J B), LL12mw-183 (2.4 μg/L J B), LL12mw-184 (3.8 μg/L J B), LL12mw-185 (2.6 μg/L J B), LL12mw-186 (3.3 μg/L J B), LL12mw-187 (1.2 μg/L J B), LL12mw-188 (2.4 μg/L J B), LL12mw-189 (2.8 μg/L J B), LL12mw-242 (1.7 μg/L J B), LL12mw-243 (4.4 μg/L J B), LL12mw-244 (1.8 μg/L J B), LL12mw-245 (1.8 μg/L J B), LL12mw-246 (1.8 μg/L J B). There is no MCL for Bis(2-Ethylhexyl)phthalate. The Region 9 PRG is 4.8 μg/L.

- Benzo(a)anthracene – LL12mw-182 (0.23 µg/L). There is no MCL for Benzo(a)anthracene. The Region 9 PRG is 0.092 µg/L.

- Benzo(b)fluoranthene – LL12mw-182 (0.22 µg/L). There is no MCL for Benzo(b)fluoranthene. The Region 9 PRG is 0.092 µg/L.

- Benzo(g,h,i)perylene – LL12mw-182 (0.22 µg/L). There is no MCL or Region 9 PRG for Benzo(g,h,i)perylene.

- Benzo(k)fluoranthene – LL12mw-182 (0.32 µg/L). There is no MCL for Benzo(k)fluoranthene. The Region 9 PRG is 0.92 µg/L.

- Butyl Benzyl Phthalate – LL3mw-234 (2.0 µg/L), LL12mw-185 (1.4 µg/L), LL2mw-270 (13 µg/L). There is no MCL for Butyl Benzyl Phthalate. The Region 9 PRG is 7300 µg/L.

- Chrysene – LL12mw-182 (0.21 µg/L). There is no MCL for Chrysene. The Region 9 PRG is 9.2 µg/L.

- Dibenzo(a,h)anthracene – LL12mw-182 (0.21 µg/L). There is no MCL for Dibenzo (a,h)anthracene. The Region 9 PRG is 0.0093 µg/L.

- 2,4-Dinitrotoluene – LL1mw-083 (1.5 µg/L J). There is no MCL for 2,4-Dinitrotoluene. The Region 9 PRG is 73 µg/L.

- Di-n-Butyl Phthalate – LL1mw-078 (0.80 µg/L J), LL12mmw-182 (0.89 µg/L J B), LL12mmw-185 (0.75 µg/L J B), LL12mw-186 (0.76 µg/L J b), LL12mw-189 (0.75 µg/L J B). There is no MCL or Region 9 PRG for Di-n-Butyl Phthalate.

- Fluoranthene – LL12mw-182 (0.23 µg/L). There is no MCL or Region 9 PRG for fluoranthene.

- Indeno(1,2,3-cd)pyrene – LL12mw-182 (0.22 µg/L). There is no MCL for Indeno (1,2,3-cd)pyrene. The Region 9 PRG is 0.092 µg/L.

- Naphthalene – LL12mw-246 (1.4 µg/L). There is no MCL for Naphthalene. The Region 9 PRG is 6.2 µg/L.

- Phenol – LL12mw-113 (0.83 µg/L J), SCFmw-004 (0.81 µg/L J), LL2mw-270 (1.4 µg/L). There is no MCL for Phenol. The Region 9 PRG is 11,000 µg/L.

- Pyrene – LL12mw-182 (0.21 µg/L). There is no MCL or Region 9 PRG for Pyrene.

Note that method blanks associated with many of these samples had contamination for bis(2-ethylhexyl)phthalate below 1/2 the method reporting limit (MRL). The low level detections (i.e. < RL) in these samples are therefore attributed to low level laboratory contamination and were flagged with a B qualifier.

As shown in Table 3-7 the following SVOCs were detected at a level exceeding either the MCL or the Region 9 PRGs:

- Bis(2-Ethylhexyl)phthalate at a concentration exceeding the Region 9 PRG of 4.8 µg/L at LL2mw-266 (5.8 µg/L J B), LL3mw-239 (8.7 µg/L J B), Ll4mw-196 (8.2 µg/L J B), LL12mw-182 (4.9 µg/L J B).
- Benzo(a)anthracene at a concentration exceeding the Region 9 PRG of 0.092 µg/L at LL12mw-182 (0.23 µg/L).
- Benzo(b)fluroanthene at a concentration exceeding the Region 9 PRG of 0.092 µg/L at LL12mw-182 (0.22 µg/L).
- Dibenzo(a,h)anthracene at a concentration exceeding the Region 9 PRG of 0.093 µg/L LL12mw-182 (0.21 µg/L).
- Indeno(1,2,3-cd)pyrene at a concentration exceeding the Region 9 PRG of 0.092 µg/L LL12mw-182 (0.22 µg/L).

3.2.5 Pesticides and Polychlorinated Biphenyls (PCBs)

Pesticides and PCBs analytical results are summarized in Table 3-8. The following pesticides and PCBs were detected above the MDL for this sampling event.

- beta-BHC – SCFmw-003 (0.0092 µg/L J), SCFmw-006 (0.02 µg/L J), LL1mw-081 (0.011 µg/L J), LL1mw-084 (0.26 µg/L J), LL2mw-266 (0.029 µg/L J), LL12mw-107 (0.018 µg/L J), LL12mw-153 (0.10 µg/L J), LL12mw-154 (0.11 µg/L J), LL12mw-186 (0.013 µg/L J), LL12mw-189 (0.014 µg/L J), LL12mw-243 (0.012 µg/L J). There is no MCL for beta-BHC. The Region 9 PRG is 0.037 µg/L.

- delta-BHC – LL1mw-080 (0.019 µg/L J. There is no MCL or Region 9 PRG for delta-BHC.

- Endrin Ketone – SCFmw-001 (0.027 µg/L J), LL12mw-186 (0.0091 µg/L J), LL2mw-270 (0.009 µg/L J). There is no MCL or Region 9 PRG for Endrin Ketone.

- Heptachlor – LL12mw-183 (0.027 µg/L J), LL12mw-189 (0.017 µg/L J). The MCL for Heptachlor is 0.4 µg/L. The Region 9 PRG is 0.015 µg/L.

As shown in Table 3-8 the following pesticides and PCBs were detected at a level exceeding either the MCL or the Region 9 PRGs:

- beta-BHC at a concentration exceeding the Region 9 PRG of 0.037 µg/L at LL1mw-084 (0.26 µg/L J), LL12mw-153 (0.10 µg/L J), LL12mw-154 (0.11 µg/L J).
- Heptachlor at a concentration exceeding the Region 9 PRG of 0.015 µg/L at LL12mw-183 (0.027 µg/L J), LL12mw-189 (0.017 µg/L J).

Table 3-4. FWGWMP July 2010 Inorganics Analytical Results

Station ID					SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-001-1515-GF	FWGSCFmw-002-1516-GF	FWGSCFmw-003-1517-GF	FWGSCFmw-004-1518-GF	FWGSCFmw-005-1519-GF	FWGSCFmw-006-1520-GF
Date Collected					7/14/2010	7/14/2010	7/13/2010	7/15/2010	7/15/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
Aluminum	µg/L	200	36000	37000	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U
Antimony	µg/L	6	15	15	2.0 U	**0.15 J**	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	0.045	**13.1**	**12.5**	5.0 U	5.0 U	5.0 U	**12.8**
Barium	µg/L	2000	2600	7300	**39.4**	**38.0**	**75.2**	**97.9**	**22.4**	**107**
Beryllium	µg/L	4	73	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	5	18	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**102000**	**83400**	**71100**	**135000**	**89400**	**58300**
Chromium	µg/L	100	110	55000*	5.0 U	5.0 U	5.0 U	5.0 U	**3.0 J**	5.0 U
Cobalt	µg/L	NS	730	11	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Copper	µg/L	1300	1500	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	26000	**814**	**233**	**390**	50.0 U	**4440**	**332**
Lead	µg/L	15	NS	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	NS	**28600**	**27000**	**29000**	**54200**	**43100**	**16300**
Manganese	µg/L	50	880	880	**194**	**67.3**	**237**	**624**	**1750**	**153**
Mercury	µg/L	2	11	0.57	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	730	**3.3 J**	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Potassium	µg/L	NS	NS	NS	**1670**	**2190**	**1420 J**	**2440**	**2180**	**5740**
Selenium	µg/L	50	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	NS	**13000**	**20500**	**6860**	**12700**	**8400**	**10900**
Thallium	µg/L	2	2.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	NS	36	180	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	11000	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4. FWGWMP July 2010 Inorganics Analytical Results

Station ID					LL1mw-064	LL1mw-065	LL1mw-067	LL1mw-078	LL1mw-080	LL1mw-081	LL1mw-082	LL1mw-083
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-064C-1521-GF	FWGLL1mw-065C-1522-GF	FWGLL1mw-067C-1523-GF	FWGLL1mw-078C-1524-GF	FWGLL1mw-080C-1525-GF	FWGLL1mw-081C-1526-GF	FWGLL1mw-082C-1527-GF	FWGLL1mw-083C-1528-GF
Date Collected					7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/15/2010	7/14/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units											
Aluminum	µg/L	200	36000	37000	50.0 U	50.0 U	50.0 U	**110**	**45.2 J**	50.0 U	50.0 U	**813**
Antimony	µg/L	6	15	15	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	0.045	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	7300	**44.5**	**48.6**	**11.2**	**16.2**	**26.5**	**18.2**	**9.9 J**	**15.8**
Beryllium	µg/L	4	73	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.33 J**
Cadmium	µg/L	5	18	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.18 J**	**0.70**
Calcium	µg/L	NS	NS	NS	**54300**	**79300**	**29400**	**47300**	**130000**	**54300**	**29800**	**23200**
Chromium	µg/L	100	110	55000*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	11	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**6.2**	**8.2**	**11.1**
Copper	µg/L	1300	1500	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	26000	**517**	**127**	50.0 U	50.0 U	50.0 U	**4200**	**5150**	50.0 U
Lead	µg/L	15	NS	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	NS	**9330**	**19900**	**10400**	**7390**	**9180**	**12000**	**12300**	**4910**
Manganese	µg/L	50	880	880	**112**	**256**	**13.1**	**71.0**	**25.5**	**1830**	**1080**	**497**
Mercury	µg/L	2	11	0.57	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	730	10.0 U	10.0 U	**21.5**	**4.5 J**	10.0 U	**11.0**	**17.9**	**34.1**
Potassium	µg/L	NS	NS	NS	643 UJ	**845 J**	589 UJ	**3100**	**3310**	**2350**	**1460**	**2230**
Selenium	µg/L	50	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	NS	**4890**	**10700**	**1590**	**3770**	**4320**	**2050**	**1190**	**9730**
Thallium	µg/L	2	2.4	NS	1.0 U	1.0 U	0.25 UJ	0.68 UJ	0.19 UJ	0.24 UJ	0.16 UJ	0.16 UJ
Vanadium	µg/L	NS	36	180	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	11000	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	**48.5**	**49.1**	**40.1**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4. FWGWMP July 2010 Inorganics Analytical Results

Station ID					LL1mw-084	LL1mw-085	LL2mw-059	LL2mw-060	LL2mw-261	LL2mw-262	LL2mw-263	LL2mw-265
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-084C-1529-GF	FWGLL1mw-085C-1530-GF	FWGLL2mw-059C-1531-GF	FWGLL2mw-060C-1532-GF	FWGLL2mw-261C-1533-GF	FWGLL2mw-262C-1534-GF	FWGLL2mw-263C-1535-GF	FWGLL2mw-265C-1536-GF
Date Collected					7/14/2010	7/15/2010	7/8/2010	7/8/2010	7/15/2010	7/8/2010	7/8/2010	7/12/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units											
Aluminum	µg/L	200	36000	37000	**335**	50.0 U	**21.5 J**	50.0 U	50.0 U	**24.9 J**	50.0 U	**26.4 J**
Antimony	µg/L	6	15	15	2.0 U	2.0 U	2.0 U	**0.17 J**	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	0.045	5.0 U	5.0 U	**6.4**	5.0 U	**11.2**	5.0 U	**15.4**	5.0 U
Barium	µg/L	2000	2600	7300	**14.0**	**13.4**	**208**	**23.9**	**19.1**	**16.2**	**21.5**	**8.8 J**
Beryllium	µg/L	4	73	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	5	18	18	**1.6**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**45600**	**64600**	**30000**	**45200**	**59200**	**47100**	**30900**	**76100**
Chromium	µg/L	100	110	55000*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	11	**15.7**	**2.8 J**	**29.1**	5.0 U	**2.2 J**	5.0 U	**3.2 J**	**5.6**
Copper	µg/L	1300	1500	1500	**5.4**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.010 U	0.010 U	**0.0058 J**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	26000	50.0 U	**435**	**7090**	50.0 U	**2290**	50.0 U	**4670**	**614**
Lead	µg/L	15	NS	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	NS	**2710**	**18300**	**8290**	**8470**	**21700**	**34200**	**13800**	**22700**
Manganese	µg/L	50	880	880	**196**	**564**	**5530**	**25.7**	**375**	**77.4**	**1450**	**1430**
Mercury	µg/L	2	11	0.57	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	730	**26.8**	**11.4**	**22.4**	10.0 U	**3.9 J**	**10.7**	**5.6 J**	**19.0**
Potassium	µg/L	NS	NS	NS	**2260**	**1690**	**883 J**	519 UJ	**1070**	**1770**	814 UJ	672 UJ
Selenium	µg/L	50	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	NS	**2630**	**1380**	**5170**	**2400**	**10800**	**7430**	**3930**	**10400**
Thallium	µg/L	2	2.4	NS	0.39 UJ	0.14 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	NS	36	180	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	11000	**58.5**	**4.1 J**	**4.0 JB**	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4. FWGWMP July 2010 Inorganics Analytical Results

Station ID					LL2mw-266	LL2mw-267	LL2mw-269	LL2mw-270	LL3mw-232	LL3mw-234	LL3mw-236	LL3mw-239
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL2mw-266C-1537-GF	FWGLL2mw-267C-1565-GF	FWGLL2mw-269C-1538-GF	FWGLL2mw-270C-1539-GF	FWGLL3mw-232C-1540-GF	FWGLL3mw-234C-1541-GF	FWGLL3mw-236C-1542-GF	FWGLL3mw-239C-1543-GF
Date Collected					7/8/2010	7/8/2010	7/15/2010	7/15/2010	7/8/2010	7/8/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units											
Aluminum	µg/L	200	36000	37000	**1060**	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	**46.6 J**
Antimony	µg/L	6	15	15	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.15 J**	2.0 U
Arsenic	µg/L	10	0.045	0.045	**5.6**	5.0 U	5.0 U	5.0 U	**3.5 J**	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	7300	**19.1**	**14.9**	**215**	**13.1**	**26.1**	**9.8 J**	10.0 U	**10.4**
Beryllium	µg/L	4	73	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	5	18	18	**0.24 J**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**18400**	**37900**	**30300**	**44400**	**60300**	**51100 J**	**22200**	**9730**
Chromium	µg/L	100	110	55000*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	11	**17.0**	**4.5 J**	5.0 U	**7.2**	5.0 U	**1.5 J**	5.0 U	5.0 U
Copper	µg/L	1300	1500	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	26000	**5080**	**1240**	**5990**	**1420**	50.0 U	**1210**	50.0 U	**218**
Lead	µg/L	15	NS	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	NS	**9620**	**18900**	**15200**	**16800**	**39800**	**19800 J**	**13700**	**5160**
Manganese	µg/L	50	880	880	**1390**	**622**	**1540**	**384**	**308**	**2190 J**	**235**	**101**
Mercury	µg/L	2	11	0.57	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	730	**16.5**	**3.6 J**	10.0 U	**12.7**	**7.8 J**	**7.0 J**	**7.9 J**	**6.1 J**
Potassium	µg/L	NS	NS	NS	**1270**	711 UJ	**2970**	**1070**	**3650**	**1750**	**1330**	**1280**
Selenium	µg/L	50	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	NS	**9520**	**16500**	**5930**	**2190**	**8570**	**8990**	**3620**	**18700**
Thallium	µg/L	2	2.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	NS	36	180	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	11000	10.6 B	10.0 U	10.0 U	**3.5 J**	**7.8 JB**	10.0 U	**15.9 B**	**6.0 JB**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4. FWGWMP July 2010 Inorganics Analytical Results

Station ID					LL4mw-196	LL4mw-197	LL12mw-088	LL12mw-107	LL12mw-113	LL12mw-128	LL12mw-153	LL12mw-154
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL4mw-196C-1544-GF	FWGLL4mw-197C-1545-GF	FWGLL12mw-088C-1546-GF	FWGLL12mw-107C-1547-GF	FWGLL12mw-113C-1548-GF	FWGLL12mw-128C-1549-GF	FWGLL12mw-153C-1550-GF	FWGLL12mw-154C-1551-GF
Date Collected					7/8/2010	7/8/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010	7/12/2010	7/12/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units											
Aluminum	µg/L	200	36000	37000	**22.8 J**	50.0 U	50.0 U	50.0 U	**103000**	**1960**	50.0 U	50.0 U
Antimony	µg/L	6	15	15	2.0 U	**0.16 J**	2.0 U	2.0 U	**1.1 J**	**0.16 J**	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	0.045	5.0 U	5.0 U	**29.4**	**9.7**	**249**	**47.5**	**21.4**	**16.2**
Barium	µg/L	2000	2600	7300	**33.4**	**15.1**	**383**	**24.2**	**381**	**61.3**	**64.4**	**44.1**
Beryllium	µg/L	4	73	73	1.0 U	1.0 U	1.0 U	1.0 U	5.0	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	5	18	18	0.50 U	0.50 U	0.50 U	0.50 U	0.54	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**57700**	**139000**	**159000**	**162000**	**284000**	**183000**	**140000**	**147000**
Chromium	µg/L	100	110	55000*	5.0 U	5.0 U	5.0 U	5.0 U	**163**	**2.8 J**	**2.0 J**	5.0 U
Cobalt	µg/L	NS	730	11	5.0 U	5.0 U	5.0 U	**1.8 J**	**121**	**2.8 J**	**2.0 J**	5.0 U
Copper	µg/L	1300	1500	1500	5.0 U	5.0 U	5.0 U	5.0 U	**257**	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.010 U	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 UJ	0.010 U	0.010 U
Iron	µg/L	300	11000	26000	**393**	50.0 U	**3890**	**2640 J**	**354000**	**6890 J**	**3420**	**1760**
Lead	µg/L	15	NS	NS	3.0 U	3.0 U	3.0 U	3.0 U	**127**	**2.3 J**	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	NS	**18100**	**21400**	**55700**	**67100**	**151000**	**109000**	**76800**	**70000**
Manganese	µg/L	50	880	880	**183**	10.0 U	**428**	**242**	**5730**	**242**	**188**	**85.9**
Mercury	µg/L	2	11	0.57	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	730	10.0 U	10.0 U	10.0 U	10.0 U	**283**	**4.8 J**	**2.7 J**	10.0 U
Potassium	µg/L	NS	NS	NS	642 UJ	**1250**	**2820 J**	**2230 J**	**23700 J**	**2770 J**	**2010 J**	**1820 J**
Selenium	µg/L	50	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	NS	**1460**	**1130**	**13500**	**17300**	**24800**	**22100**	**23400**	**24300**
Thallium	µg/L	2	2.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	**1.9**	0.25 UJ	1.0 U	0.16 UJ
Vanadium	µg/L	NS	36	180	10.0 U	10.0 U	10.0 U	10.0 U	**179**	**2.5 J**	10.0 U	10.0 U
Zinc	µg/L	5000	11000	11000	10.0 U	10.0 U	**5.6 JB**	10.0 U	**656 J**	**19.8 J**	**9.0 JB**	10.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4. FWGWMP July 2010 Inorganics Analytical Results

Station ID					LL12mw-182	LL12mw-183	LL12mw-184	LL12mw-185	LL12mw-186	LL12mw-187	LL12mw-188	LL12mw-189
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-182C-1552-GF	FWGLL12mw-183C-1553-GF	FWGLL12mw-184C-1554-GF	FWGLL12mw-185C-1555-GF	FWGLL12mw-186C-1556-GF	FWGLL12mw-187C-1557-GF	FWGLL12mw-188C-1558-GF	FWGLL12mw-189C-1559-GF
Date Collected					7/13/2010	7/12/2010	7/13/2010	7/13/2010	7/13/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units											
Aluminum	µg/L	200	36000	37000	**29.5 J**	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	**65.0**	**298**
Antimony	µg/L	6	15	15	2.0 U	2.0 U	2.0 U	2.0 U	**0.45 J**	2.0 U	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	0.045	**25.6**	**29.8**	**15.8**	5.0 U	5.0 U	5.0 U	5.0 U	**5.1**
Barium	µg/L	2000	2600	7300	**62.7**	**65.0**	**8.7 J**	**49.4**	**49.0**	**281**	**41.4**	**18.5**
Beryllium	µg/L	4	73	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	5	18	18	0.50 U	0.50 U	0.50 U	0.26 J	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**65500**	**87600**	**203000**	**665000**	**139000**	**960000**	**134000**	**152000**
Chromium	µg/L	100	110	55000*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	11	5.0 U	5.0 U	5.0 U	5.0 U	**1.7 J**	**10.2**	**1.5 J**	**1.9 J**
Copper	µg/L	1300	1500	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.010 UJ	0.010 U	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 U	0.010 UJ
Iron	µg/L	300	11000	26000	**766 J**	**867**	**2300 J**	50.0 U	50.0 U	50.0 U	**246**	**1320 J**
Lead	µg/L	15	NS	NS	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	NS	**51500**	**36400**	**150000**	**287000**	**64700**	**301000**	**108000**	**72200**
Manganese	µg/L	50	880	880	**43.7**	**47.7**	**469**	**1380**	**275**	**2020**	**433**	**310**
Mercury	µg/L	2	11	0.57	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	730	10.0 U	10.0 U	10.0 U	**6.2 J**	**2.2 J**	**15.3**	10.0 U	10.0 U
Potassium	µg/L	NS	NS	NS	**4080 J**	**6050 J**	**2410 J**	**7120 J**	**1690 J**	**54200 J**	**1930 J**	**1800 J**
Selenium	µg/L	50	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	NS	**25100**	**19800**	**35600**	**52300**	**14700**	**35600**	**32200**	**49200**
Thallium	µg/L	2	2.4	NS	1.0 U	0.20 UJ	1.0 U	1.0 U	1.0 U	0.66 UJ	0.20 UJ	1.0 U
Vanadium	µg/L	NS	36	180	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	µg/L	5000	11000	11000	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	11.0 J	10.0 U	10.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4. FWGWMP July 2010 Inorganics Analytical Results

Station ID					LL12mw-242	LL12mw-243	LL12mw-244	LL12mw-245	LL12mw-246
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-242C-1560-GF	FWGLL12mw-243C-1561-GF	FWGLL12mw-244C-1562-GF	FWGLL12mw-245C-1563-GF	FWGLL12mw-246C-1564-GF
Date Collected					7/12/2010	7/13/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab
Analyte	Units								
Aluminum	µg/L	200	36000	37000	50.0 U	50.0 U	**33700**	24.5 UJ	50.0 U
Antimony	µg/L	6	15	15	2.0 U	**0.63 J**	**0.73 J**	**0.29 J**	2.0 U
Arsenic	µg/L	10	0.045	0.045	**21.3**	**6.5**	**51.1**	**9.1**	**29.7**
Barium	µg/L	2000	2600	7300	**22.0**	**27.6**	**221**	**34.6**	**35.5**
Beryllium	µg/L	4	73	73	1.0 U	1.0 U	**1.4**	1.0 U	1.0 U
Cadmium	µg/L	5	18	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**69300**	**124000**	**95400**	**134000**	**102000**
Chromium	µg/L	100	110	55000*	5.0 U	5.0 U	43.0	5.0 U	5.0 U
Cobalt	µg/L	NS	730	11	5.0 U	**1.5 J**	**28.5**	**3.2 J**	5.0 U
Copper	µg/L	1300	1500	1500	5.0 U	5.0 U	**48.3**	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.010 U	0.010 UJ	0.010 UJ	**0.0080 J**	0.010 UJ
Iron	µg/L	300	11000	26000	**833**	50.0 U	**78800 J**	50.0 U	**1190 J**
Lead	µg/L	15	NS	NS	3.0 U	3.0 U	**26.0**	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	NS	**46500**	**81500**	**40500**	**65400**	**50400**
Manganese	µg/L	50	880	880	**56.0**	**281**	**955**	**103**	**74.5**
Mercury	µg/L	2	11	0.57	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	730	10.0 U	**2.7 J**	**72.1**	**5.1 J**	10.0 U
Potassium	µg/L	NS	NS	NS	**1630 J**	**3320 J**	**9500 J**	**3140 J**	**6380 J**
Selenium	µg/L	50	180	180	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	100	180	180	**1.9 J**	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	µg/L	NS	NS	NS	**33800**	**22800**	**9250**	**23200**	**22000**
Thallium	µg/L	2	2.4	NS	1.0 U	0.27 UJ	0.60 UJ	0.14 UJ	1.0 U
Vanadium	µg/L	NS	36	180	10.0 U	10.0 U	**49.0**	10.0 U	10.0 U
Zinc	µg/L	5000	11000	11000	10.0 U	10.0 U	**165 J**	10.0 U	10.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-4 FWGWMP July 2010 Inorganics Analytical Results

Data Qualifiers

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

U- The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

J- The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:

- Results detected above the laboratory MDL but less than the laboratory reporting limit.
- MS/MSD percent recoveries outside the acceptance criteria.
- Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

R- Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

UJ- This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

B- The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) “B” designation when used by the laboratory as an estimated value for inorganics.

Table 3-5 RVAAP Facility-wide Background Criteria, (SAIC, 2001b)

Media Units	Surface Soil mg/kg	Subsurface Soil mg/kg	Sediment mg/kg	Surface Water ug/L	Groundwater Bedrock Zone Filtered ug/L	Groundwater Bedrock Zone Unfiltered ug/L	Groundwater Unconsolidated Zone Filtered ug/L	Groundwater Unconsolidated Unfiltered ug/L
Analyte								
Cyanide	0	0	0	0	0	0	0	0
Aluminum	17700	19500	13900	3370	0	9410	0	0
Antimony	0.96	0.96	0	0	0	0	0	0
Arsenic	15.4	19.8	19.5	3.2	0	19.1	11.7	11.7
Barium	88.4	124	123	47.5	256	241	82.1	82.1
Beryllium	0.88	0.88	0.38	0	0	0	0	0
Cadmium	0	0	0	0	0	0	0	0
Calcium	15800	35500	5510	41400	53100	48200	115000	115000
Chromium	17.4	27.2	18.1	0	0	19.5	7.3	7.3
Cobalt	10.4	23.2	9.1	0	0	0	0	0
Copper	17.7	32.3	27.6	7.9	0	17	0	0
Iron	23100	35200	28200	2560	1430	21500	279	279
Lead	26.1	19.1	27.4	0	0	23	0	0
Magnesium	3030	8790	2760	10800	15000	13700	43300	43300
Manganese	1450	3030	1950	391	1340	1260	1020	1020
Mercury	0.036	0.044	0.059	0	0	0	0	0
Nickel	21.1	60.7	17.7	0	83.4	85.3	0	0
Potassium	927	3350	1950	3170	5770	6060	2890	2890
Selenium	104	105	107	0	0	0	0	0
Silver	0	0	0	0	0	0	0	0
Sodium	123	145	112	21300	51400	49700	45700	45700
Thallium	0	0.91	0.89	0	0	0	0	0
Vanadium	31.1	37.6	26.1	0	0	15.5	0	0
Zinc	61.8	93.3	532	42	52.3	193	60.9	60.9

Table 3-6. FWGWMP July 2010 VOCs Analytical Results

Station ID					SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-001-1515-GW	FWGSCFmw-002-1516-GW	FWGSCFmw-003-1517-GW	FWGSCFmw-004-1518-GW	FWGSCFmw-005-1519-GW	FWGSCFmw-006-1520-GW
Date Collected					7/14/2010	7/14/2010	7/13/2010	7/15/2010	7/15/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,1,1-Trichloroethane	µg/L	NS	3200	9100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	0.067	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	0.0065	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	330	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	0.39	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	7100	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	47	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	2000	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	22000	10 U	10 U	**3.4 JB**	10 U	10 U	**4.9 JB**
Benzene	µg/L	5	0.35	0.41	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1000	**0.69 J**	**0.34 J**	1.0 U	1.0 U	**0.64 J**	1.0 U
Carbon tetrachloride	µg/L	5	0.17	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	91	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	21000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	NS	0.17	0.19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	190	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-dichloroethene	µg/L	70	61	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	1200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	4.8	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6. FWGWMP July 2010 VOCs Analytical Results

Station ID					LL1mw-064	LL1mw-065	LL1mw-067	LL1mw-078	LL1mw-080	LL1mw-081	LL1mw-082
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-064C-1521-GW	FWGLL1mw-065C-1522-GW	FWGLL1mw-067C-1523-GW	FWGLL1mw-078C-1524-GW	FWGLL1mw-080C-1525-GW	FWGLL1mw-081C-1526-GW	FWGLL1mw-082C-1527-GW
Date Collected					7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/15/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,1,1-Trichloroethane	µg/L	NS	3200	9100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	0.067	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	0.0065	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	330	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	0.39	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	7100	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	47	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	2000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	22000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	5	0.35	0.41	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	91	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	21000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	NS	0.17	0.19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	190	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-dichloroethene	µg/L	70	61	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	1200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	4.8	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6. FWGWMP July 2010 VOCs Analytical Results

Station ID					LL1mw-083	LL1mw-084	LL1mw-085	LL2mw-059	LL2mw-060	LL2mw-261	LL2mw-262
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-083C-1528-GW	FWGLL1mw-084C-1529-GW	FWGLL1mw-085C-1530-GW	FWGLL2mw-059C-1531-GW	FWGLL2mw-060C-1532-GW	FWGLL2mw-261C-1533-GW	FWGLL2mw-262C-1534-GW
Date Collected					7/14/2010	7/14/2010	7/15/2010	7/8/2010	7/8/2010	7/15/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,1,1-Trichloroethane	µg/L	NS	3200	9100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	0.067	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	0.0065	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	330	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	0.39	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	7100	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	47	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	2000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	22000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	5	0.35	0.41	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	91	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	21000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	NS	0.17	0.19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	190	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-dichloroethene	µg/L	70	61	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	1200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	4.8	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6. FWGWMP July 2010 VOCs Analytical Results

Station ID					LL2mw-263	LL2mw-265	LL2mw-266	LL2mw-267	LL2mw-269	LL2mw-270	LL3mw-232
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL2mw-263C-1535-GW	FWGLL2mw-265C-1536-GW	FWGLL2mw-266C-1537-GW	FWGLL2mw-267C-1565-GW	FWGLL2mw-269C-1538-GW	FWGLL2mw-270C-1539-GW	FWGLL3mw-232C-1540-GW
Date Collected					7/8/2010	7/12/2010	7/8/2010	7/8/2010	7/15/2010	7/15/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,1,1-Trichloroethane	µg/L	NS	3200	9100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	0.067	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	0.0065	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	330	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	0.39	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	7100	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	47	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	2000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	22000	10 U	10 U	**2.5 JB**	10 U	10 U	10 U	10 U
Benzene	µg/L	5	0.35	0.41	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	91	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	21000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	NS	0.17	0.19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	190	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-dichloroethene	µg/L	70	61	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	1200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	4.8	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6. FWGWMP July 2010 VOCs Analytical Results

Station ID					LL3mw-234	LL3mw-236	LL3mw-239	LL4mw-196	LL4mw-197	LL12mw-088	LL12mw-107
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-234C-1541-GW	FWGLL3mw-236C-1542-GW	FWGLL3mw-239C-1543-GW	FWGLL4mw-196C-1544-GW	FWGLL4mw-197C-1545-GW	FWGLL12mw-088C-1546-GW	FWGLL12mw-107C-1547-GW
Date Collected					7/8/2010	7/8/2010	7/8/2010	7/8/2010	7/8/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,1,1-Trichloroethane	µg/L	NS	3200	9100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	0.067	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	0.0065	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	330	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	0.39	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	7100	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	47	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	2000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	22000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	5	0.35	0.41	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	0.44	1.0 U	1.0 U	**0.37 J**	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	91	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	21000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	NS	0.17	0.19	1.0 U	1.0 U	**0.52 J**	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	190	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-dichloroethene	µg/L	70	61	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	1200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	4.8	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6. FWGWMP July 2010 VOCs Analytical Results

Station ID					LL12mw-113	LL12mw-128	LL12mw-153	LL12mw-154	LL12mw-182	LL12mw-183	LL12mw-184
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-113C-1548-GW	FWGLL12mw-128C-1549-GW	FWGLL12mw-153C-1550-GW	FWGLL12mw-154C-1551-GW	FWGLL12mw-182C-1552-GW	FWGLL12mw-183C-1553-GW	FWGLL12mw-184C-1554-GW
Date Collected					7/12/2010	7/13/2010	7/12/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,1,1-Trichloroethane	µg/L	NS	3200	9100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	0.067	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	0.0065	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	330	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	0.39	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	7100	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	NS	NS	47	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	2000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	22000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	5	0.35	0.41	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	91	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	21000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	NS	0.17	0.19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	190	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-dichloroethene	µg/L	70	61	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	1200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	4.8	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6. FWGWMP July 2010 VOCs Analytical Results

Station ID					LL12mw-185	LL12mw-186	LL12mw-187	LL12mw-188	LL12mw-189	LL12mw-242	LL12mw-243
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-185C-1555-GW	FWGLL12mw-186C-1556-GW	FWGLL12mw-187C-1557-GW	FWGLL12mw-188C-1558-GW	FWGLL12mw-189C-1559-GW	FWGLL12mw-242C-1560-GW	FWGLL12mw-243C-1561-GW
Date Collected					7/13/2010	7/13/2010	7/13/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,1,1-Trichloroethane	µg/L	NS	3200	9100	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	0.067	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	340	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	0.0065	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	330	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	0.39	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	7100	10 U	10 U	10 U	10 U	10 U	10 U	**1.3 JB**
2-Hexanone	µg/L	NS	NS	47	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	2000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	NS	5500	22000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	5	0.35	0.41	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	91	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	21000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	NS	0.17	0.19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	190	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-dichloroethene	µg/L	70	61	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	0.15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	1200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	4.8	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6. FWGWMP July 2010 VOCs Analytical Results

Station ID					LL12mw-244	LL12mw-245	LL12mw-246
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-244C-1562-GW	FWGLL12mw-245C-1563-GW	FWGLL12mw-246C-1564-GW
Date Collected					7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab
Analyte	Units						
1,1,1-Trichloroethane	µg/L	NS	3200	9100	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	NS	0.052	0.067	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	NS	0.2	0.24	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	NS	810	2.4	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene (total)	µg/L	7	340	340	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	µg/L	NS	0.0056	0.0065	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	0.12	0.15	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	µg/L	NS	NS	330	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	0.16	0.39	1.0 U	1.0 U	1.0 U
2-Butanone	µg/L	NS	7000	7100	**1.6 JB**	10 U	10 U
2-Hexanone	µg/L	NS	NS	47	10 U	10 U	10 U
4-Methyl-2-pentanone	µg/L	NS	NS	2000	10 U	10 U	10 U
Acetone	µg/L	NS	5500	22000	**1.1 JB**	10 U	10 U
Benzene	µg/L	5	0.35	0.41	1.0 U	1.0 U	1.0 U
Bromochloromethane	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	NS	0.18	0.12	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	NS	8.5	8.5	1.0 U	1.0 U	1.0 U
Bromomethane	µg/L	NS	8.7	8.7	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	NS	1000	1000	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	0.17	0.44	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	91	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	21000	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	NS	0.17	0.19	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	NS	160	190	1.0 U	1.0 U	1.0 U
cis-1,2-dichloroethene	µg/L	70	61	370	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	NS	0.13	0.15	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1300	1.5	1.0 U	1.0 U	1.0 U
m&p-xylenes	µg/L	NS	NS	1200	2.0 U	2.0 U	2.0 U
Methylene chloride	µg/L	NS	4.3	4.8	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1200	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1600	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	**0.22 J**	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-6 FWGWMP July 2010 VOCs Analytical Results

Data Qualifiers

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

U- The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

J- The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:

- Results detected above the laboratory MDL but less than the laboratory reporting limit.
- MS/MSD percent recoveries outside the acceptance criteria.
- Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

R- Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

UJ- This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

B- The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) “B” designation when used by the laboratory as an estimated value for inorganics.

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-001-1515-GW	FWGSCFmw-002-1516-GW	FWGSCFmw-003-1517-GW	FWGSCFmw-004-1518-GW	FWGSCFmw-005-1519-GW	FWGSCFmw-006-1520-GW
Date Collected					7/14/2010	7/14/2010	7/13/2010	7/15/2010	7/15/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	2.3	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	370	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	0.043	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	3700	5.0 U	5.0 U	5.0 U	5.0 U	6.6 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	6.1	5.0 U	5.0 U	5.0 U	5.0 U	6.6 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	110	2.0 U	2.0 U	2.0 U	2.0 U	2.6 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	730	2.0 U	2.0 U	2.0 U	2.0 U	2.6 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 U	5.0 U	5.0 R	5.0 UJ	6.6 UJ	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	6.6 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	37	5.0 U	5.0 U	5.0 U	5.0 U	6.6 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	2900	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
2-Chlorophenol	µg/L	NS	30	180	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	150	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
2-Nitroaniline	µg/L	NS	110	370	2.0 U	2.0 U	2.0 U	2.0 U	2.6 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.6 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	0.15	5.0 U	5.0 U	5.0 U	5.0 U	6.6 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.6 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 R	5.0 U	6.6 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.6 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.6 U	2.0 U
4-Chloroaniline	µg/L	NS	150	0.34	2.0 U	2.0 U	2.0 U	2.0 U	2.6 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.6 U	2.0 U
4-Methylphenol	µg/L	NS	180	180	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	3.4	2.0 U	2.0 U	2.0 U	2.0 U	2.6 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	6.6 U	5.0 U
Acenaphthene	µg/L	NS	370	2200	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Acenaphthylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Anthracene	µg/L	NS	1800	11000	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.056	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Benzo(k)fluoranthene	µg/L	NS	0.92	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 U	10 U	10 UJ	10 U	13 U	10 UJ
Benzyl alcohol	µg/L	NS	11000	3700	5.0 U	5.0 U	5.0 U	5.0 U	6.6 U	5.0 U

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-001-1515-GW	FWGSCFmw-002-1516-GW	FWGSCFmw-003-1517-GW	FWGSCFmw-004-1518-GW	FWGSCFmw-005-1519-GW	FWGSCFmw-006-1520-GW
Date Collected					7/14/2010	7/14/2010	7/13/2010	7/15/2010	7/15/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
bis(2-Chloroethoxy)methane	µg/L	NS	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	0.012	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**1.7 JB**	**2.5 JB**	**1.5 JB**	**0.92 JB**	13 U	**3.7 JB**
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
Carbazole	µg/L	NS	3.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
Chrysene	µg/L	NS	9.2	2.9	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Dibenzofuran	µg/L	NS	12	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
Diethyl phthalate	µg/L	NS	29000	29000	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	NS	1.0 U	0.82 J	1.0 U	1.0 U	1.3 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
Fluoranthene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Fluorene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 U	10 U	10 U	10 U	13 U	10 U
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Isophorone	µg/L	NS	71	71	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.14	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	14	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 U	5.0 U	5.0 R	5.0 U	6.6 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U
Phenol	µg/L	NS	11000	11000	1.0 U	1.0 U	1.0 U	**0.81 J**	1.3 U	1.0 U
Pyrene	µg/L	NS	NS	1100	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL1mw-064	LL1mw-065	LL1mw-067	LL1mw-078	LL1mw-080	LL1mw-081
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-064C-1521-GW	FWGLL1mw-065C-1522-GW	FWGLL1mw-067C-1523-GW	FWGLL1mw-078C-1524-GW	FWGLL1mw-080C-1525-GW	FWGLL1mw-081C-1526-GW
Date Collected					7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	2.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	0.043	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	3700	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	6.1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	37	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	2900	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	150	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	370	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	0.34	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	180	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	3.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	2200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	11000	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.056	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(k)fluoranthene	µg/L	NS	0.92	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 U	10 U	10 U	10 U	10 U	10 U
Benzyl alcohol	µg/L	NS	11000	3700	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL1mw-064	LL1mw-065	LL1mw-067	LL1mw-078	LL1mw-080	LL1mw-081
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-064C-1521-GW	FWGLL1mw-065C-1522-GW	FWGLL1mw-067C-1523-GW	FWGLL1mw-078C-1524-GW	FWGLL1mw-080C-1525-GW	FWGLL1mw-081C-1526-GW
Date Collected					7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
bis(2-Chloroethoxy)methane	µg/L	NS	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	0.012	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**0.88 JB**	**1.4 JB**	**2.1 JB**	**1.5 JB**	**4.2 JB**	**1.6 JB**
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	2.9	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29000	29000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	**0.80 J**	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 UJ	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	1100	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL1mw-082	LL1mw-083	LL1mw-084	LL1mw-085	LL2mw-059	LL2mw-060
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-082C-1527-GW	FWGLL1mw-083C-1528-GW	FWGLL1mw-084C-1529-GW	FWGLL1mw-085C-1530-GW	FWGLL2mw-059C-1531-GW	FWGLL2mw-060C-1532-GW
Date Collected					7/15/2010	7/14/2010	7/14/2010	7/15/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	2.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	0.043	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	3700	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	6.1	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	110	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	730	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	**1.5 J**	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	37	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	2900	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	180	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	150	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1800	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	370	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	NS	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	NS	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	0.34	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	180	180	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	3.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	2200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	11000	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.056	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(k)fluoranthene	µg/L	NS	0.92	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 U	10 UJ	10 U	10 U	10 UJ	10 UJ
Benzyl alcohol	µg/L	NS	11000	3700	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL1mw-082	LL1mw-083	LL1mw-084	LL1mw-085	LL2mw-059	LL2mw-060
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-082C-1527-GW	FWGLL1mw-083C-1528-GW	FWGLL1mw-084C-1529-GW	FWGLL1mw-085C-1530-GW	FWGLL2mw-059C-1531-GW	FWGLL2mw-060C-1532-GW
Date Collected					7/15/2010	7/14/2010	7/14/2010	7/15/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
bis(2-Chloroethoxy)methane	µg/L	NS	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	0.012	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**2.0 JB**	**0.96 JB**	**3.4 JB**	**2.5 JB**	10 U	10 U
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	2.9	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29000	29000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 U	10 UJ	10 U	10 U	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	11000	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	1100	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL2mw-261	LL2mw-262	LL2mw-263	LL2mw-265	LL2mw-266	LL2mw-267
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL2mw-261C-1533-GW	FWGLL2mw-262C-1534-GW	FWGLL2mw-263C-1535-GW	FWGLL2mw-265C-1536-GW	FWGLL2mw-266C-1537-GW	FWGLL2mw-267C-1565-GW
Date Collected					7/15/2010	7/8/2010	7/8/2010	7/12/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	2.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	0.043	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	3700	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	6.1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	37	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	2900	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	150	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	370	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	0.34	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	180	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	3.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	2200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	11000	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.056	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(k)fluoranthene	µg/L	NS	0.92	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 UJ	10 UJ	10 UJ	10 U	10 UJ	10 UJ
Benzyl alcohol	µg/L	NS	11000	3700	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL2mw-261	LL2mw-262	LL2mw-263	LL2mw-265	LL2mw-266	LL2mw-267
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL2mw-261C-1533-GW	FWGLL2mw-262C-1534-GW	FWGLL2mw-263C-1535-GW	FWGLL2mw-265C-1536-GW	FWGLL2mw-266C-1537-GW	FWGLL2mw-267C-1565-GW
Date Collected					7/15/2010	7/8/2010	7/8/2010	7/12/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
bis(2-Chloroethoxy)methane	µg/L	NS	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	0.012	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**0.87 JB**	**1.1 JB**	10 U	**2.5 JB**	**5.8 JB**	**2.3 JB**
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	2.9	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29000	29000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 U	10 U	10 U	10 UJ	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	1100	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL2mw-269	LL2mw-270	LL3mw-232	LL3mw-234	LL3mw-236	LL3mw-239
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL2mw-269C-1538-GW	FWGLL2mw-270C-1539-GW	FWGLL3mw-232C-1540-GW	FWGLL3mw-234C-1541-GW	FWGLL3mw-236C-1542-GW	FWGLL3mw-239C-1543-GW
Date Collected					7/15/2010	7/15/2010	7/8/2010	7/8/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	2.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	0.043	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	3700	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	6.1	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	110	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	730	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	37	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	2900	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	180	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	150	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1800	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U
2-Nitroaniline	µg/L	NS	110	370	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U
4-Chloroaniline	µg/L	NS	150	0.34	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	180	180	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U
4-Nitroanaline	µg/L	NS	3.2	3.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U
Acenaphthene	µg/L	NS	370	2200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	11000	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.056	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(k)fluoranthene	µg/L	NS	0.92	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ
Benzyl alcohol	µg/L	NS	11000	3700	5.0 U	5.0 U	5.0 U	0.84 JB	5.0 UJ	5.0 U

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL2mw-269	LL2mw-270	LL3mw-232	LL3mw-234	LL3mw-236	LL3mw-239
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL2mw-269C-1538-GW	FWGLL2mw-270C-1539-GW	FWGLL3mw-232C-1540-GW	FWGLL3mw-234C-1541-GW	FWGLL3mw-236C-1542-GW	FWGLL3mw-239C-1543-GW
Date Collected					7/15/2010	7/15/2010	7/8/2010	7/8/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
bis(2-Chloroethoxy)methane	µg/L	NS	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	0.012	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**1.4 JB**	10 U	**1.5 JB**	10 U	10 U	**8.7 JB**
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	**13**	1.0 U	**2.0**	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	2.9	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29000	29000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	11000	1.0 U	**1.4**	1.0 U	1.0 UJ	1.0 UJ	1.0 U
Pyrene	µg/L	NS	NS	1100	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL4mw-196	LL4mw-197	LL12mw-088	LL12mw-107	LL12mw-113	LL12mw-128
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL4mw-196C-1544-GW	FWGLL4mw-197C-1545-GW	FWGLL12mw-088C-1546-GW	FWGLL12mw-107C-1547-GW	FWGLL12mw-113C-1548-GW	FWGLL12mw-128C-1549-GW
Date Collected					7/8/2010	7/8/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	2.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	0.043	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	3700	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	6.1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 U	5.0 U	5.0 U	5.0 R	5.0 U	5.0 R
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	37	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	2900	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	150	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	370	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 R	5.0 U	5.0 R
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	0.34	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	180	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	3.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	2200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	11000	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.056	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(k)fluoranthene	µg/L	NS	0.92	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 UJ	10 UJ	10 U	10 UJ	10 U	10 UJ
Benzyl alcohol	µg/L	NS	11000	3700	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL4mw-196	LL4mw-197	LL12mw-088	LL12mw-107	LL12mw-113	LL12mw-128
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL4mw-196C-1544-GW	FWGLL4mw-197C-1545-GW	FWGLL12mw-088C-1546-GW	FWGLL12mw-107C-1547-GW	FWGLL12mw-113C-1548-GW	FWGLL12mw-128C-1549-GW
Date Collected					7/8/2010	7/8/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
bis(2-Chloroethoxy)methane	µg/L	NS	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	0.012	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**8.2 JB**	**1.1 JB**	**2.4 JB**	**3.0 JB**	**1.9 JB**	**2.3 JB**
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	2.9	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29000	29000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 U	10 U	10 UJ	10 U	10 UJ	10 U
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 U	5.0 U	5.0 U	5.0 R	5.0 U	5.0 R
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	11000	1.0 U	1.0 U	1.0 U	1.0 U	**0.83 J**	1.0 U
Pyrene	µg/L	NS	NS	1100	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL12mw-153	LL12mw-154	LL12mw-182	LL12mw-183	LL12mw-184	LL12mw-185
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-153C-1550-GW	FWGLL12mw-154C-1551-GW	FWGLL12mw-182C-1552-GW	FWGLL12mw-183C-1553-GW	FWGLL12mw-184C-1554-GW	FWGLL12mw-185C-1555-GW
Date Collected					7/12/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	2.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	0.043	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	3700	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	6.1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 U	5.0 U	5.0 R	5.0 U	5.0 R	5.0 R
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	37	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	2900	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	150	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	370	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 R	5.0 U	5.0 R	5.0 R
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	0.34	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	180	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	3.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	2200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	11000	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	**0.23**	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.056	0.20 U	0.20 U	**0.22**	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	NS	0.20 U	0.20 U	**0.22**	0.20 U	0.20 U	0.20 U
Benzo(k)fluoranthene	µg/L	NS	0.92	0.029	0.20 U	0.20 U	**0.32**	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 U	10 U	10 UJ	10 U	10 UJ	10 UJ
Benzyl alcohol	µg/L	NS	11000	3700	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL12mw-153	LL12mw-154	LL12mw-182	LL12mw-183	LL12mw-184	LL12mw-185
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-153C-1550-GW	FWGLL12mw-154C-1551-GW	FWGLL12mw-182C-1552-GW	FWGLL12mw-183C-1553-GW	FWGLL12mw-184C-1554-GW	FWGLL12mw-185C-1555-GW
Date Collected					7/12/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
bis(2-Chloroethoxy)methane	µg/L	NS	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	0.012	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**1.3 JB**	**1.5 JB**	**4.9 JB**	**2.4 JB**	**3.8 JB**	**2.6 JB**
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.4**
Carbazole	µg/L	NS	3.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	2.9	0.20 U	0.20 U	**0.21**	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.0029	0.20 U	0.20 U	**0.21**	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29000	29000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	NS	1.0 U	1.0 U	**0.89 JB**	1.0 U	1.0 U	**0.75 JB**
Di-n-octyl phthalate	µg/L	NS	1500	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	1500	0.20 U	0.20 U	**0.23**	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 UJ	10 UJ	10 U	10 UJ	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	**0.22**	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 U	5.0 U	5.0 R	5.0 U	5.0 R	5.0 R
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	1100	0.20 U	0.20 U	**0.21**	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL12mw-186	LL12mw-187	LL12mw-188	LL12mw-189	LL12mw-242	LL12mw-243
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-186C-1556-GW	FWGLL12mw-187C-1557-GW	FWGLL12mw-188C-1558-GW	FWGLL12mw-189C-1559-GW	FWGLL12mw-242C-1560-GW	FWGLL12mw-243C-1561-GW
Date Collected					7/13/2010	7/13/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
1,2,4-Trichlorobenzene	µg/L	NS	7.2	2.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	370	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	0.043	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	3700	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	6.1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	110	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	730	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 R	5.0 R	5.0 U	5.0 R	5.0 U	5.0 R
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	37	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	2900	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	150	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	370	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	0.15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 R	5.0 R	5.0 U	5.0 R	5.0 U	5.0 R
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	0.34	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	180	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	3.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	2200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	11000	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.056	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzo(k)fluoranthene	µg/L	NS	0.92	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 UJ	10 UJ	10 U	10 UJ	10 U	10 UJ
Benzyl alcohol	µg/L	NS	11000	3700	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL12mw-186	LL12mw-187	LL12mw-188	LL12mw-189	LL12mw-242	LL12mw-243
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-186C-1556-GW	FWGLL12mw-187C-1557-GW	FWGLL12mw-188C-1558-GW	FWGLL12mw-189C-1559-GW	FWGLL12mw-242C-1560-GW	FWGLL12mw-243C-1561-GW
Date Collected					7/13/2010	7/13/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
bis(2-Chloroethoxy)methane	µg/L	NS	NS	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	0.012	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**3.3 JB**	**1.2 JB**	**2.4 JB**	**2.8 JB**	**1.7 JB**	**4.4 JB**
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	0.89 J	1.0 U
Carbazole	µg/L	NS	3.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	2.9	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.0029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29000	29000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	NS	**0.76 JB**	1.0 U	1.0 U	**0.75 JB**	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.042	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	0.86	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 U	10 U	10 UJ	10 U	10 UJ	10 U
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	71	1.0 U	1.0 U	1.0 U	1.0 U	0.38 J	1.0 U
Naphthalene	µg/L	NS	6.2	0.14	0.20 U	0.20 U	0.20 U	0.29	0.20 U	0.20 U
Nitrobenzene	µg/L	NS	3.4	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	9600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 R	5.0 R	5.0 U	5.0 R	5.0 U	5.0 R
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	1100	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL12mw-244	LL12mw-245	LL12mw-246
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-244C-1562-GW	FWGLL12mw-245C-1563-GW	FWGLL12mw-246C-1564-GW
Date Collected					7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab
Analyte	Units						
1,2,4-Trichlorobenzene	µg/L	NS	7.2	2.3	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	NS	370	370	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	NS	180	NS	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	NS	0.5	0.043	1.0 U	1.0 U	1.0 U
2,2-oxybis (1-chloropropane)	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	µg/L	NS	3600	3700	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	µg/L	NS	3.6	6.1	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	NS	110	110	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	NS	730	730	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 R	5.0 U	5.0 R
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	µg/L	NS	36	37	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	µg/L	NS	490	2900	1.0 U	1.0 U	1.0 U
2-Chlorophenol	µg/L	NS	30	180	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	µg/L	NS	NS	150	0.20 U	0.20 U	0.20 U
2-Methylphenol	µg/L	NS	1800	1800	1.0 U	1.0 U	1.0 U
2-Nitroaniline	µg/L	NS	110	370	2.0 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	0.15	5.0 U	5.0 U	5.0 U
3-Nitroaniline	µg/L	NS	3.2	NS	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 R	5.0 U	5.0 R
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	NS	150	0.34	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U
4-Methylphenol	µg/L	NS	180	180	1.0 U	1.0 U	1.0 U
4-Nitroanaline	µg/L	NS	3.2	3.4	2.0 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	2200	0.20 U	0.20 U	0.20 U
Acenaphthylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U
Anthracene	µg/L	NS	1800	11000	0.20 U	0.20 U	0.20 U
Benzo(a)anthracene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.2	0.0092	0.0029	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	NS	0.092	0.056	0.20 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U
Benzo(k)fluoranthene	µg/L	NS	0.92	0.029	0.20 U	0.20 U	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 UJ	10 U	10 UJ
Benzyl alcohol	µg/L	NS	11000	3700	5.0 U	5.0 U	5.0 U

Table 3-7. FWGWMP July 2010 SVOCs Analytical Results

Station ID					LL12mw-244	LL12mw-245	LL12mw-246
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-244C-1562-GW	FWGLL12mw-245C-1563-GW	FWGLL12mw-246C-1564-GW
Date Collected					7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab
Analyte	Units						
bis(2-Chloroethoxy)methane	µg/L	NS	NS	110	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	µg/L	NS	0.001	0.012	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**1.8 JB**	**1.8 JB**	**1.8 JB**
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U
Carbazole	µg/L	NS	3.4	NS	1.0 U	1.0 U	1.0 U
Chrysene	µg/L	NS	9.2	2.9	0.20 U	0.20 U	0.20 U
Dibenzo(a,h)anthracene	µg/L	NS	0.0093	0.0029	0.20 U	0.20 U	0.20 U
Dibenzofuran	µg/L	NS	12	NS	1.0 U	1.0 U	1.0 U
Diethyl phthalate	µg/L	NS	29000	29000	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	µg/L	NS	360000	NS	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	NS	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	µg/L	NS	1500	NS	1.0 U	1.0 U	1.0 U
Fluoranthene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U
Fluorene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	1	0.042	0.042	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	NS	0.86	0.86	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 U	10 UJ	10 U
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	0.092	0.029	0.20 U	0.20 U	0.20 U
Isophorone	µg/L	NS	71	71	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	NS	6.2	0.14	0.20 U	0.20 U	**1.4**
Nitrobenzene	µg/L	NS	3.4	0.12	1.0 U	1.0 U	1.0 U
N-Nitroso-di-n-propylamine	µg/L	NS	9600	9600	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	µg/L	NS	14	14	1.0 U	1.0 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 R	5.0 U	5.0 R
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	11000	1.0 U	1.0 U	1.0 U
Pyrene	µg/L	NS	NS	1100	0.20 U	0.20 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-7 FWGWMP July 2010 SVOCs Analytical Results

Data Qualifiers

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

U- The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

J- The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:

- Results detected above the laboratory MDL but less than the laboratory reporting limit.
- MS/MSD percent recoveries outside the acceptance criteria.
- Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

R- Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

UJ- This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

B- The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) “B” designation when used by the laboratory as an estimated value for inorganics.

Table 3-8. FWGWMP July 2010 Pesticides and PCBs Analytical Results

Station ID					SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-001-1515-GW	FWGSCFmw-002-1516-GW	FWGSCFmw-003-1517-GW	FWGSCFmw-004-1518-GW	FWGSCFmw-005-1519-GW	FWGSCFmw-006-1520-GW
Date Collected					7/14/2010	7/14/2010	7/13/2010	7/15/2010	7/15/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.28	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
4,4'-DDE	µg/L	NS	0.2	0.2	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
4,4'-DDT	µg/L	NS	0.2	0.2	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Aldrin	µg/L	NS	0.004	0.004	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
alpha-BHC	µg/L	NS	0.011	0.011	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
beta-BHC	µg/L	NS	0.037	0.037	0.030 UJ	0.030 U	**0.0092 J**	0.030 U	0.030 UJ	**0.020 J**
delta-BHC	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Endosulfan I	µg/L	NS	0.022	0.022	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 U
Endosulfan II	µg/L	NS	0.022	0.022	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Endrin	µg/L	2	11	11	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Endrin ketone	µg/L	NS	NS	NS	**0.027 J**	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Gamma-BHC	µg/L	0.2	0.052	0.061	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Heptachlor	µg/L	0.4	0.015	0.015	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Methoxychlor	µg/L	40	180	180	0.10 UJ	0.10 U	0.10 U	0.10 U	0.10 UJ	0.10 U
Toxaphene	µg/L	3	0.061	0.061	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8. FWGWMP July 2010 Pesticides and PCBs Analytical Results

Station ID					LL1mw-064	LL1mw-065	LL1mw-067	LL1mw-078	LL1mw-080	LL1mw-081
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-064C-1521-GW	FWGLL1mw-065C-1522-GW	FWGLL1mw-067C-1523-GW	FWGLL1mw-078C-1524-GW	FWGLL1mw-080C-1525-GW	FWGLL1mw-081C-1526-GW
Date Collected					7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010	7/14/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.28	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
4,4'-DDE	µg/L	NS	0.2	0.2	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
4,4'-DDT	µg/L	NS	0.2	0.2	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
Aldrin	µg/L	NS	0.004	0.004	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
alpha-BHC	µg/L	NS	0.011	0.011	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
beta-BHC	µg/L	NS	0.037	0.037	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.048 J	**0.011 J**
delta-BHC	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	**0.019 J**	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
Endosulfan I	µg/L	NS	0.022	0.022	0.025 U	0.025 UJ	0.025 U	0.025 UJ	0.050 U	0.025 U
Endosulfan II	µg/L	NS	0.022	0.022	0.025 U	0.025 UJ	0.025 U	0.025 UJ	0.050 U	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
Endrin	µg/L	2	11	11	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
Endrin ketone	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
Gamma-BHC	µg/L	0.2	0.052	0.061	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
Heptachlor	µg/L	0.4	0.015	0.015	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.060 U	0.030 U
Methoxychlor	µg/L	40	180	180	0.10 U	0.10 UJ	0.10 U	0.10 UJ	0.20 U	0.10 U
Toxaphene	µg/L	3	0.061	0.061	2.0 U	2.0 UJ	2.0 U	2.0 UJ	4.0 U	2.0 U
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8. FWGWMP July 2010 Pesticides and PCBs Analytical Results

Station ID					LL1mw-082	LL1mw-083	LL1mw-084	LL1mw-085	LL2mw-059	LL2mw-060
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-082C-1527-GW	FWGLL1mw-083C-1528-GW	FWGLL1mw-084C-1529-GW	FWGLL1mw-085C-1530-GW	FWGLL2mw-059C-1531-GW	FWGLL2mw-060C-1532-GW
Date Collected					7/15/2010	7/14/2010	7/14/2010	7/15/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.28	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
4,4'-DDE	µg/L	NS	0.2	0.2	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
4,4'-DDT	µg/L	NS	0.2	0.2	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
Aldrin	µg/L	NS	0.004	0.004	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
alpha-BHC	µg/L	NS	0.011	0.011	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
beta-BHC	µg/L	NS	0.037	0.037	0.030 U	0.30 U	**0.26 J**	0.030 U	0.030 U	0.030 U
delta-BHC	µg/L	NS	NS	NS	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
Endosulfan I	µg/L	NS	0.022	0.022	0.025 U	0.25 U	0.12 U	0.025 U	0.025 U	0.025 U
Endosulfan II	µg/L	NS	0.022	0.022	0.025 U	0.25 U	0.12 U	0.025 U	0.025 U	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
Endrin	µg/L	2	11	11	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
Endrin ketone	µg/L	NS	NS	NS	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
Gamma-BHC	µg/L	0.2	0.052	0.061	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
Heptachlor	µg/L	0.4	0.015	0.015	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 U	0.30 U	0.15 U	0.030 U	0.030 U	0.030 U
Methoxychlor	µg/L	40	180	180	0.10 U	1.0 U	0.50 U	0.10 U	0.10 U	0.10 U
Toxaphene	µg/L	3	0.061	0.061	2.0 U	20 U	10 U	2.0 U	2.0 U	2.0 U
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8. FWGWMP July 2010 Pesticides and PCBs Analytical Results

Station ID					LL2mw-261	LL2mw-262	LL2mw-263	LL2mw-265	LL2mw-266	LL2mw-267
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL2mw-261C-1533-GW	FWGLL2mw-262C-1534-GW	FWGLL2mw-263C-1535-GW	FWGLL2mw-265C-1536-GW	FWGLL2mw-266C-1537-GW	FWGLL2mw-267C-1565-GW
Date Collected					7/15/2010	7/8/2010	7/8/2010	7/12/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.28	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
4,4'-DDE	µg/L	NS	0.2	0.2	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
4,4'-DDT	µg/L	NS	0.2	0.2	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Aldrin	µg/L	NS	0.004	0.004	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
alpha-BHC	µg/L	NS	0.011	0.011	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
beta-BHC	µg/L	NS	0.037	0.037	0.030 U	0.030 U	0.030 U	0.030 U	**0.029 J**	0.030 U
delta-BHC	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Endosulfan I	µg/L	NS	0.022	0.022	0.025 U	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 U
Endosulfan II	µg/L	NS	0.022	0.022	0.025 U	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Endrin	µg/L	2	11	11	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Endrin ketone	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Gamma-BHC	µg/L	0.2	0.052	0.061	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Heptachlor	µg/L	0.4	0.015	0.015	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Methoxychlor	µg/L	40	180	180	0.10 U	0.10 U	0.10 U	0.10 U	0.10 UJ	0.10 U
Toxaphene	µg/L	3	0.061	0.061	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8. FWGWMP July 2010 Pesticides and PCBs Analytical Results

Station ID					LL2mw-269	LL2mw-270	LL3mw-232	LL3mw-234	LL3mw-236	LL3mw-239
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL2mw-269C-1538-GW	FWGLL2mw-270C-1539-GW	FWGLL3mw-232C-1540-GW	FWGLL3mw-234C-1541-GW	FWGLL3mw-236C-1542-GW	FWGLL3mw-239C-1543-GW
Date Collected					7/15/2010	7/15/2010	7/8/2010	7/8/2010	7/8/2010	7/8/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.28	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
4,4'-DDE	µg/L	NS	0.2	0.2	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
4,4'-DDT	µg/L	NS	0.2	0.2	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Aldrin	µg/L	NS	0.004	0.004	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
alpha-BHC	µg/L	NS	0.011	0.011	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
beta-BHC	µg/L	NS	0.037	0.037	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
delta-BHC	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Endosulfan I	µg/L	NS	0.022	0.022	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Endosulfan II	µg/L	NS	0.022	0.022	0.025 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Endrin	µg/L	2	11	11	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Endrin ketone	µg/L	NS	NS	NS	0.030 UJ	**0.0090 J**	0.030 U	0.030 U	0.030 U	0.030 U
Gamma-BHC	µg/L	0.2	0.052	0.061	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Heptachlor	µg/L	0.4	0.015	0.015	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Methoxychlor	µg/L	40	180	180	0.10 UJ	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Toxaphene	µg/L	3	0.061	0.061	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8. FWGWMP July 2010 Pesticides and PCBs Analytical Results

Station ID					LL4mw-196	LL4mw-197	LL12mw-088	LL12mw-107	LL12mw-113	LL12mw-128
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL4mw-196C-1544-GW	FWGLL4mw-197C-1545-GW	FWGLL12mw-088C-1546-GW	FWGLL12mw-107C-1547-GW	FWGLL12mw-113C-1548-GW	FWGLL12mw-128C-1549-GW
Date Collected					7/8/2010	7/8/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.28	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDE	µg/L	NS	0.2	0.2	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDT	µg/L	NS	0.2	0.2	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Aldrin	µg/L	NS	0.004	0.004	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
alpha-BHC	µg/L	NS	0.011	0.011	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
alpha-Chordane	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
beta-BHC	µg/L	NS	0.037	0.037	0.030 U	0.030 U	0.030 U	**0.018 J**	0.030 UJ	0.030 UJ
delta-BHC	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Endosulfan I	µg/L	NS	0.022	0.022	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan II	µg/L	NS	0.022	0.022	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Endrin	µg/L	2	11	11	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Endrin aldehyde	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Endrin ketone	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Gamma-BHC	µg/L	0.2	0.052	0.061	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
gamma-Chlordane	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor	µg/L	0.4	0.015	0.015	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
Methoxychlor	µg/L	40	180	180	0.10 U	0.10 U	0.10 U	0.10 UJ	0.10 UJ	0.10 UJ
Toxaphene	µg/L	3	0.061	0.061	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8. FWGWMP July 2010 Pesticides and PCBs Analytical Results

Station ID					LL12mw-153	LL12mw-154	LL12mw-182	LL12mw-183	LL12mw-184	LL12mw-185
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-153C-1550-GW	FWGLL12mw-154C-1551-GW	FWGLL12mw-182C-1552-GW	FWGLL12mw-183C-1553-GW	FWGLL12mw-184C-1554-GW	FWGLL12mw-185C-1555-GW
Date Collected					7/12/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.28	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
4,4'-DDE	µg/L	NS	0.2	0.2	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
4,4'-DDT	µg/L	NS	0.2	0.2	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
Aldrin	µg/L	NS	0.004	0.004	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
alpha-BHC	µg/L	NS	0.011	0.011	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
alpha-Chordane	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
beta-BHC	µg/L	NS	0.037	0.037	**0.10 J**	**0.011 J**	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
delta-BHC	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
Endosulfan I	µg/L	NS	0.022	0.022	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 U	0.025 UJ
Endosulfan II	µg/L	NS	0.022	0.022	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 U	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
Endrin	µg/L	2	11	11	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
Endrin aldehyde	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
Endrin ketone	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
Gamma-BHC	µg/L	0.2	0.052	0.061	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
gamma-Chlordane	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
Heptachlor	µg/L	0.4	0.015	0.015	0.030 UJ	0.030 UJ	0.030 UJ	**0.027 J**	0.030 U	0.030 UJ
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ
Methoxychlor	µg/L	40	180	180	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ
Toxaphene	µg/L	3	0.061	0.061	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 UJ
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 U	0.50 UJ	0.50 U	0.50 UJ	0.50 U	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8. FWGWMP July 2010 Pesticides and PCBs Analytical Results

Station ID					LL12mw-186	LL12mw-187	LL12mw-188	LL12mw-189	LL12mw-242	LL12mw-243
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-186C-1556-GW	FWGLL12mw-187C-1557-GW	FWGLL12mw-188C-1558-GW	FWGLL12mw-189C-1559-GW	FWGLL12mw-242C-1560-GW	FWGLL12mw-243C-1561-GW
Date Collected					7/13/2010	7/13/2010	7/12/2010	7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units									
4,4'-DDD	µg/L	NS	0.28	0.28	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDE	µg/L	NS	0.2	0.2	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
4,4'-DDT	µg/L	NS	0.2	0.2	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Aldrin	µg/L	NS	0.004	0.004	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
alpha-BHC	µg/L	NS	0.011	0.011	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
alpha-Chordane	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
beta-BHC	µg/L	NS	0.037	0.037	**0.013 J**	0.030 U	0.030 UJ	**0.014 J**	0.030 UJ	**0.012 J**
delta-BHC	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endosulfan I	µg/L	NS	0.022	0.022	0.025 UJ	0.025 U	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan II	µg/L	NS	0.022	0.022	0.025 UJ	0.025 U	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin	µg/L	2	11	11	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin aldehyde	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin ketone	µg/L	NS	NS	NS	**0.0091 J**	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Gamma-BHC	µg/L	0.2	0.052	0.061	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
gamma-Chlordane	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor	µg/L	0.4	0.015	0.015	0.030 UJ	0.030 U	**0.017 J**	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Methoxychlor	µg/L	40	180	180	0.10 UJ	0.10 U	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ
Toxaphene	µg/L	3	0.061	0.061	2.0 UJ	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8. FWGWMP July 2010 Pesticides and PCBs Analytical Results

Station ID					LL12mw-244	LL12mw-245	LL12mw-246
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL12mw-244C-1562-GW	FWGLL12mw-245C-1563-GW	FWGLL12mw-246C-1564-GW
Date Collected					7/13/2010	7/12/2010	7/13/2010
Sample Type					Grab	Grab	Grab
Analyte	Units						
4,4'-DDD	µg/L	NS	0.28	0.28	0.030 UJ	0.030 UJ	0.030 U
4,4'-DDE	µg/L	NS	0.2	0.2	0.030 UJ	0.030 UJ	0.030 U
4,4'-DDT	µg/L	NS	0.2	0.2	0.030 UJ	0.030 UJ	0.030 U
Aldrin	µg/L	NS	0.004	0.004	0.030 UJ	0.030 UJ	0.030 U
alpha-BHC	µg/L	NS	0.011	0.011	0.030 UJ	0.030 UJ	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 U
beta-BHC	µg/L	NS	0.037	0.037	0.030 UJ	0.030 UJ	0.030 U
delta-BHC	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 UJ	0.030 UJ	0.030 U
Endosulfan I	µg/L	NS	0.022	0.022	0.025 UJ	0.025 UJ	0.025 U
Endosulfan II	µg/L	NS	0.022	0.022	0.025 UJ	0.025 UJ	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 U
Endrin	µg/L	2	11	11	0.030 UJ	0.030 UJ	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 U
Endrin ketone	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 U
Gamma-BHC	µg/L	0.2	0.052	0.061	0.030 UJ	0.030 UJ	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 U
Heptachlor	µg/L	0.4	0.015	0.015	0.030 UJ	0.030 UJ	0.030 U
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 UJ	0.030 UJ	0.030 U
Methoxychlor	µg/L	40	180	180	0.10 UJ	0.10 UJ	0.10 U
Toxaphene	µg/L	3	0.061	0.061	2.0 UJ	2.0 UJ	2.0 U
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 UJ	0.50 UJ	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 UJ	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 UJ	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-8 FWGWMP July 2010 Pesticide and PCBs Analytical Results

Data Qualifiers

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

U- The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

J- The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:

- Results detected above the laboratory MDL but less than the laboratory reporting limit.
- MS/MSD percent recoveries outside the acceptance criteria.
- Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

R- Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

UJ- This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

B- The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) “B” designation when used by the laboratory as an estimated value for inorganics.

3.3 Data Verification/Validation

As discussed in Sections 2.3 and 3.2, all primary chemical data were generated by TestAmerica. RTI conducted the independent QC analysis (EQM does not however verify RTI data). A three step process is then conducted which involves the lab, the ADR data program, and a data validator performing the data verification and validation of the data. The First Step is where each lab analyzes the data and assigns a qualifier as necessary in full accordance with USEPA and Louisville Chemistry (LCG) guidelines.

The data verification and validation process is continued with Step Two; when the data validator verifies all data received from TestAmerica, and validates greater than 10% of the data by running the lab data through the ADR program. The USACE-supplied ADR program assigned qualifiers to the data as necessary consistent with the programmed criteria of the ADR software. The Third step is when the data validator then uses professional judgment to check the validity of the qualified data and either accepts, rejects, or re-qualifies the ADR results following strict LCG and USEPA guidelines.

After this three-step process has been completed, the resulting final ADR qualifiers may not match the original lab qualifiers which are presented on the laboratory data sheets. As a result of the data validation process, one or more of four possibilities listed occurs:

1. The lab assigns a B, J, or E to the data, and ADR and/or the data validator changes the qualifier to a J, UJ, U, B, or R.
2. The lab assigns no qualifier to the data, and ADR and/or the data validator assigns a J, UJ, U, B, or R to the data.
3. The lab assigns a B, J, or E to the data, and ADR and/or the data validator assigns no qualifier to the data.
4. The lab may assign a J qualifier or use no qualifier, and ADR and/or the data validator accepts the lab designation.

For the July 2010 Sampling Event Report, the laboratory data with laboratory derived qualifiers following USEPA and LGC criteria are presented in Appendix D. The verification reports for the data are also presented in Appendix D, which includes the definitions of the ADR qualifiers. The data presented in Tables 3-3, 3-4, 3-6, 3-7, and 3-8 are the result of the data that has been subjected to the Three Step Process of verification and validation. These Tables display the final assigned data qualifier in accordance with ADR and LCG criteria.

Data qualifier flags are used in an effort to describe the quality of each piece of data for each constituent. These flags are letter codes appended to the numerical data. The following data qualifiers are specified in the USACE Louisville Chemistry Guidelines (LCG). For a complete explanation of qualifiers used for each constituent please refer to the Data Verification Summaries in Appendix D.

- U - The analyte was analyzed for but not detected. The numerical value preceding the U is the associated reporting limit.

- J - The identification of the analyte is acceptable, but the quality assurance criteria indicate that the quantitative values may be outside the normal expected range of precision (i.e., the quantitative value is estimated). Examples include:
  - Results detected above the laboratory MDL but less than the laboratory reporting limit.
  - MS/MSD percent recoveries outside the acceptance criteria.
  - Laboratory control sample (LCS) percent recoveries outside acceptance criteria.

- R - Data are considered to be rejected and shall not be used. This flag denotes the failure of quality control criteria such that it cannot be determined if the analyte is present or absent from the sample [e.g., the method reporting limit (MRL) verification standard was below quality control guidelines; associated sample results that were non-detect are unusable].

- UJ - This flag is a combination of the U and J qualifiers which indicate that the analyte is not present. The reported value is considered to be an estimated reporting limit (RL).

- B - The B flag is used for both organic and inorganic analyses when the analyte is found in the method blank or any of the field blanks. This designation overrides the Contract Laboratory Program (CLP) "B" designation when used by the laboratory as an estimated value for inorganics.

Fifty-one wells were sampled during a three-day quarterly sampling event from July 8-15, 2010. During the quarterly event, 14 trip blanks were submitted for volatile organic analysis to TestAmerica.

Six field duplicates were collected during the sampling event in order to assess the quality and consistency of sample collection. Project requirements of 10% field duplicates were met for this sampling event. In addition, five laboratory splits were collected and analyzed in order to assess the quality and consistency of the laboratory analysis. The project requirements of taking 10% laboratory splits were met for this sampling event. An equipment rinse blank was collected during each day of the sampling event.

For the July 2010 sampling event the following laboratory or field contamination at detections greater than ½ the method reporting limit (MRL) was reported for the field QA/QC samples.

A0G090540/ A0G090535
FWGEQUIPRinse1-1578-GW

- 2-butanone detected at 24ug/L, acetone at 36ug/L, m&p-xylenes at 0.35ug/L, methylene chloride at 1.0ug/L, o-xylene at 0.14ug/L, toluene at 0.87ug/L and total xylenes at 0.49ug/L. The acetone results for samples FWGLL2mw-266c-1537-GW and FWGSCFmw-006-1520-GW were qualified, "B" as the results were

<10x the equipment rinse contamination. As there were no detected concentrations of the other blank contaminants, no additional qualifications were made.

- bis (2-Ethylhexyl) phthalate detected at 1.3ug/L, benzyl alcohol at 0.41ug/L and diethyl phthalate at 0.60ug/L. The following samples were qualified, "B as the results were <10x rinse blank contamination;
  bis (2-ethylhexyl) phthalate FWGLL2mw-262c-1534-GW, FWGLL2mw-266c-1537-GW, FWGLL2mw-267c-1565-GW, FWGLL3mw-232c-1540-GW, FWGLL3mw-239c-1543-GW, FWGLL3mw-Dup3-1568-GW, FWGLL4mw-196c-1544-GW, FWGLL4mw-197c-1545-GW and FWGSCFmw-006-1520-GW
  Benzyl alcohol FWGLL3mw-234c-1541-GW
  Diethyl Phthalate-
  No qualifications were made for diethyl phthalate contamination as there were no detected concentrations of this contaminant in the associated samples.
- HMX was detected at 0.21ug/L. The HMX results for samples FWGLL2mw-059c-1531-GW, FWGLL2mw-263c-1535-GW, FWGLL3mw-234c-1541-GW, FWGLL3mw-239c-1543-GW and FWGLL4mw-197c-1545-GW were qualified, "B" as the results were <5x equipment rinse contamination.

Trip Blanks

The trip blanks had acetone contamination detected from 1.6- 1.8ug/L. The acetone results for samples FWGLL2mw-266c-1537-GW and FWGSCFmw-006-1520-GW were qualified, "B" as the results were <10x the equipment rinse contamination.

Method Blanks

- Methylene chloride was detected in the method blank at 0.65ug/L. Sample FWGEQUIPRinse1-1578-GW was qualified, "B".
- bis(2-Ethylhexyl) phthalate was detected in the method blank at 2.3ug/L. Samples FWGLL2mw-262c-1534-GW, FWGLL2mw-266c-1537-GW, FWGLL2mw-267c-1565-GW, FWGLL3mw-232c-1540-GW, FWGLL3mw-239c-1543-GW, FWGLL3mw-Dup3-1568-GW, FWGLL4mw-196c-1544-GW, FWGLL4mw-197c-1545-GW, FWGEQUIPRinse1-1578-GW and FWGSCFmw-006-1520-GW were qualified, "B" as the results were <10x method blank contamination;
- Zinc was detected in the method blank at 6.5ug/L. The zinc results for samples FWGLL2mw-059c-1531-GF, FWGLL2mw-266c-1537-GF, FWGLL3mw-232c-1540-GF, FWGLL3mw-236c-1542-GF and FWGLL3mw-239c-1543-GF were qualified, "B", as the sample results were <5x contamination

A0G130405/ A0G130410

FWGEQUIPRinse2-1579-GW

- Tetryl was detected in at 0.099ug/L. The tetryl result for sample FWGLL12mw-242c-1560-GW was qualified, "B" as the result was <5x the equipment rinse contamination.

- 2-butanone was detected at 10ug/L, acetone at 5.3ug/L and methylene chloride at 2.0ug/L. As there were no detected concentrations of the blank contaminants, no qualifications were made.

Method Blanks

- Methylene chloride was detected in the method blank at 0.54ug/L. Sample FWGEQUIPRinse2-1579-GW was qualified, "B".
- bis(2-Ethylhexyl) phthalate was detected in the method blank at 1.4ug/L. The bis(2-ethylhexyl) phthalate results for FWGLL12mw-113c-1548-GW, FWGLL12mw-088c-1546-GW, FWGLL12mw-153c-1550-GW, FWGLL12mw-154c-1551-GW, FWGLL12mw-183c-1553-GW, FWGLL12mw-188c-1558-GW, FWGLL12mw-242c-1560-GW, FWGLL12mw-245c-1563-GW, FWGLL12mw-Dup5-1570-GW, FWGLL2mw-265c-1536-GW and FWGLL2mw-Dup2-1567-GW were qualified, "B", as the results were <10x contamination.

Trip Blanks

- The trip blanks had acetone contamination detected from 1.5- 1.8ug/L. The acetone results for sample FWGEQUIPRinse2-1579-GW was qualified, "B" as the result was <10x trip blank contamination.

A0G140402/ A0G140403

FWGEQUIPRinse3-1580-GW

- 2-butanone was detected at 15ug/L, acetone at 9.7ug/L and methylene chloride at 1.5ug/L. The 2-butanone results for samples FWGLL12mw-243-1561-GW and FWGLL12mw-244-1562-GW were qualified, "B" as the results were <10x equipment blank contamination. The acetone results for FWGLL12mw-244-1562-GW and FWGSCFmw-003-1517-GW were qualified, "B" as the results were <10x equipment blank contamination. As there were no detected concentrations of the methylene chloride, no additional qualifications were made.
- bis(2-ethylhexyl)phthalate was detected at 8.5ug/L and di-n-butyl phthalate at 0.83ug/L. bis(2-ethylhexyl)phthalate results for samples FWGLL12mw-107c-1547-GW, FWGLL12mw-128c-1549-GW, FWGLL12mw-182c-1552-GW, FWGLL12mw-184c-1554-GW, FWGLL12mw-185c-1555-GW, FWGLL12mw-186c-1556-GW, FWGLL12mw-187c-1557-GW, FWGLL12mw-189c-1559-GW, FWGLL12mw-243c-1561-GW, FWGLL12mw-244c-1562-GW, FWGLL12mw-246c-1564-GW , FWGLL12mw-Dup4-1569-GW and FWGSCFmw-003c-1517-GW were qualified, "B". as the results were <5x contamination . The di-n-butyl phthalate results for samples FWGLL12mw-182c-1552-GW, FWGLL12mw-185c-1555-GW, FWGLL12mw-186c-1556-GW and FWGLL12mw-189c-1559-GW were qualified, "B". as the results were <10x contamination .

Method Blank

- bis(2-Ethylhexyl) phthalate was detected in the method blank at 2.3ug/L. The bis(2-ethylhexyl)phthalate results for samples FWGEQUIPRinse3-1580-GW, FWGLL12mw-107c-1547-GW, FWGLL12mw-128c-1549-GW, FWGLL12mw-

182c-1552-GW, FWGLL12mw-184c-1554-GW, FWGLL12mw-185c-1555-GW, FWGLL12mw-186c-1556-GW, FWGLL12mw-187c-1557-GW, FWGLL12mw-189c-1559-GW, FWGLL12mw-243c-1561-GW, FWGLL12mw-244c-1562-GW, FWGLL12mw-246c-1564-GW , FWGLL12mw-Dup4-1569-GW and FWGSCFmw-003c-1517-GW were qualified, "B", as the results were <10x contamination.

- Nitrate was detected in the method blank at 0.09mg/L. All nitrate results with the exception of samples FWGLL12mw-128c-1549-GW, FWGLL12mw-187c-1557-GW and FWGSCFmw-003c-1517-GW were qualified "U" as the detected concentrations were less than 5x blank contamination.

Trip Blanks

The trip blanks had acetone contamination detected from 1.5- 1.7ug/L. The acetone results for samples FWGEQUIPRinse3-1580-GW, FWGSCFmw-003-1517-GW and FWGLL12mw-244-1562-GW were qualified, "B" as the results were <10x trip blank contamination and or equipment blank contamination.

A0G150401/ A0G150403

FWGEQUIPRinse4-1581-GW

- 2,4-dinitrotoluene was detected at 0.071ug/L and HMX at 0.060ug/L. The 2,4-dinitrotoluene result for sample FWGLL1mw-081c-1526-GW and the HMX results for FWGLL1mw-081c-1526-GW, FWGLL1mw-083c-1528-GW and FWGLL1mw-084c-1529-GW were qualified, "B" as the detected concentrations were <5x blank contamination
- 2-butanone was detected at 15ug/L, acetone at 13ug/L, toluene at 0.32ug/L and methylene chloride at 1.4ug/L. As there were no detected concentrations of the methylene chloride, toluene or 2-butanone in the associated field samples no qualifications were made.
- bis(2-Ethylhexyl) phthalate was detected at 1.8ug/L. The bis(2-ethylhexyl) phthalate results for samples FWGLL1mw-064c-1521-GW, FWGLL1mw-065c-1522-GW, FWGLL1mw-067c-1523-GW, FWGLL1mw-078c-1524-GW, FWGLL1mw-080c-1525-GW, FWGLL1mw-081c-1526-GW, FWGLL1mw-083c-1528-GW, FWGLL1mw-084c-1529-GW, FWGLL1mw-Dup1-1566-GW, FWGSCFmw-001-1515-GW and FWGSCFmw-002-1516- GW contamination were qualified, "B" as the concentrations were of <10x contamination.

Trip Blanks

The trip blanks had acetone contamination detected from 1.8- 1.9ug/L. The acetone result for sample FWGEQUIPRinse4-1581-GW, was qualified, "B" as the result was <10x trip blank contamination.

Method Blanks

- 1,3,5-Trinitrobenzene was detected in the method blank at 0.045ug/L. Samples FWGLL1mw-067c-1523-GW and FWGLL1mw-078c-1524-GW were qualified, "B" as the detected concentrations were <5x blank contamination.

- Methylene chloride was detected in the method blank (batch 0204233) at 0.76ug/L. Methylene chloride was also detected in the method blank (batch 0207253) at 0.88ug/L. Sample FWGEQUIPRinse4-1581-GW was qualified, "B". No additional qualifications were made as there were no other detected methylene chloride results associated with the blanks.
- bis(2-Ethylhexyl) phthalate was detected in the method blank at 1.2ug/L. bis(2-Ethylhexyl) phthalate results for samples FWGEQUIPRinse4-1581-GW, FWGLL1mw-064c-1521-GW, FWGLL1mw-065c-1522-GW, FWGLL1mw-067c-1523-GW, FWGLL1mw-078c-1524-GW, FWGLL1mw-080c-1525-GW, FWGLL1mw-081c-1526-GW, FWGLL1mw-083c-1528-GW, FWGLL1mw-084c-1529-GW, FWGLL1mw-Dup1-1566-GW, FWGSCFmw-001-1515-GW and FWGSCFmw-002-1516- GW contamination were qualified, "B" as the concentrations were of <10x contamination.

A0G150579/ A0G150582

Trip Blanks

- FWGTEAM2- and FWGTEAM3- trip blanks had acetone contamination detected at 1.6 and 1.4 ug/L respectively. FWGTEAM1-TRIP had methylene chloride and acetone contamination detected at 0.35 and 2.3 ug/L respectively. The acetone result for sample FWGEQUIPRinse5-1582-GW was qualified "B" as the result was <10x trip blank contamination.

FWGEQUIPRinse5-1582-GW

- 2-butanone was detected at 10ug/L, acetone at 6.3ug/L, and methylene chloride at 0.51ug/L. As there were no detected concentrations of methylene chloride, acetone, or 2-butanone in the associated field samples no additional qualifications were made.
- bis(2-Ethylhexyl) phthalate was detected at 0.91 ug/L. The bis(2-ethylhexyl) phthalate results for samples FWGLL1mw-082c-1527-GW, FWGLL1mw-085c-1530-GW, FWGLL1mw-261c-1533-GW, FWGLL2mw-269c-1538-GW, FWGSCFmw-004-1518-GW and FWGSCFmw-Dup6-1571-GW were qualified, "B" as the results were < 10x contamination.

Method Blanks

- bis(2-Ethylhexyl) phthalate was detected in the method blank at 0.91 ug/L. The bis(2-ethylhexyl) phthalate results for samples FWGEQUIPRinse5-1582-GW, FWGLL1mw-082c-1527-GW, FWGLL1mw-085c-1530-GW, FWGLL2mw-269c-1538-GW, FWGSCFmw-004-1518-GW and FWGSCFmw-Dup6-1571-GW were qualified, "B" as the results were < 10x contamination.
- Methylene chloride was detected in the method blank (prep batch 0207253) at 0.88ug/L. Sample FWGTEAM1-TRIP was qualified, "B". No additional qualifications were made as there were no other detected methylene chloride results associated with the blanks.

For a discussion of method blank contamination please reference the Data Verification Reports and the Laboratory Case Narrative.

Laboratory analyses were performed in analytical batches of ≤ 20 in order to maximize efficiency and group quality control requirements. Method blanks and laboratory control samples were analyzed at a frequency of 1:20 (5%) samples, or in each analytical batch whichever was greater. Sufficient volume was provided to the laboratory in order to assess matrix spike analysis on project samples at a frequency of 1:10 (10%) samples. Matrix spike/matrix spike duplicate analysis was performed by the laboratory as batch quality control at a frequency of 1:10 (10%).

Field quality control and laboratory quality control results were evaluated as part of the verification assessment provided in Appendix D. Project requirements were met for the frequency and quality of these samples.

Table 3-9 presents the percent, by analytical method, of data that was acceptable (based on data not rejected) for use. For SDG A0G140402, hexachlorocyclopentadiene recovered below control limits at 30.88%, 4,6-dinitro-2-methylphenol at 25%, 2,4-dinitrophenol at 9.5% and pentachlorophenol at 47% in the MRL analyzed 7/27/10 at 1753. Per LCG, "for recovery<50%, apply, J/R. If MDL check was run attend and acceptable do not reject data." An MDL check was analyzed with acceptable results for hexachlorocyclopentadiene and results were qualified as estimated, "UJ". The MDL check did not recover for 4,6-dinitro-2-methylphenol, 2,4-dinitrophenol or pentachlorophenol. As the associated sample results for 4,6-dinitro-2-methylphenol, 2,4-dinitrophenol and pentachlorophenol did not have any detected concentrations, the results were qualified as unusable, "R". This does not, however, have any negative effect on the usability of other parameters analyzed under the same method. Rejected data do call into question the interpretation of that particular data for a given monitoring event and it is important to correct any problems to prevent a reoccurrence for future sampling events. All methods met the 90% completion requirement.

Table 3-9. Percent of Acceptable Data

Analytical Method	Total Number of Analytes	Number of Rejects	Percent Completeness
353.2 Modified	33	0	100
6010B	930	0	100
6020	434	0	100
7470A	62	0	100
8081A	1302	0	100
8082	434	0	100
8260B	2964	0	100
8270C	4092	42	99.0
8330	992	0	100
9012A	62	0	100
8330 Modified	62	0	100
WS-WC-0050	62	0	100
TOTAL	**11429**	**0**	**99.6**

All qualified data has been discussed in the Data Verification Reports contained in Appendix D. All other data meet the requirements specified in the USACE Louisville Guidance Document and the QAPP associated with this site. All qualified data performed by the data validator is further discussed in the Data Verification Reports contained in Appendix D.

SECTION 4

SUMMARY OF RESULTS

Explosive and Propellant Compounds

As shown in Table 3-3, the following explosives or propellants were detected at levels above the MCL or Region 9 PRGs during the July 2010 sampling:

- 2,4,6-Trinitotoluene at a concentration exceeding the Region 9 PRG of 2.2 µg/L at LL1mw-083 (5.0 µg/L J), LL1mw-084 (9.2 µg/L J).

- 2-Nitrotoluene – at a concentration exceeding the Region 9 PRG of 0.049 at LL1mw-083 (0.18 µg/L J).
- RDX at a concentration exceeding the Region 9 PRG of 0.61 µg/L at LL1mw-080 (88 µg/L J), LL1mw-081 (1.0 µg/L), LL1mw-084 (0.76 µg/L J), LL2mw-267 (1.1 µg/L), LL3mw-239 (1.7 µg/L),
- Nitrate/Nitrite at a concentration exceeding the Region 9 PRG of 1mg/L at LL12mw-185 (160 mg/L J) and LL12mw-187 (1400 mg/L).

Inorganic Elements

Several inorganic compounds were detected at levels exceeding the MCLs and/or Region 9 PRGs. These included manganese, aluminum, arsenic, and iron for wells from all areas sampled. These compounds were also detected at concentrations exceeding the Facility-Wide Background Criteria for many of the wells. Table 4-1 presents a summary of all inorganic compounds and the associated wells that had detections exceeding MCLs or Region 9 PRGs.

Volatile Organic Compounds

As shown in Table 3-6, the following VOCs were detected at levels above the MCLs or Region 9 PRGs during the July 2009 sampling event:

- Carbon Tetrachloride at a concentration exceeding the Region 9 PRG of 0.17 µg/L at LL3mw-239 (0.37 µg/L J).
- Chloroform at a concentration exceeding the Region 9 PRG of 0.17 µg/L at LL3mw-239 (0.52 (µg/L J).

Semivolatile Organic Compounds

As shown in Table 3-7 the following SVOCs were detected at a level exceeding either the MCL or the Region 9 PRGs:

- Bis(2-Ethylhexyl)phthalate at a concentration exceeding the Region 9 PRG of 4.8 µg/L at LL2mw-266 (5.8 µg/L J B), LL3mw-239 (8.7 µg/L J B), Ll4mw-196 (8.2 µg/L J B), LL12mw-182 (4.9 µg/L J B).

- Benzo(a)anthracene at a concentration exceeding the Region 9 PRG of 0.092 µg/L at LL12mw-182 (0.23 µg/L).
- Benzo(b)fluroanthene at a concentration exceeding the Region 9 PRG of 0.092 µg/L at LL12mw-182 (0.22 µg/L).
- Dibenzo(a,h)anthracene at a concentration exceeding the Region 9 PRG of 0.093 µg/L LL12mw-182 (0.21 µg/L).
- Indeno(1,2,3-cd)pyrene at a concentration exceeding the Region 9 PRG of 0.092 µg/L LL12mw-182 (0.22 µg/L).

Pesticides and Polychlorinated Biphenyls (PCBs)

As shown in Table 3-8 the following pesticides and PCBs were detected at a level exceeding either the MCL or the Region 9 PRGs:

- beta-BHC at a concentration exceeding the Region 9 PRG of 0.037 µg/L at LL1mw-084 (0.26 µg/L J), LL12mw-153 (0.10 µg/L J), LL12mw-154 (0.11 µg/L J).
- Heptachlor at a concentration exceeding the Region 9 PRG of 0.015 µg/L at LL12mw-183 (0.027 µg/L J), LL12mw-189 (0.017 µg/L J).

Table 4-1. Inorganic Elements Detected at Concentrations Exceeding the MCLs or Region 9 PRGs

Area	Well Number	Compound or Element Detected	Jul-10 Level (ug/L)		MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background Criteria (ug/L)
Sharon Conglomerate Wells	SCFmw-001	Arsenic	**13.1**		10	0.045	0
		Iron	**814**		300	11,000	1,430
		Manganese	**194**		50	880	1,340
	SCFmw-002	Arsenic	**12.5**		10	0.045	0
		Manganese	**67.3**		50	880	1,340
	SCFmw-003	Iron	**390**		300	11,000	1,430
		Manganese	**237**		50	880	1,340
	SCFmw-004	Manganese	**624**		50	880	1,340
	SCFmw-005	Iron	**4400**		300	11,000	1,430
		Manganese	**2180**		50	880	1,340
	SCFmw-006	Arsenic	**12.8**		10	0.045	0
		Iron	**332**		300	11,000	1,430
		Manganese	**5740**		50	880	1,340
Load Line 1	LL1mw-064	Iron	**517**		300	11,000	279
		Manganese	**112**		50	880	1,020
	LL1mw-065	Manganese	**256**		50	880	1,020
	LL1mw-078	Manganese	**71**		50	880	1,340
	LL1mw-081	Iron	**4200**		300	11,000	1,430
		Manganese	**1830**		50	880	1,340
	LL1mw-082	Iron	**5150**		300	11,000	1,430
		Manganese	**1080**		50	880	1,340
	LL1mw-083	Aluminum	**813**		200	36000	0
		Iron	**497**		300	11,000	1,430
	LL1mw-084	Manganese	**196**		50	880	1,340
	Ll1mw-085	Iron	**435**		300	11,000	1,430
		Manganese	**564**		50	880	1,340
Load Line 2	LL2mw-059	Arsenic	**6.4**		10	0.045	0
		Manganese	**5530**		50	880	1,340
		Iron	**7090**		300	11,000	1,430
	LL2mw-0261	Arsenic	**11.2**		10	0.045	0.0
		Manganese	**375**		50	880	1,340
		Iron	**2290**		300	11,000	1,430
	LL2mw-262	Manganese	**77.4**		50	880	1,340
	LL2mw-263	Arsenic	**15.4**		10	0.045	0
		Manganese	**1450**		50	880	1,340
		Iron	**4670**		300	11,000	1,430
	LL2mw-265	Manganese	**1430**		50	880	1,340
		Iron	**614**		300	11,000	1,430
	LL2mw-266	Aluminum	**1060**		200	36,000	0
		Arsenic	**5.6**		10	0.045	0
		Manganese	**1390**		50	880	1,340
		Iron	**5080**		300	11,000	1,430
	LL2mw-267	Manganese	**622**		50	880	1,340
		Iron	**1240**		300	11,000	1,430
	LL2mw-269	Manganese	**1540**		50	880	1,340
		Iron	**5990**		300	11,000	1,430
	LL2mw-270	Manganese	**384**		50	880	1,340
		Iron	**1420**		300	11,000	1,430
Load Line 3	LL3mw-232	Manganese	**308**		50	880	1,340
		Arsenic	**3.5**	**J**	10	0.045	0
	LL3mw-234	Manganese	**2190**	**J**	50	880	1,340
		Iron	**1210**		300	11,000	1,430
	LL3mw-236	Manganese	**235**		50	880	1,340
	LL3mw-239	Manganese	**101**		50	880	1,020
Load Line 4	LL4mw-196	Manganese	**183**		50	880	1,020
		Iron	**393**		300	11,000	279

Table 4-1. Inorganic Elements Detected at Concentrations Exceeding the MCLs or Region 9 PRGs

Area	Well Number	Compound or Element Detected	Jul-10 Level (ug/L)		MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background Criteria (ug/L)
Load Line 12	LL12mw-088	Arsenic	**29.4**		10	0.045	11.7
		Iron	**3890**		300	11,000	279
		Manganese	**428**		50	880	1,020
	LL12m-107	Iron	**2640**	J	300	11,000	279
		Manganese	**428**		50	880	1,020
	LL12mw-113	Aluminum	**103000**		200	36000	0
		Arsenic	**249**		10	0.045	0
		Iron	**354000**		300	11,000	1,430
		Manganese	**5730**		50	880	1,340
		Vanadium	**179**		NS	36	0
	LL12mw-128	Aluminum	**1960**		200	36000	0
		Arsenic	**47.5**		10	0.045	11.7
		Iron	**6890**	J	300	11,000	279
		Manganese	**242**		50	880	1,020
		Vanadium	**2.5**	J	NS	36	0
	LL12mw-153	Arsenic	**21.4**		10	0.045	11.7
		Iron	**3420**		300	11,000	279
		Manganese	**188**		50	880	1,020
	LL12mw-154	Arsenic	**16.2**		10	0.045	11.7
		Iron	**1760**		300	11,000	279
		Manganese	**85.9**		50	880	1,020
	LL12mw-182	Arsenic	**25.6**		10	0.045	11.7
	LL12mw-183	Arsenic	**29.8**		10	0.045	11.7
	LL12mw-184	Arsenic	**15.8**		10	0.045	11.7
		Manganese	**469**		50	880	1,020
	Ll12mw-185	Manganese	**1380**		50	880	1,020
	LL12mw-186	Manganese	**275**		50	880	1340
	LL12mw-187	Manganese	**2020**		300	11,000	1,020
	LL12mw-188	Manganese	**433**		50	880	1,020
	LL12mw-189	Aluminum	**298**		200	36,000	0
		Arsenic	**5.1**		10	0.045	0
		Manganese	**310**		50	880	1,340
	LL12mw-242	Arsenic	**21.3**		10	0.045	11.7
		Iron	**833**		300	11,000	279
		Manganese	**56**		50	880	1,020
	LL12mw-243	Arsenic	**6.5**		10	0.045	11.7
		Manganese	**281**		50	880	1,020
	LL12mw-244	Aluminum	**33700**		200	36000	0
		Arsenic	**51.1**		10	0.045	0
		Iron	**78800**	J	300	11,000	279
		Manganese	**955**		50	880	1,020
		Vanadium	**49**		NS	36	0
	LL12mw-245	Arsenic	**9.1**		10	0.045	11.7
		Manganese	**103**		50	880	1,020
	LL12mw-246	Arsenic	**29.7**		10	0.045	0
		Iron	**1190**	J	300	11,000	279
		Manganese	**74.5**		50	880	1,020

Notes:
J = estimated result. Results have been qualified "J" For more details refer to Data Verification/Validation Reports in Appendix D

SECTION 5

REFERENCES

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APPENDIX A

CORRESPONDENCE DOCUMENTING THE CURRENT MONITORING WELL SCHEDULE.

Subject: Documentation of Groundwater Scheduling Meeting
From: "Nichter, Mark W LRL" <Mark.W.Nichter@usace.army.mil>
Date: Wed, 26 May 2010 14:55:15 -0400
To: "Eileen Mohr" <eileen.mohr@epa.state.oh.us>, "Conni McCambridge" <conni.mccambridge@epa.state.oh.us>, "John Miller" <jmiller@eqm.com>, "Fredrick E Gebhardt" <gebhardt@usgs.gov>, "Brian Mailot" <bemailot@usgs.gov>, "Patterson, Mark C Mr CIV USA OSA" <mark.c.patterson@us.army.mil>, "Beckham, Glen LRL" <Glen.Beckham@usace.army.mil>, "Esler, Christy L Ms ARMY GUEST USA OSA USA" <christy.esler@us.army.mil>
CC: "Todd Fisher" <todd.fisher@epa.state.oh.us>, "Vicki Deppisch" <vicki.deppisch@epa.state.oh.us>, "Ralph J Haefner" <rhaefner@usgs.gov>, "Jeff Langman" <jlangman@usgs.gov>, "Mitchell, Cristie L LRL" <Cristie.L.Mitchell@usace.army.mil>, "Peters, Nathaniel II LRL" <Nathaniel.Peters.II@usace.army.mil>, "Chanda, Thomas M LRL" <Thomas.M.Chanda@usace.army.mil>, "Stolte, Nicholas J LRL (Intern)" <Nicholas.J.Stolte@usace.army.mil>, "Kinder, Derek S LRL" <Derek.S.Kinder@usace.army.mil>, "Krantz, Kathy J LRL" <Kathy.J.Krantz@usace.army.mil>, "Trumble, Jay N LRL" <Jay.N.Trumble@usace.army.mil>, "Cheng, Eric S LRL" <Eric.S.Cheng@usace.army.mil>, "Cullen, Joan T LRL" <Joan.T.Cullen@usace.army.mil>, "Schmidt, Angela L LRL" <Angela.L.Schmidt@usace.army.mil>

The USACE and EQM hosted a meeting on 26 May to discuss the schedule for the 2010 groundwater monitoring program. Ravenna team members addressed in this correspondence (To) attended the meeting. The primary purpose of the meeting was to discuss the path forward for "when" to conduct the quarterly groundwater monitoring events in 2010 since the April 2010 monitoring event did not occur. The typical annual monitoring schedule includes the April, July, October, and January sampling events.

John Miller of EQM provided several options for a revised monitoring schedule. The first option included the possible monitoring of wells during the alternate months of June, September, and November of 2010, and March 2011. He indicated that EQM could meet this schedule; however, this schedule would result in the submittal of a draft September 2010 report at the same time the draft 2010 Annual report is submitted (on or before December 15th).

The second option proposed dropping the spring 2010 sampling event from the 2010 schedule, and rotating the schedule to include monitoring during the months of July and October 2010, and January and April of 2011. This schedule would fulfill EQM's contractual commitments, and would allow the FWGWMP to remain on the former seasonal monitoring schedule. The spring 2010 monitoring event simply would not be conducted during the 2010 program.

In support of the second option, I indicated that the DFFOs and the FWGWMP Plan do not specify that groundwater monitoring is required on each and every quarterly event. In other words, omitting the April 2010 monitoring event is not in violation of the DFFOs or the FWGWMP Plan. Eileen Mohr indicated the Ohio EPA would conduct its own review of the requirements to verify my understanding.

Eileen Mohr agreed to adopt the second option of dropping the spring 2010 monitoring event, and sliding the quarterly events forward. Eileen also indicated that responses to Vicki Deppisch's recent review comments pertaining to the monitoring well schedule are still required by the USACE to

close the loop on related outstanding issues.

Mark Patterson indicated that a good strategy is needed for the summer groundwater meeting. I common understanding of the path forward is necessary before conducting the meeting. Eileen Mohr requested more information on the decision processes for assessing groundwater.

Glen Beckham questioned whether seasonal consistency would be affected by not conducting the spring 2010 sampling event. Conni McCambridge and I both assured Glen that the seasonal consistency should not be an issue due to the consistent and repetitive nature of the existing groundwater data.

It was noted that all participants in the upcoming summer groundwater meeting are required to read Ravenna's approved FWGWMP Plan (see attached) prior to attending the meeting. If you don't read the FWGWMP Plan, then please don't attend the meeting. It's that important - Mark Nichter

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Comments on our Environmental Services are invited:
http://ice.disa.mil/index.cfm?fa=card&site_id=915&service_provider_id=115446

FINAL_FWGWMPP.pdf	**Content-Description:**	FINAL_FWGWMPP.pdf
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Attachment B: 2010 Well Sampling Schedule
Facility-Wide Groundwater Monitoring Program
Ravenna Army Ammunition Plant
Ravenna, Ohio

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters									List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate					
Background	BKGmw-004	Unconsolidated																				
	BKGmw-005	Unconsolidated	Annual				1	1	1	1	1	1	1	1	1							The USACE anticipates this well is representative of background with respect to the unconsolidated aquifer. Resampling is requested.
	BKGmw-006	Sharon	Annual				1	1	1	1	1	1	1	1	1							The USACE anticipates this well is representative of background with respect to the upper portion of the Sharon Sandstone. Resampling is requested.
	BKGmw-008	Sharon	Annual				1	1	1	1	1	1	1	1	1						Yes	Down-gradient of all AOCs (per FWGWMP Plan)
	BKGmw-010	Sharon	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes	Yes	Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	BKGmw-012	Sharon																				
	BKGmw-013	Unconsolidated																Arsenic	Yes			
	BKGmw-015	Sharon	Annual				1	1	1	1	1	1	1	1	1						Yes	Down-gradient of all AOCs (per FWGWMP Plan)
	BKGmw-016	Unconsolidated																				
	BKGmw-017	Unconsolidated																Arsenic	Yes			
	BKGmw-018	Sharon	Annual				1	1	1	1	1	1	1	1	1							The USACE anticipates this well is representative of background with respect to the upper portion of the Sharon Sandstone. Resampling is requested.
	BKGmw-019	Unconsolidated																				
	BKGmw-020	Unconsolidated																				
	BKGmw-021	Unconsolidated	Annual				1	1	1	1	1	1	1	1	1						Yes	Down-gradient of all AOCs (per FWGWMP Plan)
	LL1mw-063	Sharon																				
	LL1mw-064	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes		Yes	Well is located hydraulically down-gradient of Load Line 1, and is in close proximity to the east RVAAP fenceline. Monitoring is recommended.
	LL1mw-065	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes		Yes	Well is located hydraulically down-gradient of Load Line 1, and is in close proximity to the east RVAAP fenceline. Monitoring is recommended.
	LL1mw-067	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4		1					Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in July Monitoring Event.
	LL1mw-078	Sharon	Annual	1				1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes		Yes	Well is located down-gradient of LL-1.
	LL1mw-079	Sharon																Bis(2-ethylhexyl)phthalate	Yes			

Attachment B: 2010 Well Sampling Schedule
Facility-Wide Groundwater Monitoring Program
Ravenna Army Ammunition Plant
Ravenna, Ohio

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters									List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate					
Load Line 1	LL1mw-080	Sharon	Annual	1				1	1	1	1	1	1	1	1			Arsenic, Lead	Yes	Yes		Yes	Lead, Iron, Manganese, and Hexahydro-1,3,5-trinitro-1,3,5-triazine dectected at concentration above CUG. Added to 2010 program for annual monitoring. Down-gradient of LL-1.
	LL1mw-081	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4		1						Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in July Monitoring Event.
	LL1mw-082	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4		1						Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in July Monitoring Event.
	LL1mw-083	Sharon	Annual	1				1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes		Yes	2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Amino-4,6-dinitrotoluene, and 4-Amino-2,6-dinitrotoluene dectected at concentration above CUG. Added to 2010 program for annual monitoring. Down-gradient of LL-1.
	LL1mw-084	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4		1						Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in July Monitoring Event.
	LL1mw-085	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4		1						Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in July Monitoring Event.
	LL2mw-059	Sharon	Annual	1				1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes		Yes	Well is located down-gradient of LL-2.
	LL2mw-060	Sharon	Annual	1				1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL2mw-261	Sharon	Annual	1				1	1	1	1	1	1	1	1			Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Arsenic is increasing in concentrations (above background, PRG, and MCL value)
	LL2mw-262	Sharon	Annual	1				1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes			Yes	Time-Trend graph presented in 2009 Annual FWGWMP report suggests Magnesium is increasing in concentrations (above background value). Down-gradient of LL-2.

Attachment B: 2010 Well Sampling Schedule
Facility-Wide Groundwater Monitoring Program
Ravenna Army Ammunition Plant
Ravenna, Ohio

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters									List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate					
Load Line 2	LL2mw-263	Sharon	Annual	1				1	1	1	1	1	1	1	1			Arsenic, Bis(2-ethylhexyl)phthalate	Yes	Yes		Yes	Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring. Down-gradient of LL-2.
	LL2mw-264																	Bis(2-ethylhexyl)phthalate	Yes				
	LL2mw-265		Annual	1				1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes				Well is located hydraulically down-gradient of Load Line 2, and is in close proximity to RVAAP fenceline. Monitoring is recommended.
	LL2mw-266	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4		1						Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in July Monitoring Event.
	LL2mw-267	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4		1						Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in July Monitoring Event.
	LL2mw-268	Sharon																Bis(2-ethylhexyl)phthalate	Yes				
	LL2mw-269	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4		1						Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in July Monitoring Event.
	LL2mw-270	Sharon	Annual	1				1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate, Pentachlorophenol	Yes	Yes			Manganese, Bis(2-ethylhexyl)phthalate, and Pentachlorophenol dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL3mw-232	Sharon	Annual	1				1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate					Time-Trend graph presented in 2009 Annual FWGWMP report suggests Magnesium is increasing in concentrations (above background value)
	LL3mw-233	Sharon																					
	LL3mw-234	Sharon	Annual	1				1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL3mw-235	Sharon																					
	LL3mw-236	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4		1						Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in July Monitoring Event.

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Facility-Wide Groundwater Monitoring Program
Ravenna Army Ammunition Plant
Ravenna, Ohio

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Load Line 3	LL3mw-237	Sharon	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			2-Amino-4,6-dinitrotoluene, and 4-Amino-2,6-dinitrotoluene dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL3mw-238	Sharon	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes		Yes	2-Amino-4,6-dinitrotoluene, 4-Amino-2,6-dinitrotoluene and 2,4,6-Trinitrotoluene dectected at concentration above CUG. Added to 2010 program for annual monitoring. Down-gradient of LL-3.
	LL3mw-239	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4								Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in April Monitoring Event at the Request of the OEPA.
	LL3mw-240	Sharon																Bis(2-ethylhexyl)phthalate	Yes				
	LL3mw-241	Sharon																Bis(2-ethylhexyl)phthalate	Yes				
	LL3mw-242	Sharon	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes			Yes	Well is down-gradient of LL-3.
	LL3mw-243	Sharon	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes			Yes	Well is located hydraulically down-gradient of Load Line 3, and is in close proximity to RVAAP fenceline. Monitoring is recommended.
Load Line 4	LL4mw-193	Unconsolidated	Annual				1	1	1	1	1	1	1	1	1			Arsenic, Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL4mw-194	Unconsolidated																					
	LL4mw-195	Unconsolidated	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL4mw-196	Unconsolidated	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4		1						Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in July Monitoring Event.
	LL4mw-197	Unconsolidated	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4		1						Well added to FWGWMP for 2010. Previously excluded from expanded FWGWMP. Sample for Perchlorate in July Monitoring Event.
	LL4mw-198	Unconsolidated	Annual				1	1	1	1	1	1	1	1	1							Yes	Well is down-gradient of LL-4.
	LL4mw-199	Unconsolidated	Annual				1	1	1	1	1	1	1	1	1			Arsenic				Yes	Well is down-gradient of LL-4.

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Ravenna Army Ammunition Plant
Ravenna, Ohio

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters									List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate					
	LL4mw-200	Unconsolidated	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate				Yes	Well is located hydraulically down-gradient of Load Line 4, and is located in close proximity to a natural surface drainage feature that drains Load Line 4. Monitoring is recommended.
Load Line 5	LL5mw-001	Homewood																					
	LL5mw-002	Homewood																					
	LL5mw-003	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	LL5mw-004	Homewood																					
	LL5mw-005	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL5mw-006	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
Load Line 6	LL6mw-001	Unconsolidated	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL6mw-002	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	LL6mw-003	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL6mw-004	Homewood	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL6mw-005	Homewood	Annual		1			1	1	1	1	1	1	1	1			Arsenic	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Arsenic is increasing in concentrations (above background, tap water, and MCL values)
	LL6mw-006	Unconsolidated																					
	LL6mw-007	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
Load Line 7	LL7mw-001	Homewood	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate, 1,1-Dichloroethane	Yes, No	Yes			1,1-Dichloroethane dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL7mw-002	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL7mw-003	Homewood	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Iron dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL7mw-004	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL7mw-005	Homewood	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL7mw-006	Homewood																Bis(2-ethylhexyl)phthalate	Yes				

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RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Load Line 8	LL8mw-001	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	LL8mw-002	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	LL8mw-003	Unconsolidated	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL8mw-004	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	LL8mw-005	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL8mw-006	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
Load Line 9	LL9mw-001	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL9mw-002	Homewood	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL9mw-003	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL9mw-004	Homewood	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL9mw-005	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL9mw-006	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL9mw-007	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
Load Line 10	LL10mw-001	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL10mw-002	Homewood	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL10mw-003	Homewood	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Carbon Tetrachloride dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL10mw-004	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL10mw-005	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	LL10mw-006	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	LL11mw-001	Unconsolidated	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL11mw-002	Unconsolidated	Annual		1			1	1	1	1	1	1	1	1							Yes	Well is down-gradient of LL-11.
	LL11mw-003	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				

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RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters									List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate					
Load Line 11	LL11mw-004	Unconsolidated																Cadmium, Bis(2-ethylhexyl)phthalate	Yes				
	LL11mw-005	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	LL11mw-006	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	LL11mw-007	Unconsolidated	Annual		1			1	1	1	1	1	1	1	1			Arsenic, Bis(2-ethylhexyl)phthalate	Yes			Yes	Time-Trend graph presented in 2009 Annual FWGWMP report suggests Arsenic is increasing in concentrations (above background, tap water, and MCL values). Well is down-gradient of LL-11.
	LL11mw-008	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	LL11mw-009	Unconsolidated	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Trichloroethylene and Tetrachloroethylene dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL11mw-010	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	LL12mw-088	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Sample all wells in Load Line 12 per discussion with Ohio EPA.
	LL12mw-107	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Sample all wells in Load Line 12 per discussion with Ohio EPA.
	LL12mw-113	Sharon Shale	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Manganese is increasing in concentrations (above background value)
	LL12mw-128	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Arsenic historically detected above background and MCL.
	LL12mw-153	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic	Yes			Yes	Well is down-gradient of LL-12. Arsenic historically detected above background and MCL.
	LL12mw-154	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Arsenic historically detected above background and MCL.
	LL12mw-162	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic	Yes			Yes	Well is down-gradient of LL-12. Arsenic historically detected above background and MCL.
	LL12mw-183	Sharon Shale	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic	Yes			Yes	Well is down-gradient of LL-12. Arsenic historically detected above background and MCL.
	LL12mw-184	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Arsenic historically detected above background and MCL.
	LL12mw-185	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Bis(2-ethylhexyl)phthalate, Nitrate	Yes	Yes			Well selected for annual sampling in 2010 program to support the anticipated RA process and LTM for Load Line 12. Nitrate detected at concentration above CUG.

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Ravenna Army Ammunition Plant
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RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Load Line 12	LL12mw-186	Sharon Shale	Annual	1				1	1	1	1	1	1	1	1	1						Yes	Well is down-gradient of LL-12. Sample all wells in Load Line 12 per discussion with Ohio EPA.
	LL12mw-187	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Bis(2-ethylhexyl)phthalate, Nitrate	Yes	Yes			Well selected for annual sampling in 2010 program to support the anticipated RA process and LTM for Load Line 12. Nitrate detected at concentration above CUG.
	LL12mw-188	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Bis(2-ethylhexyl)phthalate	Yes				Sample all wells in Load Line 12 per discussion with Ohio EPA.
	LL12mw-189	Sharon Shale	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL12mw-242	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Well selected for annual sampling in 2010 program to support the anticipated RA process and LTM for Load Line 12.
	LL12mw-243	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Arsenic historically detected above background and MCL.
	LL12mw-244	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Lead, Bis(2-ethylhexyl)phthalate	Yes	Yes			Lead dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LL12mw-245	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Well selected for annual sampling in 2010 program to support the anticipated RA process and LTM for Load Line 12.
	LL12mw-246	Unconsolidated	Annual	1				1	1	1	1	1	1	1	1	1		Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Well selected for annual sampling in 2010 program to support the anticipated RA process and LTM for Load Line 12.
Atlas Scrap Yard	ASYmw-001	Sharon																Bis(2-ethylhexyl)phthalate	Yes				
	ASYmw-002	Sharon																Bis(2-ethylhexyl)phthalate	Yes				
	ASYmw-003	Sharon	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	ASYmw-004	Sharon																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
	ASYmw-005	Sharon																Bis(2-ethylhexyl)phthalate	Yes				
	ASYmw-006	Sharon																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
	ASYmw-007	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				

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RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters									List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate					
	ASYmw-008	Unconsolidated																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
	ASYmw-009	Sharon																Bis(2-ethylhexyl)phthalate	Yes				
	ASYmw-010	Unconsolidated																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
Building 1200	B12mw-010	Sharon	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Indeno(1,2,3-cd)pyrene and Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	B12mw-011	Sharon																Bis(2-ethylhexyl)phthalate	Yes				
	B12mw-012	Sharon	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Bis(2-ethylhexyl)phthalate is increasing in concentrations.
C-Block Quarry	CBLmw-001	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	CBLmw-002	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	CBLmw-003	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	CBLmw-004	Homewood	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
Central Burn Pits	CBPmw-001	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Time-Trend graphs presented in 2009 Annual FWGWMP report suggests Arsenic and Magnesium are increasing in concentrations (above background values)
	CBPmw-002	Unconsolidated																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
	CBPmw-003	Unconsolidated																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
	CBPmw-004	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis(2-ethylhexyl)phthalate	Yes	Yes			Arsenic dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	CBPmw-005	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic	Yes			Yes	Monitors GW flow to Sand Creek.
	CBPmw-006	Unconsolidated																Arsenic	Yes				
	CBPmw-007	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic	Yes			Yes	Monitors GW flow to Sand Creek.
	CBPmw-008	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Magnesium is increasing in concentrations (above background value)
	CPmw-001	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				

Attachment B: 2010 Well Sampling Schedule
Facility-Wide Groundwater Monitoring Program
Ravenna Army Ammunition Plant
Ravenna, Ohio

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Cobbs Pond	CPmw-002	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate detected at concentration above CUG. Added to 2010 program for annual monitoring.
	CPmw-003	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	CPmw-004	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	CPmw-005	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis(2ethylhexyl)phthalate	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Barium is increasing in concentrations (above background value)
	CPmw-006	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis(2ethylhexyl)phthalate	Yes	Yes			Manganese and Naphthalene dectected at concentration above CUG. Added to 2010 program for annual monitoring.
Open Demolition Area 2	DET-001B	Unconsolidated																					
	DET-002	Unconsolidated																					
	DET-003	Unconsolidated	Semi-Annual		1		1	2	2	2	2	2	2	2	2			Bis(2-ethylhexyl)phthalate	Yes		Yes		RCRA well. Bi-Annual monitoring required by DFF&Os.
	DET-004	Unconsolidated	Semi-Annual		1		1	2	2	2	2	2	2	2	2			Arsenic, Bis(2ethylhexyl)phthalate	Yes		Yes		RCRA well. Bi-Annual monitoring required by DFF&Os.
	DA2mw-104	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	DA2mw-105	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	DA2mw-106	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring. Time-Trend graph presented in 2009 Annual FWGWMP report suggests Magnesium is increasing in concentration
	DA2mw-107	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1							Yes	Down-gradient to ODA2 RCRA Unit.
	DA2mw-108	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	DA2mw-109	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	DA2mw-110	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate detected at concentration above CUG. Added to 2010 program for annual monitoring.
	DA2mw-111	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	DA2mw-112	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	DA2mw-113	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				

Attachment B: 2010 Well Sampling Schedule
Facility-Wide Groundwater Monitoring Program
Ravenna Army Ammunition Plant
Ravenna, Ohio

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Erie Burning Grounds	EBGmw-123	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis (2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate detected at concentration above CUG. Added to 2010 program for annual monitoring. Time-Trend graph presented in 2009 Annual FWGWMP report suggests Arsenic is increasing in concentration (above background value)
	EBGmw-124	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Lead, Bis(2-ethylhexyl)phthalate	Yes	Yes			Lead dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	EBGmw-125	Unconsolidated																Arsenic, Bis (2-ethylhexyl)phthalate	Yes				
	EBGmw-126	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis (2-ethylhexyl)phthalate	Yes			Yes	Well is located at Erie Burning Ground adjacent to the northern RVAAP fenceline. Monitoring is recommended.
	EBGmw-127	Unconsolidated																Arsenic, Bis (2-ethylhexyl)phthalate	Yes				
	EBGmw-128	Unconsolidated																Arsenic, Bis (2-ethylhexyl)phthalate	Yes				
	EBGmw-129	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate				Yes	Well is located at Erie Burning Ground adjacent to the northern RVAAP fenceline. Monitoring is recommended.
	EBGmw-130	Unconsolidated																					
Fuze and Booster Quarry	FBQmw-166	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	FBQmw-167	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	FBQmw-168	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	FBQmw-169	Homewood	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	FBQmw-170	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	FBQmw-171	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	FBQmw-172	Homewood	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	FBQmw-173	Homewood	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Bis (2-ethylhexyl)phthalate is increasing in concentrations (above PRG or tap water value)

Attachment B: 2010 Well Sampling Schedule
Facility-Wide Groundwater Monitoring Program
Ravenna Army Ammunition Plant
Ravenna, Ohio

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
	FBQmw-174	Homewood	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			2,4,6-Trinitrotoluene, 2-Amino-4,6-dinitrotoluene, and 4-Amino-2,6-dinitrotoluene dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	FBQmw-175	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	FBQmw-176	Unconsolidated																					
	FBQmw-177	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
Landfill North of Winklepeck	LNWmw-024	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	LNWmw-025	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis(2-ethylhexyl)phthalate	Yes	Yes			Arsenic dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	LNWmw-026	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	LNWmw-027	Unconsolidated																Bis(2-ethylhexyl)phthalate					
NACA Test Area	NTAmw-107	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	NTAmw-108	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	NTAmw-109	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	NTAmw-110	Unconsolidated																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
	NTAmw-111	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	NTAmw-112	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Arsenic is increasing in concentrations (above background, PRG and MCL values)
	NTAmw-113	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Lead, Bis(2-ethylhexyl)phthalate	Yes	Yes			Lead dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	NTAmw-114	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	NTAmw-115	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	NTAmw-116	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	NTAmw-117	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	NTAmw-118	Unconsolidated																Bis(2-ethylhexyl)phthalate					

Attachment B: 2010 Well Sampling Schedule
Facility-Wide Groundwater Monitoring Program
Ravenna Army Ammunition Plant
Ravenna, Ohio

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Ramsdell Quarry Landfill	RQLmw-006	Sharon	Annual		1			1	1	1	1	1	1	1	1			Arsenic	Yes	Yes			Arsenic, Iron, Manganese, and Nickel dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	RQLmw-007	Sharon	Semi-Annual		1		1	2	2	2	2	2	2	2	2			Arsenic	Yes		Yes		RCRA well. Bi-Annual monitoring required by DFF&Os. Arsenic, Iron, and Manganese detected at concentrations above CUGs.
	RQLmw-008	Sharon	Semi-Annual		1		1	2	2	2	2	2	2	2	2			Arsenic, Bis(2-ethylhexyl)phthalate	Yes		Yes		RCRA well. Bi-Annual monitoring required by DFF&Os. Arsenic and Iron detected at concentrations above CUGs.
	RQLmw-009	Sharon	Semi-Annual		1		1	2	2	2	2	2	2	2	2			Arsenic, Bis(2-ethylhexyl)phthalate	Yes		Yes		RCRA well. Bi-Annual monitoring required by DFF&Os. Arsenic, Manganese, and Bis(2-ethylhexyl)phthalate detected at concentrations above CUGs.
	RQLmw-010	Sharon	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese and Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	RQLmw-011	Sharon	Annual		1			1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese, Tetrachloroethylene, and Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	RQLmw-012	Sharon																Bis(2-ethylhexyl)phthalate	Yes				
	RQLmw-013	Sharon																					
	RQLmw-014	Sharon	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	RQLmw-015	Sharon																Bis(2-ethylhexyl)phthalate					
	RQLmw-016	Sharon	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese and Iron dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	RQLmw-017	Sharon	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring.

Attachment B: 2010 Well Sampling Schedule
Facility-Wide Groundwater Monitoring Program
Ravenna Army Ammunition Plant
Ravenna, Ohio

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Winklepeck Burning Grounds	WBGmw-005	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Manganese is increasing in concentrations (above background, PRG and MCL values)
	WBGmw-006	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1				Yes	Yes		Yes	Hexahydro-1,3,5-1,3,5-trinitro-1,3,5-triazine dectected at concentration above CUG. Well monitors GW flow to Sand Creek. Added to 2010 program for annual monitoring.
	WBGmw-007	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic	Yes			Yes	Monitors GW to Sand Creek
	WBGmw-008	Unconsolidated																					
	WBGmw-009	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1				Yes	Yes		Yes	Hexahydro-1,3,5-1,3,5-trinitro-1,3,5-triazine dectected at concentration above CUG. Well monitors GW flow to Sand Creek. Added to 2010 program for annual monitoring.
	WBGmw-010	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	WBGmw-011	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	WBGmw-012	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	WBGmw-013	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	WBGmw-014	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	WBGmw-015	Unconsolidated																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
	WBGmw-016	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	WBGmw-017	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
Suspected Mustard Agent Burial Site	MBS-001	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	MBS-002	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	MBS-003	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	MBS-004	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	MBS-005	Unconsolidated																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
	MBS-006	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				

Attachment B: 2010 Well Sampling Schedule
Facility-Wide Groundwater Monitoring Program
Ravenna Army Ammunition Plant
Ravenna, Ohio

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Facility-Wide Groundwater: Basal Sharon Conglomerate Wells	SCFmw-001	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4	4							Well added to FWGWMP for 2010. Quarterly monitoring recommended in support of initial characterization performed by SAIC.
	SCFmw-002	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4	4							Well added to FWGWMP for 2010. Quarterly monitoring recommended in support of initial characterization performed by SAIC.
	SCFmw-003	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4	4							Well added to FWGWMP for 2010. Quarterly monitoring recommended in support of initial characterization performed by SAIC.
	SCFmw-004	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4	4							Well added to FWGWMP for 2010. Quarterly monitoring recommended in support of initial characterization performed by SAIC.
	SCFmw-005	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4	4							Well added to FWGWMP for 2010. Quarterly monitoring recommended in support of initial characterization performed by SAIC.
	SCFmw-006	Sharon	Quarterly	1	1	1	1	4	4	4	4	4	4	4	4	4							Well added to FWGWMP for 2010. Quarterly monitoring recommended in support of initial characterization performed by SAIC.
	TOTALS =			51	41	49	42	183	183	183	183	183	183	183	183	43	11						

Former Ground Water Analytical Results Exhibits Contaminant Concentrations Above CUGs
FWGWMP CERCLA Wells - Highlighted Red
FWGWMP RCRA Wells - Highlighted Blue

APPENDIX B

LIST OF WELLS SAMPLED DURING THE JULY 2010 EVENT

Wells Monitored During The July 2010 Event

Well ID	Location
LL1mw-064	Load Line 1
LL1mw-065	Load Line 1
LL1mw-067	Load Line 1
LL1mw-078	Load Line 1
LL1mw-080	Load Line 1
LL1mw-081	Load Line 1
LL1mw-082	Load Line 1
LL1mw-083	Load Line 1
LL1mw-084	Load Line 1
LL1mw-085	Load Line 1
LL2mw-059	Load Line 2
LL2mw-060	Load Line 2
LL2mw-261	Load Line 2
LL2mw-262	Load Line 2
LL2mw-263	Load Line 2
LL2mw-265	Load Line 2
LL2mw-266	Load Line 2
LL2mw-267	Load Line 2
LL2mw-269	Load Line 2
LL2mw-270	Load Line 2
LL3mw-232	Load Line 3
LL3mw-234	Load Line 3
LL3mw-236	Load Line 3
LL3mw-239	Load Line 3
LL4mw-196	Load Line 4
LL4mw-197	Load Line 4
LL12mw-088	Load Line 12
LL12mw-107	Load Line 12
LL12mw-113	Load Line 12
LL12mw-128	Load Line 12
LL12mw-153	Load Line 12
LL12mw-154	Load Line 12
LL12mw-182	Load Line 12
LL12mw-183	Load Line 12
LL12mw-184	Load Line 12
LL12mw-185	Load Line 12
LL12mw-186	Load Line 12
LL12mw-187	Load Line 12
LL12mw-188	Load Line 12
LL12mw-189	Load Line 12
LL12mw-242	Load Line 12
LL12mw-243	Load Line 12
LL12mw-244	Load Line 12
LL12mw-245	Load Line 12
LL12mw-246	Load Line 12

Well ID	Location
SCFmw-001	Sharon Deep Wells
SCFmw-002	Sharon Deep Wells
SCFmw-003	Sharon Deep Wells
SCFmw-004	Sharon Deep Wells
SCFmw-005	Sharon Deep Wells
SCFmw-006	Sharon Deep Wells

APPENDIX C

WATER LEVEL MEASUREMENTS/FIELD LOG BOOK AND PURGE RECORDS/DAILY QUALITY CONTROL REPORTS

Signature Page

July 2010 FWGMP Monitoring Well Event
Field Personnel Abbreviations and Signatures Page

Field Personnel

Name	Affiliation	Initials
Colleen A. Lear	EQM	CAL
Erik Corbin	EQM	EC
John Miller	EQM	JM
Lisa Sebesta	EQM	LS
Phil Heikkila	EQM	PH
Stephen Stuergon	EQM	SS
Maria Leiter	EQM	ML

Project and Field Leads

Name, Title, Affiliation

John Miller, Project Manager / QC Check, EQM

Signature: _____

Colleen A. Lear, Field Manager / QC Check, EQM

Signature: _____

Erik Corbin, Sample Manager, EQM

Signature: _____

Comprehensive Water Levels Measurements

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JULY 2010

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL1 MW-064	Loadline 1	7/8/2010	0950	2.49	21.56	Hard	05767
LL1 MW-065	Loadline 1	7/8/2010	1010	12.79	23.66	Hard	05767
LL1 MW-085	Loadline 1	7/8/2010	1030	36.33	45.19	Hard	05767
LL1 MW-084	Loadline 1	7/8/2010	1035	29.43	39.02	Hard	05767
LL1 MW-082	Loadline 1	7/8/2010	1040	28.69	41.49	Hard	05767
LL1 MW-083	Loadline 1	7/8/2010	1045	33.91	41.40	Hard	05767
LL1 MW-078	Loadline 1	7/8/2010	1050	33.24	40.90	Hard	05767
LL1 MW-080	Loadline 1	7/8/2010	1055	11.96	22.34	Hard	05767
LL1 MW-081	Loadline 1	7/8/2010	1105	30.44	41.97	Hard	05767
LL1 MW-067	Loadline 1	7/8/2010	1125	19.70	25.68	Hard	05767, bailed
LL12 MW-186	Loadline 12	7/8/2010	1455	7.25	21.00	Hard	05767
LL12 MW-189	Loadline 12	7/8/2010	1500	6.20	19.95	Medium	05767
LL12 MW-182	Loadline 12	7/8/2010	1510	9.98	38.10	Medium	05767
LL12 MW-113	Loadline 12	7/8/2010	1518	6.71	25.25	Soft	05767
LL12 MW-153	Loadline 12	7/8/2010	1525	6.00	25.05	Hard	05767
LL12 MW-154	Loadline 12	7/8/2010	1530	8.71	28.66	Hard	05767
LL12 MW-243	Loadline 12	7/8/2010	1535	8.50	25.40	Soft	05767
LL12 MW-128	Loadline 12	7/8/2010	1540	9.74	33.99	Medium	05767
LL12 MW-088	Loadline 12	7/8/2010	1545	6.42	27.38	Soft	05767
LL12 MW-185	Loadline 12	7/8/2010	1550	6.95	23.23	Hard	05767
LL12 MW-107	Loadline 12	7/8/2010	1555	8.89	33.65	Hard	05767
LL12 MW-245	Loadline 12	7/8/2010	1600	7.64	30.29	Medium	05767
LL12 MW-183	Loadline 12	7/8/2010	1605	12.18	36.28	Hard	05767
LL12 MW-246	Loadline 12	7/8/2010	1610	16.34	34.98	Medium	05767

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JULY 2010

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL12 MW-242	Loadline 12	7/8/2010	1625	9.25	28.75	Medium	05767
LL12 MW-244	Loadline 12	7/8/2010	1630	10.25	32.65	Soft	05767
LL12 MW-185	Loadline 12	7/8/2010	1645	12.36	31.34	Hard	05767
LL12 MW-187	Loadline 12	7/8/2010	1650	9.65	29.89	Hard	05767
LL12 MW-188	Loadline 12	7/8/2010	1655	5.69	22.08	Medium	05767
LL2 MW-060	Loadline 2	7/8/2010	1240	10.91	20.76	Hard	05767
LL2 MW-265	Loadline 2	7/8/2010	1250	10.54	24.38	Hard	05767
LL2 MW-059	Loadline 2	7/8/2010	1255	13.93	21.86	Hard	05767
LL2 MW-269	Loadline 2	7/8/2010	1305	17.55	30.23	Hard	05767
LL2 MW-266	Loadline 2	7/8/2010	1310	12.39	22.67	Hard	05767
LL2 MW-261	Loadline 2	7/8/2010	1320	7.33	22.42	Hard	05767
LL2 MW-262	Loadline 2	7/8/2010	1325	8.91	22.60	Hard	05767
LL2 MW-263	Loadline 2	7/8/2010	1330	9.31	23.40	Hard	05767
LL2 MW-270	Loadline 2	7/8/2010	1340	9.71	22.36	Hard	05767
LL2 MW-267	Loadline 2	7/8/2010	1350	10.38	22.66	Hard	05767

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JULY 2010

Well Number		Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL3	MW-234	Loadline 3	7/8/2010	0814	10.69	22.64	Hard	05767
LL3	MW-232	Loadline 3	7/8/2010	0825	19.53	39.77	Medium	05767
LL3	MW-236	Loadline 3	7/8/2010	0830	16.44	26.55	Hard	05767
LL3	MW-239	Loadline 3	7/8/2010	0845	25.22	36.93	Medium	05767
LL4	MW-197	Loadline 4	7/8/2010	0910	14.74	23.58	Hard	05767
LL4	MW-196	Loadline 4	7/8/2010	0915	13.78	21.76	Hard	05767
SCF	MW-004	Sharon Conglomerate	7/8/2010	1015	0.71	112.50	Hard	QED WL
SCF	MW-005	Sharon Conglomerate	7/8/2010	1200	11.48	156.39	Hard	QED WL
SCF	MW-006	Sharon Conglomerate	7/8/2010	1215	18.00	88.35	Hard	QED WL
SCF	MW-003	Sharon Conglomerate	7/8/2010	1230	8.79	137.90	Hard	QED WL
SCF	MW-002	Sharon Conglomerate	7/8/2010	1410	19.17	149.85	Hard	QED WL
SCF	MW-001	Sharon Conglomerate	7/8/2010	1430	89.06	215.90	Hard	QED WL

*All measurements from top of casing

Logbook

RVAAP: USACE

Book # 1



"Rite in the Rain"®

ALL-WEATHER

ENVIRONMENTAL

No. 550

EQM
Ravenna Ohio

No. 550 Enviro-Poly Cover
6 32281 55014 2

120

Location RVAAP Date 7-7-10

Project / Client USACE JM CAL

Water Level / Redevelop EQ ML SS

1000 Onsite

1015 Unload and organize and set up for the day

1030 H+S Meeting

Start at WP2

Complete sediment removal at WP2

MW 244, 243, 113, 168

Set up for the next day.

121

Location RVAAP Date 7/7/10

Project / Client USACE

Drum Log, July 2010

Drum ID	Area / Contents
EQM 2010-3	Decon Water
EQM 2010-4	Purge Water *
EQM 2010-5	Purge Water *
EQM 2010-6	Purge Water *
EQM 2010-7	Purge Water *

* LC1, LC2, LC3, LC4, LC12 SCF

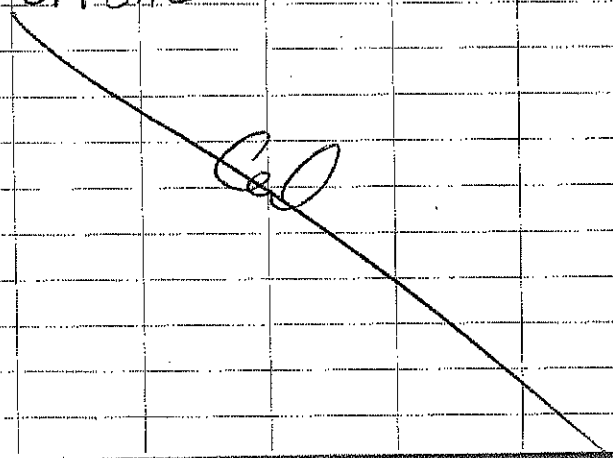
122

Location RVAAP Date 7-8-10

Project / Client USACE JM, CA, SS, EC, MC

Water level Event / Purge/Sample

0730 Onsite
0800 Calibration
H+S meeting
organize + pack for day.
0900 Sample LL3mw wells
both teams
1400 Sample LL4mw wells.
both teams
1600 Sample LL2 mw wells
and start SC wells.
1730 prep wells coolers for
laboratory + hotel + fedex.
1800 sample to Fed Ex
for overnight on Split.
1940 OFFSITE



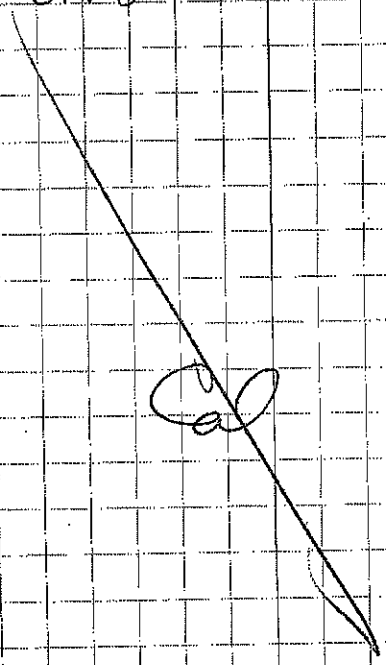
123

Location RVAAP Date 7-9-10

Project / Client USACE JM, CA, SS, EC, MC

Water level Event / Purge Sample

0730 Onsite
0745 Calibration
0800 H+S meeting,
organize + pack for day
0900 Sample LL2mw
1230 organize 103 caddy.
1330 OFFSITE



124

Location RVAAP Date 7-12-10

Project / Client USACE + ECML

Qtrly Event Sample/Purge LL1,5S

1000 Onsite
Organize for day + Calibration/H+S meeting
Unload weeks equipment
Load + set up for day.

1200 Sample, purge LL12 + U2

1730 Pertech to 1036 pack for fedex + lab pickup

1800 Coolers to fedex. Organize for next day

1840 OFFSITE

125

Location RVAAP Date 7-13-10

Project / Client USACE MLEC-JM

Qtrly Event CALSSLS PH

0730 Onsite

0800 Calibrate H+S meeting Purge + Sample

0845 LL12 continue (problems w/ gas on SEP well setup - partial delay)

1600 Bldg 1036 organize + set up for next day + fed exp

1900 FedEx samples for split laboratory.

1830 OFFSITE

126

Location RVAAP

Date 7-14-10

Project / Client USACE

JM Cal EC

Qtrly Event

PH SS LS ML

0730	Onsite
0740	Calibrated H+S meeting load for daily Purge and sample wells at
0840	LLI/SCF USGS Ralph Halfper + Brian onsite also.
1740	Set up fed exp and 1026. Prep coolers for lab pickup.
1830	lab pickup.

127

Location RVAAP

Date 7-15-10

Project / Client USACE

gm Cal EC PH

Qtrly Event

SS LS ML

0730	Onsite - USGS onsite also
0740	Calibrate Load for day + setup.
0800	H+S meeting USGS Halfner onsite SCF / LLI / LL2 finalize
1400	wells complete.
1430	IDW sampling
1500	organize 1026.
1530	Lab pickup
1600	Prep for Demob
1630	OFFSITE

128

Location RVAAP Date 7-16-10

Project / Client USACE ML CAL

Qtrly Event EC PH SS

0730 Onsite

pack + load equipment

Organize storage area

Clean bldg 1036

930 OFFSITE / DEMOB

129

Location _____ Date _____

Project / Client _____

intentionally

blank

Static Water Levels

Measurements

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/8/2010

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL1mw-064	Loadline 1	21.56	05767	JM	9:50	2.49		0
	Cmt:Good,							
LL1mw-065	Loadline 1	23.66	05767	JM	10:10	12.79		0
	Cmt:Good,							
LL1mw-085	Loadline 1	45.19	05767	JM	10:30	36.33		0
	Cmt:Good,							
LL1mw-084	Loadline 1	39.02	05767	JM	10:35	29.43		0
	Cmt:Good,							
LL1mw-082	Loadline 1	41.49	05767	JM	10:40	28.69		0
	Cmt:Good,							
LL1mw-083	Loadline 1	41.4	05767	JM	10:45	33.91		0
	Cmt:Good,							
LL1mw-078	Loadline 1	40.9	05767	JM	10:50	33.24		0
	Cmt:Good,							
LL1mw-080	Loadline 1	22.34	05767	JM	10:55	11.96		0
	Cmt:Good,							
LL1mw-081	Loadline 1	41.97	05767	JM	11:05	30.44		0
	Cmt:Good,							
LL1mw-067	Loadline 1	25.68	05767	JM	11:25	19.7		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/8/2010

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL12mw-186	Loadline 12	21	05767	JM	14:55	7.25		0
	Cmt:Good,							
LL12mw-189	Loadline 12	19.95	05767	JM	15:00	6.2		0
	Cmt:Good,							
LL12mw-182	Loadline 12	38.1	05767	JM	15:10	9.98		0
	Cmt:Good,							
LL12mw-113	Loadline 12	25.25	05767	JM	15:18	6.71		0
	Cmt:Good,							
LL12mw-153	Loadline 12	25.05	05767	JM	15:25	6		0
	Cmt:Good,							
LL12mw-154	Loadline 12	28.66	05767	JM	15:30	8.71		0
	Cmt:Good,							
LL12mw-243	Loadline 12	25.4	05767	JM	15:35	8.5		0
	Cmt:Good,							
LL12mw-128	Loadline 12	33.99	05767	JM	15:40	9.74		0
	Cmt:Good,							
LL12mw-088	Loadline 12	27.38	05767	JM	15:45	6.42		0
	Cmt:Good,							
LL12mw-185	Loadline 12	23.23	05767	JM	15:50	6.95		0
	Cmt:Good,							
LL12mw-107	Loadline 12	33.65	05767	JM	15:55	8.89		0
	Cmt:Good,							
LL12mw-245	Loadline 12	30.29	05767	JM	16:00	7.64		0
	Cmt:Good,							
LL12mw-183	Loadline 12	36.28	05767	JM	16:05	12.18		0
	Cmt:Good,							
LL12mw-246	Loadline 12	34.98	05767	JM	16:10	16.34		0
	Cmt:Good,							
LL12mw-242	Loadline 12	28.75	05767	JM	16:25	9.25		0
	Cmt:Good,							
LL12mw-244	Loadline 12	32.65	05767	JM	16:30	10.25		0
	Cmt:Good,							
LL12mw-185	Loadline 12	31.34	05767	JM	16:45	12.36		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/8/2010

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL12mw-187	Loadline 12	29.89	05767	JM	16:50	9.65		0
	Cmt:Good,							
LL12mw-188	Loadline 12	22.08	05767	JM	16:55	5.69		0
	Cmt:Good,							
LL2mw-060	Loadline 2	20.76	05767	JM	12:40	10.91		0
	Cmt:Good,							
LL2mw-265	Loadline 2	24.38	05767	JM	12:50	10.54		0
	Cmt:Good,							
LL2mw-059	Loadline 2	21.86	05767	JM	12:55	13.93		0
	Cmt:Good,							
LL2mw-269	Loadline 2	30.23	05767	JM	13:05	17.55		0
	Cmt:Good,							
LL2mw-266	Loadline 2	22.67	05767	JM	13:10	12.39		0
	Cmt:Good,							
LL2mw-261	Loadline 2	22.42	05767	JM	13:20	7.33		0
	Cmt:Good,							
LL2mw-262	Loadline 2	22.6	05767	JM	13:25	8.91		0
	Cmt:Good,							
LL2mw-263	Loadline 2	23.4	05767	JM	13:30	9.31		0
	Cmt:Good,							
LL2mw-270	Loadline 2	22.36	05767	JM	13:40	9.71		0
	Cmt:Good,							
LL2mw-267	Loadline 2	22.66	05767	JM	13:50	10.38		0
	Cmt:Good,							
LL2mw-059	Loadline 2		OH01266	EC	15:35	13.74		0
	Cmt:Good,							
LL2mw-060	Loadline 2		OH01266	EC	16:52	10.79		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/8/2010

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL3mw-234	Loadline 3	22.64	05767	JM	8:14	10.69		0
	Cmt:Good,							
LL3mw-232	Loadline 3	39.77	05767	JM	8:25	19.53		0
	Cmt:Good,							
LL3mw-236	Loadline 3	26.55	05767	JM	8:30	16.44		0
	Cmt:Good,							
LL3mw-236	Loadline 3		OH01266	EC	8:30	16.23		0
	Cmt:Good,							
LL3mw-239	Loadline 3	36.93	05767	JM	8:45	25.22		0
	Cmt:Good,							
LL3mw-234	Loadline 3		oh02911	CAL	8:45	10.36		0
	Cmt:Good, orange opaque start tint orange later							
LL3mw-232	Loadline 3		OH01266	EC	10:30	19.28		0
	Cmt:Good,							
LL3mw-239	Loadline 3		oh02911	CAL	11:46	24.71		0
	Cmt:Good, clear with s solids							
ILL4mw-197	Loadline 4	23.58	05767	JM	9:10	14.74		0
	Cmt:Good,							
LL4mw-196	Loadline 4	21.76	05767	JM	9:15	13.78		0
	Cmt:Good,							
LL4mw-197	Loadline 4		OH01266	EC	13:40	14.74		0
	Cmt:Good,							
LL4mw-196	Loadline 4		oh02911	CAL	13:45	13.74		0
	Cmt:Good, brown orange cloudy start then tint							
SCFmw-006	Sharon Cong		oh02911	CAL	15:51	17.99		0
	Cmt:Good, mp10-comp-samp pro changed to 9/6 for R/D							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/8/2010

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
SCFmw-004	Sharon Cong	112.5	QED WL	JM	10:15	0.71		0
	Cmt:Good,							
SCFmw-005	Sharon Cong	156.39	QED WL	JM	12:00	11.48		0
	Cmt:Good,							
SCFmw-006	Sharon Cong	88.35	QED WL	JM	12:15	18		0
	Cmt:Good,							
SCFmw-003	Sharon Cong	137.9	QED WL	JM	12:30	8.79		0
	Cmt:Good,							
SCFmw-002	Sharon Cong	149.85	QED WL	JM	14:10	19.17		0
	Cmt:Good,							
SCFmw-001	Sharon Cong	215.9	QED WL	JM	14:30	89.06		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/9/2010

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL2mw-262	Loadline 2		OH01266	ML	8:40	8.93		0
	Cmt:Good,							
LL2mw-267	Loadline 2		oh02911	CAL	8:49	10.38		0
	Cmt:Good, s solids globuals orange							
LL2mw-266	Loadline 2		oh02911	CAL	10:00	12.4		0
	Cmt:Good, check initial wl							
LL2mw-263	Loadline 2		OH01266	ML	10:10	8.25		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/12/2010

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL12mw-245	Loadline 12		05769	LS	11:30	7.39		0
	Cmt:Good, purge rate 0.1 lpm							
LL12mw-113	Loadline 12		OH01266	EC	11:40	6.43		0
	Cmt:Good,							
LL12mw-188	Loadline 12		OH01266	EC	13:15	5.45		0
	Cmt:Good,							
LL12mw-088	Loadline 12		OH01266	EC	14:20	5.86		0
	Cmt:Good,							
LL12mw-153	Loadline 12		oh02911	CAL	14:53	6.14		0
	Cmt:Good, start time is 1450							
LL12mw-154	Loadline 12		oh02911	CAL	16:20	8.44		0
	Cmt:Good,							
LL12mw-242	Loadline 12		05769	LS	16:40	9.51		0
	Cmt:Good, purge rate 0.1 lpm							
LL12mw-183	Loadline 12		OH01266	EC	17:10	11.91		0
	Cmt:Good, Heavy scale buildup on the tubing in the well							
LL2mw-265	Loadline 2		oh02911	CAL	12:24	10.46		0
	Cmt:Good,							
LL6mw-001	Loadline 6		oho2011	CAL	6:25	11		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/13/2010

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL12mw-186	Loadline 12		QED WL	CAL	8:31	7.14		0
	Cmt:Good,							
LL12mw-128	Loadline 12		OH01266	EC	8:38	9.26		0
	Cmt:Good, water was cloudy - turbidity began clearing up during sampling							
LL12mw-182	Loadline 12		05769	LS	8:38	10.23		0
	Cmt:Good,							
LL12mw-107	Loadline 12		05769	LS	9:40	9.02		0
	Cmt:Good,							
LL12mw-189	Loadline 12		QED WL	CAL	10:14	6.29		0
	Cmt:Good, gray cldy, turbidity dec w purge							
LL12mw-243	Loadline 12		OH01266	EC	11:44	8.29		0
	Cmt:Good,							
LL12mw-246	Loadline 12		05769	LS	12:20	16.39		0
	Cmt:Good,							
LL12mw-187	Loadline 12		OH01266	EC	13:28	9.78		0
	Cmt:Good, Heavy construction equipment running nearby							
LL12mw-184	Loadline 12		05769	LS	13:45	13.6		0
	Cmt:Good,							
LL12mw-244	Loadline 12		OH01266	EC	15:25	9.92		0
	Cmt:Good,							
LL12mw-185	Loadline 12		05769	LS	15:30	7.09		0
	Cmt:Good,							
LL6mw-001	Loadline 6		QED WL	CAL	12:12	7.77		0
	Cmt:Good,							
LL6mw-002	Loadline 6		QED WL	CAL	12:12	12		0
	Cmt:Good,							
SCFmw-003	Sharon Cong		QED WL	CAL	12:46	8.81		0
	Cmt:Good,							
SCFmw-002	Sharon Cong		QED WL	CAL	15:43	19.09		0
	Cmt:Good, 6							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/14/2010

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL1mw-067	Loadline 1		OH01266	EC	9:56	19.74		0
	Cmt:Good, Cannot use bladder pump, must use bailer to purge and sample							
LL1mw-064	Loadline 1		05769	LS	10:10	2.67		0
	Cmt:Good,							
LL1mw-080	Loadline 1		OH01266	EC	11:40	12.22		0
	Cmt:Good,							
LL1mw-078	Loadline 1		05769	LS	13:00	33.31		0
	Cmt:Good,							
LL1mw-065	Loadline 1		OH01266	EC	14:18	13.06		0
	Cmt:Good,							
LL1mw-084	Loadline 1		QED WL	CAL	14:30	29.3		0
	Cmt:Good,							
LL1mw-081	Loadline 1		05769	LS	15:10	32.85		0
	Cmt:Good,							
LL1mw-083	Loadline 1		05769	LS	16:30	34.06		0
	Cmt:Good,							
LL6mw-001	Loadline 6		QED WL	CAL	12:13	3.33		0
	Cmt:Good,							
SCFmw-002	Sharon Cong		QED WL	CAL	8:50	19.24		0
	Cmt:Good,							
SCFmw-001	Sharon Cong		QED WL	CAL	13:10	89.24		0
	Cmt:Good, 1.5							

MONITOR WELL STATIC WATER LEVEL FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

FIELD BOOK#: 1 DATE: 7/15/2010

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL1mw-085	Loadline 1	45.25	OH01266	EC	8:35	36.52		0
	Cmt:Good, Do not use pump it will get stuck! Used bailer to purge and sample							
LL1mw-082	Loadline 1		OH01266	EC	10:17	28.78		0
	Cmt:Good,							
LL2mw-261	Loadline 2		05769	LS	8:40	7.4		0
	Cmt:Good,							
LL2mw-270	Loadline 2		05769	LS	11:20	10.2		0
	Cmt:Good,							
LL2mw-269	Loadline 2		OH01266	EC	12:25	17.78		0
	Cmt:Good,							
SCFmw-005	Sharon Cong		QED WL	CAL	9:00	11.07		0
	Cmt:Good,							
SCFmw-004	Sharon Cong		QED WL	CAL	10:40	0.6		0
	Cmt:Good, .15-.2 on gas							

Purge/Sample Records

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 1 DATE: 7/14/2010 START TIME: 10:10

WELL ID: LL1mw-064

WELL DEPTH: INITIAL WATER LEVEL: 2.67

WELL DIAMETER SCREEN INTERVAL: 8 - 18

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 13.0

PUMP READINGS: Throttle: 30 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb. (NTU)
10:23	2.91	0.2	1	15.55	0.441	2.58	6.77	13.1
10:26	3.12	0.2	0.6	13.98	0.433	2.19	7	12.4
10:29	3.12	0.2	0.6	13.76	0.423	0.34	7.08	11
10:32	3.12	0.2	0.6	13.42	0.412	0.01	7.21	10.2
10:35	3.12	0.2	0.6	13.32	0.409	0.01	7.27	8.6
10:38	3.12	0.2	0.6	13.01	0.408	0.01	7.36	6.9
10:41	3.12	0.2	0.6	12.96	0.405	0	7.45	5.1
10:45	3.12	0.2	0.8	12.95	0.404	0	7.48	4
10:48	3.12	0.2	0.6	12.93	0.403	0	7.49	3.8

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 1** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL1mw-064 SampleID: FWGLL1MW064C-1521-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: Y

GRAB: Y COMPOSITE: N DATE: 7/14/2010 TIME: 10:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 3.1	Color:	Clear
		Odor:	None

pH: 7.54 Temperature (°C): 12.92 DO (mg/L): 0 Specific Conductivity (mS/cm): 0.403

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	3	NaOH	9012	Cyanide
1L/Amber	6	4C	353.2/8330	Propellants
1L/Amber	3	4C	8330	Explo
1L/Amber	6	4C	8082	PCB
1L/Amber	6	4C	8081	Pest
1L/Amber	6	4C	8270	SVOC
40ml/Vial	9	HCl	8260	VOC
1L/Poly	3	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 1 DATE: 7/14/2010 START TIME: 14:18

WELL ID: LL1mw-065

WELL DEPTH: INITIAL WATER LEVEL: 13.06

WELL DIAMETER SCREEN INTERVAL: 10.2 - 20.2

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.2

PUMP READINGS: Throttle: 40 Recharge: 12 Discharge: 3

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:22	13.07	0.2	0.5	17.65	0.755	4.23	7.04	511
14:25	13.07	0.2	0.6	17.15	0.724	3.76	7.26	340
14:28	13.08	0.2	0.6	16.74	0.72	3.56	7.58	270
14:31	13.08	0.2	0.6	16.78	0.715	3.3	7.81	188
14:34	13.08	0.2	0.6	16.42	0.715	3.13	8.01	145
14:37	13.08	0.2	0.6	16.44	0.714	3.02	8.2	112
14:40	13.08	0.2	0.6	16.59	0.709	2.82	8.37	103
14:43	13.08	0.2	0.6	16.32	0.703	2.68	8.51	56.4
14:46	13.08	0.2	0.6	16.48	0.701	2.55	8.51	53.4
14:49	13.08	0.2	0.6	16.57	0.695	2.48	8.53	42

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 1** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL1mw-065 SampleID: FWGLL1mw-065C-21522-GW/GF DupID: FWGLL1-mw-DUP1-1566-GW/GF

SplitID: FWGLL1mw-065C-1573S-GW/GF RinseID: FWGEQUIPRinse4-1581-GW

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2010 TIME: 14:53

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 33	Color:	Clear
		Odor:	None

pH: 8.53 Temperature (°C): 16.2 DO (mg/L): 2.4 Specific Conductivity (mS/cm): 0.692

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 85

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: EC Cmt: DUP AT 1547 Rinse AT 1707

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	5	4C	8081	Pest
1L/Amber	5	4C	8270	SVOC
1L/Amber	5	4C	8082	PCB
1L/Amber	3	4C	8330	Explo
250ml/Poly	3	NaOH	9012	Cyanide
1L/Poly	3	HNO3	6010/6020/7470	Metals
40ml/Vial	9	HCl	8260	VOC
1L/Amber	6	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 1 DATE: 7/14/2010 START TIME: 9:56

WELL ID: LL1mw-067

WELL DEPTH: INITIAL WATER LEVEL: 19.74

WELL DIAMETER SCREEN INTERVAL: 12.8 - 22.5

PUMP/PURGING DEVICE: B - BAILER PUMP INTAKE DEPTH: 17.7

PUMP READINGS: Throttle: 0 Recharge: 0 Discharge: 0

COMMENTS Cannot use bladder pump, must use bailer to purge and sample Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:05	20.60	0.5	0.5	16.7	0.389	11.68	5.12	144
10:08	20.75	0.5	1.5	15.7	0.335	11.91	5.16	118
10:13	21.05	0.5	2.5	15.57	0.349	11.8	4.95	81.1
10:16	21.22	0.5	1.5	15.26	0.35	11.81	5.08	102
10:25	20.66	0.5	4.5	16.2	0.358	11.48	5.18	97.3

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 1** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL1mw-067 SampleID: FWGLL1mw-067C-1523-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: B - Bailer MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2010 TIME: 10:29

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 76.4	Color:	Clear
		Odor:	None

pH: 5.41 Temperature (°C): 16.22 DO (mg/L): 11.44 Specific Conductivity (mS/cm): 0.35

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8082	PCB
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8081	Pest
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 1 DATE: 7/14/2010 START TIME: 13:00

WELL ID: LL1mw-078

WELL DEPTH: INITIAL WATER LEVEL: 33.31

WELL DIAMETER SCREEN INTERVAL: 28.7 - 38.2

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 33.5

PUMP READINGS: Throttle: 50 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:01	33.49	0.2	1	15.66	0.428	9.33	6.57	78
13:04	33.49	0.2	0.6	15.26	0.414	7.51	6.47	36.1
13:07	33.49	0.2	0.6	14.95	0.407	6.55	6.42	22.6
13:10	33.49	0.2	0.6	14.63	0.406	6.3	6.4	15.9

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 1** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL1mw-078 SampleID: FWGLL1MW078C-1524-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2010 TIME: 13:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 7.9	Color:	Clear
		Odor:	None

pH: 6.39 Temperature (°C): 14.51 DO (mg/L): 6.27 Specific Conductivity (mS/cm): 0.401

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 1 DATE: 7/14/2010 START TIME: 11:40

WELL ID: LL1mw-080

WELL DEPTH: INITIAL WATER LEVEL: 12.22

WELL DIAMETER SCREEN INTERVAL: 9.5 - 19

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.3

PUMP READINGS: Throttle: 35 Recharge: 13 Discharge: 2

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
11:55	12.71	0.12	0.5	21.7	0.552	5.59	6.12	28
11:58	12.77	0.1	0.3	21.78	0.553	5.31	5.85	16.2
12:01	12.78	0.1	0.3	21.89	0.553	5.12	5.75	13
12:04	12.87	0.1	0.3	21.6	0.554	5.11	5.7	16.6
12:07	12.96	0.1	0.3	21.45	0.555	5.04	5.68	9.5

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 1** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL1mw-080 SampleID: FWGLL1mw-080C-1525-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2010 TIME: 12:11

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 13.8	Color:	Clear
		Odor:	None

pH: 5.67 Temperature (°C): 21.38 DO (mg/L): 5.02 Specific Conductivity (mS/cm): 0.556

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8270	SVOC
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8081	Pest
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8082	PCB

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 1 DATE: 7/14/2010 START TIME: 15:10

WELL ID: LL1mw-081

WELL DEPTH: INITIAL WATER LEVEL: 32.85

WELL DIAMETER SCREEN INTERVAL: 29.4 - 38.9

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 34.2

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
15:12	32.54	0.4	1	13.44	0.432	0.5	6.86	45.1
15:15	33.28	0.4	1.2	13.23	0.427	0.01	6.86	28.2
15:18	33.28	0.4	1.2	12.81	0.424	0	6.86	21.7

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 1** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL1mw-081 SampleID: FWGLL1MW081-1526-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2010 TIME: 15:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 15.9	Color:	Clear
		Odor:	None

pH: 8.87 Temperature (°C): 12.86 DO (mg/L): 0 Specific Conductivity (mS/cm): 0.423

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 85

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 1 DATE: 7/15/2010 START TIME: 10:17

WELL ID: LL1mw-082

WELL DEPTH: INITIAL WATER LEVEL: 28.78

WELL DIAMETER SCREEN INTERVAL: 28.9 - 38.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 33.7

PUMP READINGS: Throttle: 50 Recharge: 11 Discharge: 4

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:23	29.41	0.12	0.5	19.93	0.367	3.32	8.67	139
10:26	29.53	0.1	0.3	19.28	0.366	2.63	8.26	127
10:29	29.61	0.1	0.3	18.77	0.363	2.4	8.15	115
10:32	29.65	0.1	0.3	18.33	0.362	2.29	8.12	110
10:35	29.71	0.1	0.3	18.1	0.36	2.09	8.08	104

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 1** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL1mw-082 SampleID: FWGLL1mw-082C-1527-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2010 TIME: 10:41

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 100	Color:	Clear
		Odor:	None

pH: 8.07 Temperature (°C): 18.12 DO (mg/L): 2.12 Specific Conductivity (mS/cm): 0.36

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 85

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER *SIZE/TYPE*	CONTAINER *NUMBER*	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
1L/Amber	2	4C	8081	Pest
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8270	SVOC
1L/Amber	1	4C	8330	Explo

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 1 DATE: 7/14/2010 START TIME: 16:30

WELL ID: LL1mw-083

WELL DEPTH: INITIAL WATER LEVEL: 34.06

WELL DIAMETER SCREEN INTERVAL: 29.1 - 38.6

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 33.9

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:33	34.60	0.4	1	11.96	0.279	3.19	4.84	17
16:36	34.73	0.4	1.2	11.98	0.277	2.78	4.69	15.7
16:39	34.74	0.4	1.2	11.95	0.274	2.34	4.6	14.1
16:42	34.79	0.4	1.2	11.21	0.271	2.1	4.56	13.1
16:45	34.82	0.4	1.2	11.04	0.269	1.96	4.53	12.6

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 1** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL1mw-083 SampleID: FWGLL11MW083C-1528-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2010 TIME: 16:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 11	Color:	Clear
		Odor:	None

pH: 4.51 Temperature (°C): 11.15 DO (mg/L): 1.89 Specific Conductivity (mS/cm): 0.269

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 85

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 1 DATE: 7/14/2010 START TIME: 14:30

WELL ID: LL1mw-084

WELL DEPTH: INITIAL WATER LEVEL: 29.3

WELL DIAMETER SCREEN INTERVAL: 26.7 - 36.3

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 31.5

PUMP READINGS: Throttle: 55 Recharge: 12.5 Discharge: 3.5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:33	29.88	0.17	0.2	15.07	0.332	7.01	5.55	41
16:36	29.90	0.175	0.525	14.8	0.328	7	5.19	55
16:39	29.92	0.175	0.525	14.8	0.326	6.65	5.14	51
16:41	29.91	0.175	0.35	14.55	0.327	6.29	5.06	46
16:44	30.30	0.175	0.525	14.59	0.327	6.2	5.05	42

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 1** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL1mw-084 SampleID: FWGLL1mw-084C-1529-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2010 TIME: 16:48

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 0.327	Color:	Clear
		Odor:	None

pH: 5.03 Temperature (°C): 14.39 DO (mg/L): 6 Specific Conductivity (mS/cm): 0.327

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 90

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER *SIZE/TYPE*	CONTAINER *NUMBER*	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 1 DATE: 7/15/2010 START TIME: 8:35

WELL ID: LL1mw-085

WELL DEPTH: 45.25 INITIAL WATER LEVEL: 36.52

WELL DIAMETER SCREEN INTERVAL: 32.2 - 41.6

PUMP/PURGING DEVICE: B - BAILER PUMP INTAKE DEPTH: 36.9

PUMP READINGS: Throttle: 0 Recharge: 0 Discharge: 0

COMMENTS Do not use pump it will get stuck! Used bailer to purge and sample Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:39	37.41	0.5	7	16.93	0.643	11.29	7.3	999
8:47	37.65	0.75	6	16.38	0.582	11.38	8.07	77.7
8:57	37.97	0.6	6	16.5	0.582	11.35	7.94	71.6
9:06	37.42	0.67	6.03	15.93	0.593	11.56	8.28	51.2
9:16	37.95	0.6	6	15.58	0.587	11.53	8.43	43.8

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 1** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL1mw-085 SampleID: FWGLL1mw-085C-1530-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: B - Bailer MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2010 TIME: 9:27

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 38.4	Color:	Clear
		Odor:	None

pH: 8.51 Temperature (°C): 15.21 DO (mg/L): 11.62 Specific Conductivity (mS/cm): 0.588

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 78

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: ML Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 2 DATE: 7/8/2010 START TIME: 15:35

WELL ID: LL2mw-059

WELL DEPTH: _____ INITIAL WATER LEVEL: 13.74

WELL DIAMETER _____ SCREEN INTERVAL: 9.3 - 19.1

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.2

PUMP READINGS: Throttle: 20 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
15:42	14.24	0.2	0.5	18.98	0.418	3.52	7.54	49.8
15:45	14.25	0.2	0.6	18.77	0.407	3.06	7.28	37.8
15:48	14.27	0.2	0.6	18.14	0.4	2.85	7.15	35.2
15:51	14.27	0.2	0.6	18	0.396	2.65	7.1	33.4
15:54	14.28	0.2	0.6	17.94	0.383	2.49	7.16	32.1

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 2** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL2mw-059 SampleID: FWGLL2mw-059C-1531-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/8/2010 TIME: 16:05

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 31	Color:	Clear
		Odor:	None

pH: 7.17 Temperature (°C): 17.75 DO (mg/L): 2.38 Specific Conductivity (mS/cm): 0.382

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 90

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 2 DATE: 7/8/2010 START TIME: 16:52

WELL ID: LL2mw-060

WELL DEPTH: INITIAL WATER LEVEL: 10.79

WELL DIAMETER SCREEN INTERVAL: 8.1 - 17.9

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 13.0

PUMP READINGS: Throttle: 15 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:59	11.02	0.2	0.5	19.74	0.353	3.6	6.42	29
17:02	11.04	0.2	0.6	19.12	0.347	3.18	6.11	18.5
17:05	11.04	0.2	0.6	18.57	0.346	2.95	6.23	11.3
17:08	11.04	0.2	0.6	18.5	0.345	2.71	6.3	9
17:11	11.04	0.2	0.6	18.44	0.345	2.67	6.33	7.6

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 2** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL2mw-060 SampleID: FWGLL2mw-060C-1532-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: **Y** COMPOSITE: **N** DATE: 7/8/2010 TIME: 17:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 7.6	Color:	Clear
		Odor:	None

pH: 6.36 Temperature (°C): 18.29 DO (mg/L): 2.69 Specific Conductivity (mS/cm): 0.346

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 85

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 2 DATE: 7/15/2010 START TIME: 8:40

WELL ID: LL2mw-261

WELL DEPTH: INITIAL WATER LEVEL: 7.4

WELL DIAMETER SCREEN INTERVAL: 9.8 - 19.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.8

PUMP READINGS: Throttle: 30 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:52	8.80	0.5	1	13.72	0.569	0.51	6.69	92.1
8:55	8.78	0.5	1.5	13.69	0.566	0.19	6.76	77.4
8:58	8.80	0.5	1.5	13.52	0.564	0.06	6.84	89.9
9:02	8.82	0.5	2	13.47	0.561	0	6.9	72.8
9:05	8.82	0.5	1.5	13.34	0.559	0	6.96	60
9:09	8.82	0.5	2	13.43	0.559	0	7.02	57.4
9:12	8.82	0.5	1.5	13.27	0.559	0	7.05	51

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 2** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL2mw-261 SampleID: FWGLL2261C-1533-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: Y

GRAB: Y COMPOSITE: N DATE: 7/15/2010 TIME: 9:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 0.558	Color:	Clear
		Odor:	None

pH: 7.06 Temperature (°C): 13.36 DO (mg/L): 0 Specific Conductivity (mS/cm): 49

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	6	4C	8081	Pest
250ml/Poly	3	NaOH	9012	Cyanide
1L/Amber	3	4C	8330	Explo
40ml/Vial	9	HCl	8260	VOC
1L/Amber	6	4C	353.2/8330	Propellants
1L/Amber	6	4C	8270	SVOC
1L/Poly	3	HNO3	6010/6020/7470	Metals
1L/Amber	6	4C	8082	PCB

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 2 DATE: 7/9/2010 START TIME: 8:40

WELL ID: LL2mw-262

WELL DEPTH: _____ INITIAL WATER LEVEL: 8.93

WELL DIAMETER _____ SCREEN INTERVAL: 10.6 - 20.6

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.6

PUMP READINGS: Throttle: 25 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
9:00	9.23	0.2	1	17.87	0.703	4.29	5.05	50.6
9:03	9.24	0.2	0.6	17.61	0.696	4.06	5.02	51.3
9:06	9.24	0.2	0.6	17.29	0.684	3.83	5.04	37.3

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: ML

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 2** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL2mw-262 SampleID: FWGLL2mw-262C-1534-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/9/2010 TIME: 9:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 33.2	Color:	Clear
		Odor:	None

pH: 5.08 Temperature (°C): 17.19 DO (mg/L): 3.71 Specific Conductivity (mS/cm): 0.682

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: ML Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8082	PCB

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 2 DATE: 7/9/2010 START TIME: 10:10

WELL ID: LL2mw-263

WELL DEPTH: INITIAL WATER LEVEL: 8.25

WELL DIAMETER SCREEN INTERVAL: 10.8 - 20.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.8

PUMP READINGS: Throttle: 15 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:15	9.23	0.2	0.5	18.94	0.354	3.95	8.22	108
10:18	9.25	0.2	0.6	18.71	0.362	3.58	8.05	95.9
10:21	9.27	0.2	0.6	18.38	0.366	3.55	7.86	80.2
10:24	9.27	0.2	0.6	18.11	0.352	3.56	7.8	71.2
10:27	9.27	0.2	0.6	18.06	0.346	3.59	7.79	68.5

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: ML

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 2** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL2mw-263 SampleID: FWGLL2mw-263C-1535-GW/GF DuplID:

SplitID: RinseID: FGWEQUIPRinse1-1578-GW

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/9/2010 TIME: 10:35

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 53.5	Color:	Clear
		Odor:	None

pH: 7.76 Temperature (°C): 18.38 DO (mg/L): 3.64 Specific Conductivity (mS/cm): 0.355

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: ML Cmt: Rinse at 1145

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 2 DATE: 7/12/2010 START TIME: 12:24

WELL ID: LL2mw-265

WELL DEPTH: INITIAL WATER LEVEL: 10.46

WELL DIAMETER SCREEN INTERVAL: 11.8 - 21.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 16.8

PUMP READINGS: Throttle: 45 Recharge: 12 Discharge: 3

COMMENTS cldy Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:26	10.80	0.14	0.25	14.42	0.67	3.28	6.04	340
12:29	10.84	0.14	0.42	14.12	0.676	3.09	5.84	300
12:32	10.88	0.14	0.42	13.81	0.679	3	5.81	260
12:35	10.89	0.14	0.42	13.65	0.677	2.97	5.82	220

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 2** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL2mw-265 SampleID: FWGLL2mw-265C-1536-GW/GF DuplID: FWGLL2mw-DUP2-1567-GW/GF

SplitID: FWGLL2mw-265C-1574S-GW/GF RinseID: FWEQUIPRinse2-1579-GW

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/12/2010 TIME: 12:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 230	Color:	cldy
		Odor:	None

pH: 5.85 Temperature (°C): 13.42 DO (mg/L): 2.88 Specific Conductivity (mS/cm): 0.271

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 72

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt: DUP @ 1404, RINSE @ 1434

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	9	HCl	8260	VOC
1L/Poly	3	HNO3	6010/6020/7470	Metals
250ml/Poly	3	NaOH	9012	Cyanide
1L/Amber	5	4C	353.2/8330	Propellants
1L/Amber	3	4C	8330	Explo
1L/Amber	5	4C	8082	PCB
1L/Amber	6	4C	8270	SVOC
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	5	4C	8081	Pest

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 2 DATE: 7/9/2010 START TIME: 10:00

WELL ID: LL2mw-266

WELL DEPTH: INITIAL WATER LEVEL: 12.4

WELL DIAMETER SCREEN INTERVAL: 9.8 - 19.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.8

PUMP READINGS: Throttle: 45 Recharge: 12 Discharge: 3

COMMENTS check initial wl tint Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:00	12.86	0.11	0.35	15.74	0.131	5.99	5.54	120
10:03	13.11	0.11	0.33	15.14	0.129	6.05	5.2	130
10:06	13.23	0.11	0.33	14.75	0.128	6.2	5.04	150
10:09	13.29	0.11	0.33	14.6	0.129	6.24	4.97	170
10:12	13.49	0.11	0.33	14.56	0.131	6.35	5	200

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 2** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL2mw-266 SampleID: FWGLL2mw-266C-1537-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/9/2010 TIME: 10:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU):	200	Color: tint
			Odor: None

pH: 5.03 Temperature (°C): 14.56 DO (mg/L): 6.33 Specific Conductivity (mS/cm): 0.132

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 82

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: gray tint

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 2 DATE: 7/9/2010 START TIME: 8:49

WELL ID: LL2mw-267

WELL DEPTH: INITIAL WATER LEVEL: 10.38

WELL DIAMETER SCREEN INTERVAL: 9.8 - 19.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.8

PUMP READINGS: Throttle: 45 Recharge: 12 Discharge: 3

COMMENTS s solids globuals orange tint Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:54	10.64	0.15	0.4	16.1	0.471	6.8	5.97	690
8:57	10.78	0.15	0.45	15.79	0.466	5.35	5.85	470
9:00	10.79	0.15	0.45	15.21	0.447	4.67	5.38	260
9:03	10.79	0.15	0.45	15.23	0.44	4.48	5.38	210
9:06	10.80	0.175	0.525	15.21	0.436	4.41	5.39	210

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 2** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL2mw-267 SampleID: FWGLL2mw-267C-1565-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/9/2010 TIME: 9:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU):	210	Color: tint
			Odor: None

pH: 5.4 Temperature (°C): 15.18 DO (mg/L): 4.24 Specific Conductivity (mS/cm): 0.435

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: orange tint w/ trace suspended solids

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 2 DATE: 7/15/2010 START TIME: 12:25

WELL ID: LL2mw-269

WELL DEPTH: INITIAL WATER LEVEL: 17.78

WELL DIAMETER SCREEN INTERVAL: 17.1 - 27.1

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 22.1

PUMP READINGS: Throttle: 40 Recharge: 12.5 Discharge: 2.5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:31	18.20	0.1	0.5	18.75	0.445	3.39	7.85	192
12:34	18.26	0.1	0.3	18.47	0.443	3.18	7.51	165
12:37	18.26	0.1	0.3	18.07	0.446	3.24	7.39	102
12:40	18.31	0.1	0.3	17.89	0.448	3.19	7.32	70.1
12:43	18.32	0.1	0.3	17.69	0.449	3.15	7.29	57.7

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 2** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL2mw-269 SampleID: FWGLL2mw-269C-1538-GW/GF DupIID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2010 TIME: 12:47

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 52.9	Color:	Clear
		Odor:	None

pH: 7.27 Temperature (°C): 17.76 DO (mg/L): 3.08 Specific Conductivity (mS/cm): 0.446

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 90

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8081	Pest
1L/Amber	1	4C	8330	Explo
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8082	PCB

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 2 DATE: 7/15/2010 START TIME: 11:20

WELL ID: LL2mw-270

WELL DEPTH: INITIAL WATER LEVEL: 10.2

WELL DIAMETER SCREEN INTERVAL: 9.8 - 19.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.8

PUMP READINGS: Throttle: 30 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
11:31	10.50	0.5	1	14.01	0.455	9.36	6.76	52.2
11:34	10.90	0.5	1.5	13.36	0.426	0.99	6.6	58
11:37	11.05	0.5	1.5	12.75	0.415	0	6.52	52.3
11:40	11.05	0.4	1.2	12.7	0.419	0	6.52	423

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 2** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL2mw-270 SampleID: FWGLL2MW270C-1539-GW/GF DuplID:

SplitID: RinseID: FWGEQUIPRinse5-1582-GW

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2010 TIME: 11:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 42.7	Color:	Clear
		Odor:	None

pH: 6.51 Temperature (°C): 12.56 DO (mg/L): 0 Specific Conductivity (mS/cm): 0.413

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS Cmt: Rinse at 1230

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 3 DATE: 7/8/2010 START TIME: 10:30

WELL ID: LL3mw-232

WELL DEPTH: INITIAL WATER LEVEL: 19.28

WELL DIAMETER SCREEN INTERVAL: 26.8 - 36.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 31.8

PUMP READINGS: Throttle: 45 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:41	20.07	0.2	0.5	17.47	0.777	6.03	7.21	142
10:44	20.87	0.2	0.6	15.82	0.744	6.52	6.66	96.9
10:47	21.18	0.2	0.6	15.36	0.75	7.17	6.64	85.3
10:50	21.41	0.2	0.6	15.17	0.747	7.47	6.83	70.3
10:53	21.59	0.2	0.6	14.94	0.738	7.84	6.98	58.3
10:56	21.78	0.2	0.6	14.88	0.732	8.19	7.06	30.8
10:59	21.84	0.2	0.6	14.89	0.73	8.14	7.1	29.2
11:03	22.01	0.2	0.8	14.83	0.729	8.17	7.15	33.4

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 3** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL3mw-232 SampleID: FWGLL3mw-232C-1540-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: Y

GRAB: Y COMPOSITE: N DATE: 7/8/2010 TIME: 11:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 30	Color:	Clear
		Odor:	None

pH: 7.17 Temperature (°C): 14.84 DO (mg/L): 8.44 Specific Conductivity (mS/cm): 0.729

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	6	4C	353.2/8330	Propellants
1L/Amber	6	4C	8270	SVOC
1L/Amber	6	4C	8081	Pest
40ml/Vial	9	HCl	8260	VOC
1L/Amber	3	4C	8330	Explo
250ml/Poly	3	NaOH	9012	Cyanide
1L/Poly	3	HNO3	6010/6020/7470	Metals
1L/Amber	6	4C	8082	PCB

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 3 DATE: 7/8/2010 START TIME: 8:45

WELL ID: LL3mw-234

WELL DEPTH: INITIAL WATER LEVEL: 10.36

WELL DIAMETER SCREEN INTERVAL: 9.8 - 19.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.8

PUMP READINGS: Throttle: 50 Recharge: 12 Discharge: 3

COMMENTS orange opaque start tint orange later ORANGE Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:48	11.86	0.25	0.3	15.82	0.524	0.53	6.55	505
8:51	11.18	0.17	0.51	15.53	0.524	0.22	6.6	498
8:54	11.88	0.16	0.48	15.3	0.519	0.25	6.66	480
8:57	11.85	0.165	0.495	15.21	0.517	0.15	6.67	405
9:00	11.86	0.165	0.495	15.06	0.518	0.09	6.7	321

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 3** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL3mw-234 SampleID: FWGLL3mw-234C-1541-GW/GF DuplID: FWGLL3mw-DUP3-1568-GW/GF

SplitID: FWGLL3mw-1575S-GW/GF RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/8/2010 TIME: 9:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 261	Color: ORANGE
		Odor: None

pH: 6.79 Temperature (°C): 15.05 DO (mg/L): 0.58 Specific Conductivity (mS/cm): 0.516

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 85

SHIPPED VIA: Multiple Labs

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt: DUP @ 1030 TURBIDITY @ HALF SAMPLE = 75 NTU

CONTAINER *SIZE/TYPE*	CONTAINER *NUMBER*	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
1L/Amber	5	4C	8082	PCB
1L/Poly	3	HNO3	6010/6020/7470	Metals
1L/Amber	5	4C	8081	Pest
1L/Amber	3	4C	8330	Explo
40ml/Vial	6	HCl	8260	VOC
1L/Amber	5	4C	353.2/8330	Propellants
1L/Amber	5	4C	8270	SVOC
250ml/Poly	3	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 3 DATE: 7/8/2010 START TIME: 8:30

WELL ID: LL3mw-236

WELL DEPTH: _____ INITIAL WATER LEVEL: 16.23

WELL DIAMETER _____ SCREEN INTERVAL: 13.8 - 23.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 18.8

PUMP READINGS: Throttle: 25 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:59	16.91	0.2	1	18.13	0.259	3.4	5.09	63.1
8:59	16.91	0.2	1	18.13	0.259	3.4	5.09	63.1
9:02	17.09	0.2	0.6	17.54	0.256	3.23	5.08	58.4
9:02	17.09	0.2	0.6	17.54	0.256	3.23	5.08	58.4
9:05	17.14	0.2	0.6	16.84	0.246	3.06	5.04	55.9
9:05	17.14	0.2	0.6	16.84	0.246	3.06	5.04	55.9
9:08	17.41	0.2	0.6	16.48	0.241	3.11	5.04	57.4
9:08	17.41	0.2	0.6	16.48	0.241	3.11	5.04	57.4
9:11	17.66	0.2	0.6	16.32	0.239	3.06	5.09	59
9:11	17.66	0.2	0.6	16.32	0.239	3.06	5.09	59

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: JM

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 3** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL3mw-236 SampleID: FWGLL3mw-236C-1542-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/8/2010 TIME: 9:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 22.8	Color:	Clear
		Odor:	None

pH: 5.09 Temperature (°C): 16.24 DO (mg/L): 2.46 Specific Conductivity (mS/cm): 0.247

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 3 DATE: 7/8/2010 START TIME: 11:46

WELL ID: LL3mw-239

WELL DEPTH: _____ INITIAL WATER LEVEL: 24.71

WELL DIAMETER _____ SCREEN INTERVAL: 24.9 - 34.9

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 29.9

PUMP READINGS: Throttle: 45 Recharge: 12 Discharge: 3

COMMENTS clear with s solids Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:23	25.13	0.1	0.2	15.75	0.234	2.56	6.2	931
12:26	25.46	0.1	0.3	15.25	0.226	1.18	6.19	583
12:29	25.51	0.1	0.3	15.04	0.223	1.03	6.19	376
12:32	25.68	0.1	0.3	14.89	0.221	0.97	6.18	231

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 3** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL3mw-239 SampleID: FWGLL3mw-239C-1543-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/8/2010 TIME: 12:40

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 208	Color:	Clear
		Odor:	None

pH: 6.19 Temperature (°C): 14.8 DO (mg/L): 0.78 Specific Conductivity (mS/cm): 0.221

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 90

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: trace suspended solids trace cldy

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	3	HCl	8260	VOC
1L/Amber	1	4C	8330	Explo
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8082	PCB
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 4 DATE: 7/8/2010 START TIME: 13:45

WELL ID: LL4mw-196

WELL DEPTH: INITIAL WATER LEVEL: 13.74

WELL DIAMETER SCREEN INTERVAL: 9.2 - 19.2

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.2

PUMP READINGS: Throttle: 45 Recharge: 12 Discharge: 3

COMMENTS brown orange cloudy start then tint TINT Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:57	13.83	0.2	0.2	15.99	0.596	4.04	6.86	845
14:00	13.91	0.175	0.525	15.31	0.577	1.77	6.98	596
14:03	13.96	0.175	0.525	15.06	0.557	1.72	7.07	452
14:06	13.99	0.175	0.525	14.66	0.536	0.75	7.15	461
14:09	14.05	0.175	0.525	14.58	0.524	0.56	7.18	433
14:12	14.08	0.175	0.525	14.51	0.521	0.44	7.19	399

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 4** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL4mw-196 SampleID: FWGLL4mw-196C-1544-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/8/2010 TIME: 14:14

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 334	Color:	TINT
		Odor:	None

pH: 7.19 Temperature (°C): 14.58 DO (mg/L): 0.22 Specific Conductivity (mS/cm): 0.517

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 90

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: orange turbidity still dropping slightly ever 3 minutes (25 NTU or less)

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8081	Pest

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 4 DATE: 7/8/2010 START TIME: 13:40

WELL ID: LL4mw-197

WELL DEPTH: INITIAL WATER LEVEL: 14.74

WELL DIAMETER SCREEN INTERVAL: 10.8 - 20.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.8

PUMP READINGS: Throttle: 25 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:41	14.74	0.2	0.5	19.05	0.986	6.33	6.76	76.4
13:44	14.87	0.2	0.6	17.13	0.956	6.73	6.43	64.5
13:47	14.94	0.2	0.6	16.63	0.945	7.23	6.42	71.7
13:50	14.95	0.2	0.6	16.21	0.949	7.55	6.57	62.7
13:53	14.95	0.2	0.6	16.11	0.946	7.66	6.82	51.7
13:56	14.95	0.2	0.6	16.03	0.942	7.74	7	41.9
13:59	14.95	0.2	0.6	15.89	0.942	7.71	7.08	32.6
14:02	14.95	0.2	0.6	15.89	0.941	7.78	7.11	26.3
14:05	14.95	0.2	0.6	15.82	0.939	7.71	7.13	21.2

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 4** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL4mw-197 SampleID: FWGLL4mw-197C-1545-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/8/2010 TIME: 14:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 18.6	Color:	Clear
		Odor:	None

pH: 7.13 Temperature (°C): 15.69 DO (mg/L): 7.72 Specific Conductivity (mS/cm): 0.938

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 90

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER *SIZE/TYPE*	CONTAINER *NUMBER*	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/12/2010 START TIME: 14:20

WELL ID: LL12mw-088

WELL DEPTH: INITIAL WATER LEVEL: 5.86

WELL DIAMETER SCREEN INTERVAL: 14.8 - 24.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 19.8

PUMP READINGS: Throttle: 20 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:25	6.83	0.2	1	18.12	1.27	2.51	9.1	26.2
14:28	7.61	0.2	0.6	17.9	1.25	2.05	8.98	20.4
14:31	8.13	0.2	0.6	17.76	1.24	1.9	8.91	17.6
14:34	8.82	0.2	0.6	17.54	1.24	1.76	8.86	16.1
14:37	9.39	0.2	0.6	17.58	1.24	1.68	8.95	15.4

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-088 SampleID: FWGLL12mw-088C-1546-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: Y

GRAB: Y COMPOSITE: N DATE: 7/12/2010 TIME: 14:39

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 15.3	Color:	Clear
		Odor:	None

pH: 8.99 Temperature (°C): 17.59 DO (mg/L): 1.69 Specific Conductivity (mS/cm): 1.24

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	6	4C	8270	SVOC
40ml/Vial	9	HCl	8260	VOC
1L/Amber	6	4C	8081	Pest
1L/Amber	6	4C	8082	PCB
1L/Amber	3	4C	8330	Explo
1L/Amber	6	4C	353.2/8330	Propellants
250ml/Poly	3	NaOH	9012	Cyanide
1L/Poly	3	HNO3	6010/6020/7470	Metals
250ml/Poly	3	H2SO4	353.2	NO3/NO2

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/13/2010 START TIME: 9:40

WELL ID: LL12mw-107

WELL DEPTH: INITIAL WATER LEVEL: 9.02

WELL DIAMETER SCREEN INTERVAL: 20.7 - 30.7

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 25.7

PUMP READINGS: Throttle: 50 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
9:48	10.29	0.2	0.2	13.49	0.867	8.64	7.99	180
9:51	11.38	0.2	0.6	11.51	0.825	6.22	7.71	137
9:54	11.80	0.2	0.6	11.26	0.811	5.61	7.66	80
9:57	12.34	0.2	0.6	11.51	0.8	5.01	7.6	62
10:00	14.78	0.2	0.6	11.31	0.799	4.48	7.57	41

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-107 SampleID: FWGLL12MW107C-1547-GW/GF DupIID: FWGLL12MWDUP4-1569-GW/GF

SplitID: FWGLL12MW107C-1576S-GW/GF RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2010 TIME: 10:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 0.799	Color:	Clear
		Odor:	None

pH: 7.55 Temperature (°C): 11.21 DO (mg/L): 3.98 Specific Conductivity (mS/cm): 39

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: LS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	2	4C	8081	Pest

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/12/2010 START TIME: 11:40

WELL ID: LL12mw-113

WELL DEPTH: INITIAL WATER LEVEL: 6.43

WELL DIAMETER SCREEN INTERVAL: 12.3 - 22.3

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 17.3

PUMP READINGS: Throttle: 25 Recharge: 10 Discharge: 5

COMMENTS gray Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
11:40	7.68	0.2	1.5	19.46	1.93	1.78	7.17	999
11:43	9.10	0.2	0.6	19.33	1.91	1.7	7.36	999
11:46	9.35	0.2	0.6	19.09	1.89	1.66	7.46	999
11:49	9.66	0.2	0.6	18.99	1.87	1.58	7.55	999
11:52	9.85	0.2	0.6	18.93	1.86	1.53	7.6	999
11:55	9.98	0.2	0.6	18.79	1.85	1.51	7.63	999

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-113 SampleID: FWGLL12mw-113C-1548-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: **Y** COMPOSITE: **N** DATE: 7/12/2010 TIME: 12:07

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 999	Color:	gray
		Odor:	None

pH: 7.66 Temperature (°C): 18.63 DO (mg/L): 1.47 Specific Conductivity (mS/cm): 1.84

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: W AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	H2SO4	353.2	NO3/NO2
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/13/2010 START TIME: 8:38

WELL ID: LL12mw-128

WELL DEPTH: INITIAL WATER LEVEL: 9.26

WELL DIAMETER SCREEN INTERVAL: 21.1 - 31.1

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 26.1

PUMP READINGS: Throttle: 30 Recharge: 10 Discharge: 5

COMMENTS water was cloudy - turbidity began clearing up during sampling cloudy gray Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:41	10.26	0.2	0.5	18.27	1.7	3.51	8.74	227
8:44	10.77	0.2	0.6	17.56	1.81	2.94	8.72	224
8:47	11.09	0.2	0.6	17.21	1.86	2.62	8.82	448
8:50	11.39	0.2	0.6	16.97	1.87	2.41	9.04	731
8:53	11.69	0.2	0.6	17	1.87	2.24	9.04	999
8:56	11.78	0.2	0.6	16.99	1.87	2.17	9.02	999
9:00	11.97	0.2	0.8	16.98	1.86	2.06	8.99	999
9:03	12.15	0.2	0.6	16.88	1.86	1.99	8.97	999

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-128 SampleID: FWGLL12mw-128C-1549-GW/GF DupIID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: Y

GRAB: Y COMPOSITE: N DATE: 7/13/2010 TIME: 9:09

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 999	Color:	cloudy gray
		Odor:	None

pH: 8.98 Temperature (°C): 16.87 DO (mg/L): 1.96 Specific Conductivity (mS/cm): 1.86

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER *SIZE/TYPE*	CONTAINER *NUMBER*	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250ml/Poly	3	H2SO4	353.2	NO3/NO2
40ml/Vial	27	HCl	8260	VOC
1L/Amber	6	4C	8270	SVOC
1L/Amber	6	4C	8081	Pest
1L/Amber	6	4C	8082	PCB
1L/Amber	3	4C	8330	Explo
250ml/Poly	3	NaOH	9012	Cyanide
1L/Poly	3	HNO3	6010/6020/7470	Metals
1L/Amber	6	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/12/2010 START TIME: 14:53

WELL ID: LL12mw-153

WELL DEPTH: INITIAL WATER LEVEL: 6.14

WELL DIAMETER SCREEN INTERVAL: 12.3 - 22.3

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 17.3

PUMP READINGS: Throttle: 45 Recharge: 12 Discharge: 3

COMMENTS start time is 1450 Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:52	6.33	0.1	0.25	19.22	1.43	3.47	6.77	180
14:55	6.48	0.1	0.3	18.79	1.42	2.86	6.76	180
14:58	6.65	0.12	0.36	18.62	1.41	2.65	6.74	150
15:01	6.94	0.12	0.36	18.75	1.4	2.8	6.73	137

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-153 SampleID: FWGLL12MW-153C-1550-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/12/2010 TIME: 15:04

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 130	Color:	Clear
		Odor:	None

pH: 6.73 Temperature (°C): 18.92 DO (mg/L): 2.89 Specific Conductivity (mS/cm): 1.41

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 74

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/12/2010 START TIME: 16:20

WELL ID: LL12mw-154

WELL DEPTH: _____ INITIAL WATER LEVEL: 8.44

WELL DIAMETER _____ SCREEN INTERVAL: 16.4 - 26.4

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 21.4

PUMP READINGS: Throttle: 45 Recharge: 12 Discharge: 3

COMMENTS tint Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:22	8.86	0.175	0.25	16.41	1.35	4.09	6.9	505
16:25	9.17	0.165	0.495	15.9	1.34	3.45	6.77	421
16:28	9.34	0.16	0.48	15.3	1.35	3.14	6.59	346
16:31	9.39	0.16	0.48	14.92	1.35	2.96	6.54	250
16:34	9.40	0.16	0.48	14.79	1.35	2.89	6.53	210
16:37	9.40	0.16	0.48	14.68	1.35	2.85	6.53	190

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-154 SampleID: FWGLL12mw-154C-1551-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/12/2010 TIME: 16:44

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 190	Color:	tint
		Odor:	None

pH: 6.53 Temperature (°C): 14.67 DO (mg/L): 2.83 Specific Conductivity (mS/cm): 1.35

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: slight orange tint

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8082	PCB
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	H2SO4	353.2	NO3/NO2

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/13/2010 START TIME: 8:38

WELL ID: LL12mw-182

WELL DEPTH: INITIAL WATER LEVEL: 10.23

WELL DIAMETER SCREEN INTERVAL: 25.2 - 35.2

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 30.2

PUMP READINGS: Throttle: 50 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:42	10.91	0.2	2.8	12.94	0.665	19	7.76	968
8:45	13.04	0.2	0.6	11.92	0.669	19	7.68	134
8:48	14.02	0.2	0.6	11.79	0.641	19	7.66	56
8:51	14.84	0.2	0.6	11.67	0.608	19	7.7	41.2

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-182 SampleID: FWGLL12182C-1552-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2010 TIME: 9:00

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 0.573	Color:	Clear
		Odor:	None

pH: 7.72 Temperature (°C): 11.71 DO (mg/L): 19 Specific Conductivity (mS/cm): 39.5

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/12/2010 START TIME: 17:10

WELL ID: LL12mw-183

WELL DEPTH: INITIAL WATER LEVEL: 11.91

WELL DIAMETER SCREEN INTERVAL: 23.3 - 33.3

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 28.3

PUMP READINGS: Throttle: 40 Recharge: 10 Discharge: 5

COMMENTS Heavy scale buildup on the tubing in the well Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
17:13	12.62	0.2	0.5	17.57	0.94	4.1	10.0	62.8
17:16	13.31	0.2	0.6	16.74	0.95	3.53	9.35	53.1
17:19	13.72	0.2	0.6	16.57	0.95	3.28	9.25	81
17:22	14.11	0.2	0.6	16.34	0.94	3.01	9.27	81.5

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-183 SampleID: FWGLL12mw-183C-1553-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/12/2010 TIME: 17:29

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 71.6	Color:	Clear
		Odor:	None

pH: 9.29 Temperature (°C): 16.3 DO (mg/L): 2.81 Specific Conductivity (mS/cm): 0.94

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8082	PCB
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/13/2010 START TIME: 13:45

WELL ID: LL12mw-184

WELL DEPTH: INITIAL WATER LEVEL: 13.6

WELL DIAMETER SCREEN INTERVAL: 18.8 - 28.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 23.8

PUMP READINGS: Throttle: 50 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb. (NTU)
13:47	13.45	0.5	1	11.87	1.52	12	7.89	63.4
13:50	13.77	0.5	1.5	11.65	1.48	6.1	7.74	42.1
13:53	14.00	0.5	1.5	11.6	1.48	4.2	7.67	28.4
13:56	14.21	0.5	1.5	11.49	1.48	3.9	7.67	18.8

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-184 SampleID: FWGLL12MW-184C-1554-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2010 TIME: 14:00

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 12.2	Color:	Clear
		Odor:	None

pH: 7.66 Temperature (°C): 11.62 DO (mg/L): 3.6 Specific Conductivity (mS/cm): 1.47

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/13/2010 START TIME: 15:30

WELL ID: LL12mw-185

WELL DEPTH: INITIAL WATER LEVEL: 7.09

WELL DIAMETER SCREEN INTERVAL: 10.8 - 20.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.8

PUMP READINGS: Throttle: 50 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
15:34	8.10	0.5	1	12.73	4.34	4.1	7.52	12
15:37	9.81	0.5	1.5	12.43	4.28	3.4	7.5	11.9
15:40	10.88	0.5	1.5	12.36	4.26	3.1	7.47	14

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-185 SampleID: FWGLL12MW185C-1555-GWGF DuplID:

SplitID: RinseID: FWGEQUIPRINSE3-1580-GW

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2010 TIME: 15:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 14.2	Color:	Clear
		Odor:	None

pH: 7.47 Temperature (°C): 12.41 DO (mg/L): 3 Specific Conductivity (mS/cm): 4.26

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: W AMBIENT TEMP (°F): 70

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS Cmt: Rinse at 1620

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	4	4C	353.2/8330	Propellants
250ml/Poly	2	NaOH	9012	Cyanide
1L/Amber	2	4C	8330	Explo
1L/Amber	4	4C	8082	PCB
1L/Amber	4	4C	8081	Pest
1L/Amber	4	4C	8270	SVOC
40ml/Vial	6	HCl	8260	VOC
250ml/Poly	2	H2SO4	353.2	NO3/NO2
1L/Poly	2	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/13/2010 START TIME: 8:31

WELL ID: LL12mw-186

WELL DEPTH: INITIAL WATER LEVEL: 7.14

WELL DIAMETER SCREEN INTERVAL: 8.8 - 18.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 13.8

PUMP READINGS: Throttle: 45 Recharge: 12.5 Discharge: 2.5

COMMENTS s cldy Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:33	7.88	0.2	0.2	14.89	1.28	4.27	6.5	130
8:36	7.99	0.115	0.345	15.07	1.26	3.86	6.38	130
8:39	8.13	0.115	0.345	15.11	1.26	3.59	6.38	120
8:42	8.29	0.115	0.345	15.1	1.26	3.42	6.4	130

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-186 SampleID: FWGLL12mw-186C-1556-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: **Y** COMPOSITE: **N** DATE: 7/13/2010 TIME: 8:48

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 150	Color:	s cldy
		Odor:	None

pH: 6.4 Temperature (°C): 15.04 DO (mg/L): 3.35 Specific Conductivity (mS/cm): 1.25

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 73

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: slight cldy gray

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
250ml/Poly	1	NaOH	9012	Cyanide
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	2	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/13/2010 START TIME: 13:28

WELL ID: LL12mw-187

WELL DEPTH: _____ INITIAL WATER LEVEL: 9.78

WELL DIAMETER _____ SCREEN INTERVAL: 17.2 - 27.2

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 22.2

PUMP READINGS: Throttle: 35 Recharge: 10 Discharge: 3

COMMENTS Heavy construction equipment running nearby Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:34	10.04	0.1	0.5	17.74	13.1	3.18	6.24	65.7
13:37	10.18	0.1	0.3	16.96	13.3	2.73	6.3	48.8
13:40	10.28	0.1	0.3	16.35	13.3	2.51	6.33	46.9
13:43	10.31	0.1	0.3	16.11	13.3	2.37	6.35	44.1

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-187 SampleID: FWGLL12mw-187C-1557-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2010 TIME: 13:51

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 41.5	Color:	Clear
		Odor:	None

pH: 6.37 Temperature (°C): 16.2 DO (mg/L): 2.26 Specific Conductivity (mS/cm): 13.3

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	H2SO4	353.2	NO3/NO2
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/12/2010 START TIME: 13:15

WELL ID: LL12mw-188

WELL DEPTH: INITIAL WATER LEVEL: 5.45

WELL DIAMETER SCREEN INTERVAL: 9.8 - 19.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 14.8

PUMP READINGS: Throttle: 15 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:17	6.14	0.2	0.5	17.94	1.51	2.65	7.96	119
13:20	6.68	0.2	0.6	17.75	1.5	2	8.24	102
13:23	7.21	0.2	0.6	17.83	1.5	1.85	8.22	111
13:26	7.73	0.2	0.6	18.12	1.51	1.84	8.19	91.8

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-188 SampleID: FWGLL12mw-188C-1558-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/12/2010 TIME: 13:31

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 79.7	Color:	Clear
		Odor:	None

pH: 8.22 Temperature (°C): 18.21 DO (mg/L): 1.83 Specific Conductivity (mS/cm): 1.51

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	2	4C	8081	Pest
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8270	SVOC
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/13/2010 START TIME: 10:14

WELL ID: LL12mw-189

WELL DEPTH: INITIAL WATER LEVEL: 6.29

WELL DIAMETER SCREEN INTERVAL: 7.5 - 17.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 12.5

PUMP READINGS: Throttle: 45 Recharge: 12 Discharge: 3

COMMENTS gray cldy, turbidity dec w purge CLDY Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:18	6.90	0.12	0.2	16.5	1.53	3.61	6.89	900
10:21	7.18	0.12	0.36	16.46	1.51	3.3	6.84	845
10:24	7.40	0.12	0.36	16.38	1.5	3.03	6.73	723
10:27	7.56	0.12	0.36	16.32	1.49	2.79	6.71	652
10:30	7.87	0.12	0.36	16.4	1.47	2.52	6.72	403

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-189 SampleID: FWGLL12mw-189C-1559-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2010 TIME: 10:38

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 395	Color:	CLDY
		Odor:	None

pH: 6.74 Temperature (°C): 16.6 DO (mg/L): 2.54 Specific Conductivity (mS/cm): 1.49

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: gray, turbidity lowering 375 ater 10 minutes, then at 450 after 10 more minutes

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	H2SO4	353.2	NO3/NO2

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/12/2010 START TIME: 16:40

WELL ID: LL12mw-242

WELL DEPTH: INITIAL WATER LEVEL: 9.51

WELL DIAMETER SCREEN INTERVAL: 15.5 - 25.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 20.5

PUMP READINGS: Throttle: 20 Recharge: 10 Discharge: 5

COMMENTS purge rate 0.1 lpm Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:47	9.51	0.2	1	13.31	0.577	19	8.31	752
16:50	9.40	0.2	0.6	12.34	0.539	19	8.25	681
16:53	9.40	0.2	0.6	11.92	0.55	19	8.09	378
16:56	9.40	0.2	0.6	11.96	0.529	19	8.01	156
16:59	9.40	0.2	0.6	11.98	0.523	19	7.99	100

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-242 SampleID: FWGLL12MW-242C1560-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/12/2010 TIME: 17:00

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 92.6	Color:	Clear
		Odor:	None

pH: 7.92 Temperature (°C): 11.98 DO (mg/L): 19 Specific Conductivity (mS/cm): 0.524

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8082	PCB
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8081	Pest
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/13/2010 START TIME: 11:44

WELL ID: LL12mw-243

WELL DEPTH: INITIAL WATER LEVEL: 8.29

WELL DIAMETER SCREEN INTERVAL: 13 - 23

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 18.0

PUMP READINGS: Throttle: 40 Recharge: 12 Discharge: 3

COMMENTS Cloudy gray Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
11:49	9.29	0.14	0.5	17.84	1.32	4.28	7.67	999
11:52	9.65	0.1	0.3	19.43	1.31	4.05	7.52	999
11:55	9.87	0.1	0.3	20.24	1.31	4.08	7.42	999
11:58	10.11	0.1	0.3	20.51	1.32	4.26	7.52	999
12:01	10.43	0.1	0.3	20.42	1.31	4.29	7.6	999
12:04	10.76	0.1	0.3	18.98	1.31	4.52	7.61	999
12:07	11.15	0.1	0.3	18.52	1.3	4.45	7.61	999
12:10	11.51	0.1	0.3	18.22	1.31	4.43	7.62	999

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-243 SampleID: FWGLL12mw-243C-1561-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2010 TIME: 12:17

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 999	Color:	Cloudy gray
		Odor:	None

pH: 7.66 Temperature (°C): 17.95 DO (mg/L): 4.35 Specific Conductivity (mS/cm): 1.3

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	H2SO4	353.2	NO3/NO2

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/13/2010 START TIME: 15:25

WELL ID: LL12mw-244

WELL DEPTH: INITIAL WATER LEVEL: 9.92

WELL DIAMETER SCREEN INTERVAL: 19.5 - 29.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 24.5

PUMP READINGS: Throttle: 40 Recharge: 12 Discharge: 3

COMMENTS Cloudy gray Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
15:31	11.10	0.15	1	16.48	0.828	5.26	7.28	999
15:34	11.54	0.1	0.3	17.81	0.802	5.37	7.05	999
15:37	11.73	0.1	0.3	18.48	0.781	5.4	7.03	999
15:40	11.96	0.1	0.3	18.37	0.773	5.15	7.02	999

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-244 SampleID: FWGLL12mw-244C-1562-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/13/2010 TIME: 15:49

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 999	Color:	Cloudy gray
		Odor:	None

pH: 7.01 Temperature (°C): 18.52 DO (mg/L): 4.99 Specific Conductivity (mS/cm): 0.77

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	H2SO4	353.2	NO3/NO2
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/12/2010 START TIME: 11:30

WELL ID: LL12mw-245

WELL DEPTH: _____ INITIAL WATER LEVEL: 7.39

WELL DIAMETER _____ SCREEN INTERVAL: 18 - 28

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 23.0

PUMP READINGS: Throttle: 20 Recharge: 10 Discharge: 5

COMMENTS purge rate 0.1 lpm Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
11:52	9.29	0.1	0.25	11.43	0.751	15.8	7.24	166
11:55	12.89	0.1	3	11.5	0.75	15.3	7.25	170
11:57	12.89	0.1	0.2	11.54	0.75	15.1	7.27	207
12:00	13.70	0.1	0.3	11.78	0.751	14.6	7.28	271
12:03	14.81	0.1	0.3	11.83	0.748	14.1	7.29	277

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-245 SampleID: FWGLL12MW-245C-1563-GW DuplID: FWGLL12MW-DUP5-1570-GW

SplitID: FWGLL12MW-245C-1577S-GW RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/12/2010 TIME: 12:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 400	Color:	Clear
		Odor:	None

pH: 7.33 Temperature (°C): 11.77 DO (mg/L): 19.9 Specific Conductivity (mS/cm): 0.749

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: LS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	6	4C	353.2/8330	Propellants
250ml/Poly	3	H2SO4	353.2	NO3/NO2
1L/Amber	5	4C	8081	Pest
250ml/Poly	3	NaOH	9012	Cyanide
1L/Amber	3	4C	8330	Explo
1L/Amber	5	4C	8082	PCB
1L/Amber	5	4C	8270	SVOC
40ml/Vial	9	HCl	8260	VOC
1L/Poly	3	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: LOADLINE 12 DATE: 7/13/2010 START TIME: 12:20

WELL ID: LL12mw-246

WELL DEPTH: _____ INITIAL WATER LEVEL: 16.39

WELL DIAMETER _____ SCREEN INTERVAL: 21.5 - 31.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 26.5

PUMP READINGS: Throttle: 50 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:26	16.90	0.5	1	19.91	0.728	6.32	8.18	126
12:29	18.11	0.5	1.5	12.38	0.651	5.99	8.01	87.9
12:32	18.69	0.5	1.5	11.88	0.644	5.49	7.92	62.3
12:35	19.10	0.5	1.5	11.81	0.642	4.88	7.88	40
12:38	19.43	0.5	1.5	11.69	0.64	4.61	7.86	21.1

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **LOADLINE 12** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: LL12mw-246 SampleID: FWGLL12MW246C-1564-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: **Y** COMPOSITE: **N** DATE: 7/13/2010 TIME: 12:40

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 19	Color:	Clear
		Odor:	None

pH: 7.48 Temperature (°C): 11.7 DO (mg/L): 4.32 Specific Conductivity (mS/cm): 0.639

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	1	4C	8330	Explo

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: SHARON CON DATE: 7/14/2010 START TIME: 13:10

WELL ID: SCFmw-001

WELL DEPTH: INITIAL WATER LEVEL: 89.24

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 55 Recharge: 10 Discharge: 20

COMMENTS 1.5 Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
13:18	89.20	0.2	0.2	19.5	0.486	9.83	7.1	14
13:21	89.19	0.2	0.6	18	0.508	8.47	6.95	5
13:24	89.20	0.2	0.6	17.12	0.631	5.97	6.48	8
13:27	89.20	0.2	0.6	17.07	0.65	5.51	6.44	9
13:30	89.20	0.2	0.6	16.42	0.668	5.33	6.45	8

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **SHARON CON** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: SCFmw-001 SampleID: FWGSCFmw-001-1515-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2010 TIME: 13:38

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 8	Color:	Clear
		Odor:	None

pH: 6.46 Temperature (°C): 17.05 DO (mg/L): 4.59 Specific Conductivity (mS/cm): 0.662

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 90

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: sulfer odor in air, redox conditions

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: SHARON CON DATE: 7/13/2010 START TIME: 15:43

WELL ID: SCFmw-002

WELL DEPTH: INITIAL WATER LEVEL: 19.09

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 130 Recharge: 9 Discharge: 6

COMMENTS 6 gas/pressure issues...retry later Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:15	17.53	0.2	0.2	19.24	0.718	4.58	7.01	8
16:18	16.34	0.2	0.6	18.39	0.724	4.3	6.92	4
16:21	16.01	0.2	0.6	18.16	0.719	3.79	6.92	2
16:24	16.00	0.2	0.6	18.9	0.71	3.26	6.98	4

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: SHARON CON DATE: 7/14/2010 START TIME: 8:50

WELL ID: SCFmw-002

WELL DEPTH: INITIAL WATER LEVEL: 19.24

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 80 Recharge: 7.57 Discharge: 7.5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
9:00	19.20	0.2	0.2	18.81	0.697	8.4	7.03	8
9:03	19.20	0.2	0.6	18.05	0.703	8	7.16	4
9:06	19.20	0.2	0.6	17.89	0.7	7.39	7.21	10
9:09	19.20	0.2	0.6	17.52	0.697	4.62	7.23	1

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **SHARON CON** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: SCFmw-002 SampleID: FWGSCFmw-002-1516-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/14/2010 TIME: 9:14

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 9	Color:	Clear
		Odor:	None

pH: 7.25 Temperature (°C): 17.32 DO (mg/L): 4.11 Specific Conductivity (mS/cm): 0.693

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 75

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8081	Pest
250ml/Poly	1	NaOH	9012	Cyanide
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: SHARON CON DATE: 7/13/2010 START TIME: 12:46

WELL ID: SCFmw-003

WELL DEPTH: INITIAL WATER LEVEL: 8.81

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 75 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:46	8.91	0.15	0.25	19.19	0.607	4.34	6.75	1
12:49	8.90	0.15	0.45	19	0.606	4.09	6.59	1
12:52	8.92	0.15	0.45	18.73	0.605	3.92	6.55	1
12:55	8.91	0.17	0.51	18.03	0.606	3.65	6.54	1

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **SHARON CON** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: SCFmw-003 SampleID: FWGSCFmw-003-1517-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: Y

GRAB: Y COMPOSITE: N DATE: 7/13/2010 TIME: 12:58

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 1	Color:	Clear
		Odor:	None

pH: 6.55 Temperature (°C): 17.43 DO (mg/L): 3.56 Specific Conductivity (mS/cm): 0.605

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: 80 psi/ cpm4 8/7 mp10h wl 8.93 then 90 psi cpm4 5/10 wl 7.91 1323 wl 6.73 .32l/m then 6.33

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	3	H2SO4	353.2	NO3/NO2
40ml/Vial	9	HCl	8260	VOC
1L/Amber	6	4C	8270	SVOC
1L/Amber	6	4C	8081	Pest
1L/Amber	6	4C	8082	PCB
1L/Amber	3	4C	8330	Explo
1L/Amber	6	4C	353.2/8330	Propellants
250ml/Poly	3	NaOH	9012	Cyanide
1L/Poly	3	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: SHARON CON DATE: 7/15/2010 START TIME: 10:40

WELL ID: SCFmw-004

WELL DEPTH: INITIAL WATER LEVEL: 0.6

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 55 Recharge: 10 Discharge: 20

COMMENTS .15-.2 on gas Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:45	0.60	0.2	0.2	22.55	1.19	6.9	7	9
10:48	0.60	0.2	0.6	21.75	1.24	5.76	7	30
10:51	0.20	0.2	0.6	21.5	1.24	4.86	7.01	45
10:54	0.20	0.2	0.6	20.89	1.24	4.09	7	65

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **SHARON CON** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: SCFmw-004 SampleID: FWGSCFmw-004-1518-GW/GF DuplID: FWGSCFmw-DUP6-1571-GW/GF

SplitID: FWGSCFmw-004-1572S-GW/GF RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2010 TIME: 10:58

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 66	Color:	Clear
		Odor:	None

pH: 6.99 Temperature (°C): 20.97 DO (mg/L): 3.86 Specific Conductivity (mS/cm): 1.23

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 85

SHIPPED VIA: Multiple Labs

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt: .15-.2 on gas and compressor

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	3	H2SO4	353.2	NO3/NO2
1L/Amber	3	4C	8330	Explo
1L/Amber	6	4C	353.2/8330	Propellants
1L/Poly	3	HNO3	6010/6020/7470	Metals
1L/Amber	5	4C	8082	PCB
1L/Amber	5	4C	8270	SVOC
250ml/Poly	3	NaOH	9012	Cyanide
1L/Amber	5	4C	8081	Pest
40ml/Vial	9	HCl	8260	VOC

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: SHARON CON DATE: 7/15/2010 START TIME: 9:00

WELL ID: SCFmw-005

WELL DEPTH: INITIAL WATER LEVEL: 11.07

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 55 Recharge: 10 Discharge: 20

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
9:02	11.75	0.25	0.2	13.58	0.91	6.38	6.46	37
9:05	11.80	0.25	0.75	13.92	0.824	5.16	6.34	33
9:08	11.83	0.25	0.75	14.61	0.813	3.93	6.24	39
9:11	11.84	0.25	0.75	14.69	0.804	3.66	6.17	41
9:14	11.85	0.25	0.75	15.01	0.812	3.32	6.15	46

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **SHARON CON** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: SCFmw-005 SampleID: FWGSCFmw-005-1519-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/15/2010 TIME: 9:18

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 39	Color:	Clear
		Odor:	None

pH: 6.141 Temperature (°C): 16.04 DO (mg/L): 3.13 Specific Conductivity (mS/cm): 0.795

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 80

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: black suspended solids

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	NaOH	9012	Cyanide
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	2	4C	8081	Pest

MONITOR WELL PURGING FORM

PROJECT NAME: **RVAAP** PROJECT NUMBER: **030240.0006**

LOCATION: SHARON CON DATE: 7/8/2010 START TIME: 15:51

WELL ID: SCFmw-006

WELL DEPTH: INITIAL WATER LEVEL: 17.99

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 150 Recharge: 10 Discharge: 5

COMMENTS mp10-comp-samp pro changed to 9/6 for R/D Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
15:57	18.02	0.125	0.25	18.82	0.58	3.97	8.78	585
16:00	18.02	0.125	0.375	18.42	0.565	2.04	8.61	549
16:03	18.03	0.135	0.405	17.7	0.561	1.76	8.52	402
16:06	18.02	0.135	0.405	17.2	0.549	1.6	8.37	383
16:09	18.01	0.135	0.405	17.39	0.548	1.45	8.34	379
16:12	18.01	0.135	0.405	17.74	0.548	1.33	8.29	354

Note: Condition of the well: See STATIC WATER LEVEL FORM

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **SHARON CON** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: SCFmw-006 SampleID: FWGSCFmw-006-1520-GW/GF DuplID:

SplitID: RinseID:

MATRIX: WG - Ground Water SAMPLING METHOD: BP - Bladder Pump MS/MSD: N

GRAB: Y COMPOSITE: N DATE: 7/8/2010 TIME: 16:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 336	Color:	Clear
		Odor:	None

pH: 8.26 Temperature (°C): 17.45 DO (mg/L): 1.38 Specific Conductivity (mS/cm): 1.5

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 90

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: WL @ 18.04

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide

Daily QC Records

Date: 15-Jul

S	M	T	W	T	F	S
				X		

DAILY QUALITY CONTROL REPORT

COE Project Manager Glen Beckham

Project Ravenna Army Ammunition Plant Groundwater Monitoring

Job No. 30240

Contract No. W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
	X	X			
Temp	To 32	32-50	50-70	70-85	85 up
				X	X
Wind	Still	Moder	High	Report No.	
	X				
Humidity	Dry	Moder	Humid	071510	
		X	X		

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Three water quality meters (Horiba-U22's); One multigas detector (MSA); Four bladder pumps w/ associated controllers and compressors. Two tanks of compressed nitrogen gas to purge the six deep wells.

WORK PERFORMED (INCLUDING SAMPLING):

Samples were collected at the following locations: LL1mw-082, LL1mw-085, LL2mw-261, LL2mw-269, LL2mw-270, SCFmw-004, and SCFmw-005. A field duplicate and QA split sample was collected from SCFmw-004. Extra volume was collected from LL2mw-261 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory. Additionally, a field rinsate was collected by Team #3. Collected IDW sample, packed equipment for return back to Cincinnati, and cleaned Building 1036 while waiting for lab to arrive.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	071510
Job No.	30240	Date:	7/15/2010

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

All field equipment was calibrated prior to mobilizing to the field. Water quality meters were calibrated with AutoCal Solution - certified values are: Conductivity - 4.49 mS/cm; Turbidity - 0 NTU; pH - 4.0 and 7.0 su. Multigas detector calibrated with Zero Air Standard and 100 ppm Isobutylene. All field equipment was within calibration criteria.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Health & Safety briefing conducted by Colleen Lear prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, and nitrile gloves). First Aid kits were included in each vehicle, and personnel were made aware of the location of eyewash stations. Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

NA

SPECIAL NOTES:

Two representatatives from the United States Geological Survey were present to observe field team activities.

TOMORROWS EXPECTATIONS:

NA

Date: 14-Jul

S	M	T	W	T	F	S
			X			

DAILY QUALITY CONTROL REPORT

COE Project Manager: Glen Beckham

Project: Ravenna Army Ammunition Plant Groundwater Monitoring

Job No.: 30240

Contract No.: W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
	X	X			
Temp	**To 32**	**32-50**	**50-70**	**70-85**	**85 up**
				X	X
Wind	**Still**	**Moder**	**High**	**Report No.**	
	X	X			
Humidity	**Dry**	**Moder**	**Humid**		
			X	071410	

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Three water quality meters (Horiba-U22's); One multigas detector (MSA); Four bladder pumps w/ associated controllers and compressors. Two tanks of compressed nitrogen gas to purge the six deep wells.

WORK PERFORMED (INCLUDING SAMPLING):

Samples were collected at the following locations: LL1mw-064, LL1mw-065, LL1mw-067, LL1mw-078, LL1mw-080, LL1mw-081, LL1mw-083, LL1mw-084, SCFmw-001, and SCFmw-002. A field duplicate and QA split sample was collected from LL1mw-065. Extra volume was collected from LL1mw-064 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory. Additionally, a field rinsate was collected by Team #1.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	071410
Job No.	30240	Date:	7/14/2010

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

All field equipment was calibrated prior to mobilizing to the field. Water quality meters were calibrated with AutoCal Solution - certified values are: Conductivity - 4.49 mS/cm; Turbidity - 0 NTU; pH - 4.0 and 7.0 su. Multigas detector calibrated with Zero Air Standard and 100 ppm Isobutylene. All field equipment was within calibration criteria.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Health & Safety briefing conducted by Colleen Lear prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, and nitrile gloves). First Aid kits were included in each vehicle, and personnel were made aware of the location of eyewash stations. Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

NA

SPECIAL NOTES:

Two representatatives from the United States Geological Survey were present to observe field team activities.

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect remaining samples from the July 2010 quarterly event, clean Building 1036, pack up equipment, and return to Cincinnati.

Date: 13-Jul

S	M	T	W	T	F	S
		X				

DAILY QUALITY CONTROL REPORT

COE Project Manager: Glen Beckham

Project: Ravenna Army Ammunition Plant Groundwater Monitoring

Job No.: 30240

Contract No.: W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
	X	X	X		
Temp	To 32	32-50	50-70	70-85	85 up
				X	X
Wind	Still	Moder	High	Report No.	
	X	X			
Humidity	Dry	Moder	Humid	071310	
			X		

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Three water quality meters (Horiba-U22's); One multigas detector (MSA); Four bladder pumps w/ associated controllers and compressors. Two tanks of compressed nitrogen gas to purge the six deep wells.

WORK PERFORMED (INCLUDING SAMPLING):

Samples were collected at the following locations: LL12mw-107, LL12mw-128, LL12mw-182, LL12mw-184, LL12mw-185, LL12mw-186, LL12mw-187, LL12mw-189, LL12mw-243, LL12mw-244, LL12mw-246, and SCFmw-003. A field duplicate and QA split sample was collected from LL12mw-107. Extra volume was collected from LL12mw-128 and SCFmw-003 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory. Additionally, a field rinsate was collected by Team #3.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	071310
Job No.	30240	Date:	7/13/2010

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

All field equipment was calibrated prior to mobilizing to the field. Water quality meters were calibrated with AutoCal Solution - certified values are: Conductivity - 4.49 mS/cm; Turbidity - 0 NTU; pH - 4.0 and 7.0 su. Multigas detector calibrated with Zero Air Standard and 100 ppm Isobutylene. All field equipment was within calibration criteria.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Health & Safety briefing conducted by Colleen Lear prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, and nitrile gloves). First Aid kits were included in each vehicle, and personnel were made aware of the location of eyewash stations. Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

NA

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect samples from a minimum of 10 wells.

Date: 12-Jul

S	X M	T	W	T	F	S

DAILY QUALITY CONTROL REPORT

COE Project Manager: Glen Beckham

Project: Ravenna Army Ammunition Plant Groundwater Monitoring

Job No.: 30240

Contract No.: W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
	X	X	X	X	
Temp	To 32	32-50	50-70	70-85	85 up
				X	X
Wind	Still	Moder	High	Report No.	
	X	X			
Humidity	Dry	Moder	Humid		
			X	071210	

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Three water quality meters (Horiba-U22's); One multigas detector (MSA); Four bladder pumps w/ associated controllers and compressors. Two tanks of compressed nitrogen gas to purge the six deep wells.

WORK PERFORMED (INCLUDING SAMPLING):

Samples were collected at the following locations: LL2mw-265, LL12mw-088, LL12mw-113, LL12mw-153, LL12mw-154, LL12mw-183, LL12mw-188, LL12mw-242, and LL12mw-245. Field duplicate and QA split samples were collected from LL12mw-245 and LL2mw-265. Extra volume was collected from LL12mw-088 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory. Additionally, a field rinsate was collected by Team #2.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	071210
Job No.	30240	Date:	7/12/2010

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

All field equipment was calibrated prior to mobilizing to the field. Water quality meters were calibrated with AutoCal Solution - certified values are: Conductivity - 4.49 mS/cm; Turbidity - 0 NTU; pH - 4.0 and 7.0 su. Multigas detector calibrated with Zero Air Standard and 100 ppm Isobutylene. All field equipment was within calibration criteria.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Health & Safety briefing conducted by Colleen Lear prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, and nitrile gloves). First Aid kits were included in each vehicle, and personnel were made aware of the location of eyewash stations. Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

NA

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect samples from a minimum of 10 wells.

Date: 9-Jul

S	M	T	W	T	F	S
					X	

DAILY QUALITY CONTROL REPORT

COE Project Manager Glen Beckham

Project Ravenna Army Ammunition Plant Groundwater Monitoring

Job No. 30240

Contract No. W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
	X	X			
Temp	To 32	32-50	50-70	70-85	85 up
				X	X
Wind	Still	Moder	High	Report No.	
		X			
Humidity	Dry	Moder	Humid	070910	
		X	X		

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Three water quality meters (Horiba-U22's); One multigas detector (MSA); Four bladder pumps w/ associated controllers and compressors. Two tanks of compressed nitrogen gas to purge the six deep wells.

WORK PERFORMED (INCLUDING SAMPLING):

Samples were collected at the following locations: LL2mw-262, LL2mw-263, LL2mw-266, and LL2mw-267. A field rinsate was collected by Team #1. Cleaned and organized Building 1036 while waiting for lab to arrive to pick up samples. Returned back to Cincinnati for the weekend.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	070910
Job No.	30240	Date:	7/9/2010

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

All field equipment was calibrated prior to mobilizing to the field. Water quality meters were calibrated with AutoCal Solution - certified values are: Conductivity - 4.49 mS/cm; Turbidity - 0 NTU; pH - 4.0 and 7.0 su. Multigas detector calibrated with Zero Air Standard and 100 ppm Isobutylene. All field equipment was within calibration criteria.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Health & Safety briefing conducted by Colleen Lear prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, and nitrile gloves). First Aid kits were included in each vehicle, and personnel were made aware of the location of eyewash stations. Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

NA

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

NA

Date: 8-Jul

S	M	T	W	T	F	S
				X		

DAILY QUALITY CONTROL REPORT

COE Project Manager: Glen Beckham

Project: Ravenna Army Ammunition Plant Groundwater Monitoring

Job No.: 30240

Contract No.: W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
	X	X			
Temp	**To 32**	**32-50**	**50-70**	**70-85**	**85 up**
				X	X
Wind	**Still**	**Moder**	**High**	**Report No.**	
	X				
Humidity	**Dry**	**Moder**	**Humid**		
			X	070810	

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Three water quality meters (Horiba-U22's); One multigas detector (MSA); Four bladder pumps w/ associated controllers and compressors. Two tanks of compressed nitrogen gas to purge the six deep wells.

WORK PERFORMED (INCLUDING SAMPLING):

Samples were collected at the following locations: LL2mw-059, LL2mw-060, LL3mw-232, LL3mw-234, LL3mw-236, LL3mw-239, LL4mw-196, LL4mw-197, and SCFmw-006. A field duplicate and QA split sample was collected from LL3mw-234. Extra volume was collected from LL3mw-232 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	070810
Job No.	30240	Date:	7/8/2010

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

All field equipment was calibrated prior to mobilizing to the field. Water quality meters were calibrated with AutoCal Solution - certified values are: Conductivity - 4.49 mS/cm; Turbidity - 0 NTU; pH - 4.0 and 7.0 su. Multigas detector calibrated with Zero Air Standard and 100 ppm Isobutylene. All field equipment was within calibration criteria.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Health & Safety briefing conducted by Colleen Lear prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, and nitrile gloves). First Aid kits were included in each vehicle, and personnel were made aware of the location of eyewash stations. Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

NA

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect samples from a minimum of 6 wells.

Date: 7-Jul

S	M	T	X W	T	F	S

DAILY QUALITY CONTROL REPORT

COE Project Manager Glen Beckham

Project Ravenna Army Ammunition Plant Groundwater Monitoring

Job No. 30240

Contract No. W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
	X	X			
Temp	To 32	32-50	50-70	70-85	85 up
				X	X
Wind	Still	Moder	High	Report No.	
	X				
Humidity	Dry	Moder	Humid		
			X	070710	

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Three water quality meters (Horiba-U22's); One multigas detector (MSA); Four bladder pumps w/ associated controllers and compressors. Two tanks of compressed nitrogen gas to purge the six deep wells.

WORK PERFORMED (INCLUDING SAMPLING):

Arrive at Building 1036, unload and organize equipment. Completed well re-development efforts at the following monitoring wells: LL12mw-113, LL12mw-186, LL12mw-243, LL12mw-244, and LL12mw-245.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	070710
Job No.	30240	Date:	7/7/2010

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

All field equipment was calibrated prior to mobilizing to the field. Water quality meters were calibrated with AutoCal Solution - certified values are: Conductivity - 4.49 mS/cm; Turbidity - 0 NTU; pH - 4.0 and 7.0 su. Multigas detector calibrated with Zero Air Standard and 100 ppm Isobutylene. All field equipment was within calibration criteria.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Health & Safety briefing conducted by Colleen Lear prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, and nitrile gloves). First Aid kits were included in each vehicle, and personnel were made aware of the location of eyewash stations. Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

NA

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect samples from a minimum of 6 wells.

APPENDIX D

DATA VERIFICATION REPORTS/LABORATORY DATA SHEETS

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** September 1, 2010
STL Sample Delivery Group: A0G090535 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 8 and 9th , 2010, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0G090535.

Field Sample ID	Analytes	Method
FWGLL3mw-236c-1542-GW	Explosives	SW846 8330
FWGLL3mw-232c-1540-GW	Nitroguanidine	SW846 M8330
FWGLL4mw-197c-1545-GW	Nitrocellulose	TAL- SOP WS-WC-0050
FWGLL2mw-059c-1531-GW		
FWGLL2mw-060c-1532-GW		
FWGLL2mw-262c-1534-GW		
FWGLL2mw-263c-1535-GW		
FWGLL3mw-234c-1541-GW		
FWGEQUIPRinse1-1578-GW		
FWGLL3mw-DUP3-1568-GW		
FWGLL3mw-239c-1543-GW		
FWGLL4mw-196c-1544-GW		
FWGSCFmw-006-1520-GW		
FWGLL2mw-267c-1565-GW		
FWGLL2mw-266c-1537-GW		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004, Analytical Methods, and Laboratory Standard Operating Procedures*. These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** September 1, 2010
STL Sample Delivery Group: A0G090535 **Revision:** 0

Explosives- 8330

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration Criteria
- ICV and CCV criteria
- Retention time criteria
- MDL Verification
- Surrogate recovery criteria
- Equipment and method blanks free from contamination
- MS Recovery Criteria
- LCS Recovery Criteria

LC9-4-Nitrotoluene appears to not have been spiked and/or recover in the calibration verifications or MRL verifications; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation and the %D for 2-nitrotoluene were within criteria.

MRL Recovery

LC9- the following outliers were noted:

- The MRL analyzed 7/23/10 @1400 recovered above control limits with a %D of 117% for 2,4,6-trinitrotoluene.
- The MRL analyzed 7/23/10 @1946 recovered above control limits with a %D of 129% for 2,4,6-trinitrotoluene.
- The MRL analyzed 7/23/10 @1400 recovered above control limits with a %D of 137% for 2,4,6-trinitrotoluene.

The 2,4,6-trinitrotoluene results for samples FWGLL3mw-236c-1542-GW and FWGLL3mw-239c-1543-GW were qualified as estimated, "J".

Blanks

- Due to excessive particulates, samples FWGLL2mw-059c-1531-GW, FWGLL2mw-263c-1535-GW, FWGLL2mw-267c-1565-GW and FWGLL2mw-266c-1537-GW required filtration. A filter blank was prepared and analyzed with no detected contamination.
- HMX was detected in FWGEQUIPRinse1-1578-GW at 0.21ug/L. the HMX results for samples FWGLL2mw-059c-1531-GW, FWGLL2mw-263c-1535-GW, FWGLL3mw-234c-1541-GW, FWGLL3mw-239c-1543-GW and FWGLL4mw-197c-1545-GW were qualified, "B" as the results were <5x the equipment rinse contamination.

CCV

LC10

- The CCV analyzed 7/28/10 @2118 recovered above limits for nitrobenzene with a %D of 22%.
- The CCV analyzed 7/29/10 @0610 recovered above limits for nitrobenzene with a %D of 21%.

No qualifications were made as the CCV did not bracket any detected nitrobenzene concentrations.

LC9

- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.
- The CCV analyzed 7/29/10@2246 recovered below control limits for nitrobenzene with a %D of 17%, 2-nitrotoluene with a %D of 21% and 3-nitrotoluene with a % D of 21%. AS LC9 was

used for confirmation, the nitrobenzene, 2-nitrotoluene and 3-nitrotoluene results were qualified as estimated, "UJ"

Field Duplicate RPD
Sample FWGLL3mw-DUP3-1568-GW was the field duplicate for FWGLL3mw-234c-1541-GW. The duplicate RPD was above control limits for 2-amino-4,6-dinitrotoluene at 93%, 4-amino-2,6-dinitrotoluene at 69% and RDX at 64% The 2-amino-4,6-dinitrotoluene, 4-amino-2,6-dinitrotolueneand RDX results for FWGLL3mw-DUP3-1568-GW and FWGLL3mw-234c-1541-GW were qualified as estimated, "J".

Second Column Confirmation
The second column confirmation analyzed on sample FWGLL2mw-059c-1531-GW had an RPD above control limits for HMX. FWGLL3mw-239c-1543-GW had RPDs that were above control limits for 1,3,5-trinitrobenzene and 2,4,6-trinitrotolune. The results for the targets and samples listed above were qualified as estimated, "J".

Nitroguanidine- 8330M
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MRL level verification criteria
- MDL verification criteria
- ICV and CCV criteria
- The method blank and equipment blanks were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Nitrocellulose - 353.2
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Sample preparation criteria
- Initial Calibration criteria
- ICV and CCV criteria
- The method and equipment blanks were free from contamination
- MRL Level Verification criteria
- ICB and CCBs were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- MS/MSD percent recoveries
- Nitrocellulose assay criteria

No QC outliers were noted.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010
STL Sample Delivery Group: A0G090535

Date: September 1, 2010
Revision: 0

Data Validator:
Date: 9/1/10

2nd Level Data Review: Erik Corbin
Date: 9/1/10

CASE NARRATIVE

A0G090535

The following report contains the analytical results for fifteen water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 09, 2010, according to documented sample acceptance procedures.

The 8330 Explosives, Nitroguanidine, and 353.2 Nitrocellulose as N analyses were performed at the TestAmerica West Sacramento laboratory. Refer to TestAmerica West Sacramento narrative included in their data package for additional information.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on July 31, 2010. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.3 to 5.9°C.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The analyses reported herein were performed using an instrument that has two columns(GC) or detectors(HPLC), one of which is used to confirm the results of the other. Peak interferences may result in some cases, which cause a quantitation difference between the two columns/detectors. If the difference between the two results is greater than 40%, the higher of the two results or the primary column/detector is normally reported. The reported results are flagged with "PG".

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.
California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

Case Narrative

TestAmerica West Sacramento Project Number A0G090535

General Comments

Following US EPA Region V guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. The reasons for manual integration have been documented on the affected chromatograms, which are provided in the raw data package. The raw data also includes the original chromatograms prior to any manual integrations being performed. The following samples and analytes required manual integrations:

Instrument LC9
MRL standard (analyzed on 7/23/10 @ 14:00) – RDX, 2-Nitrotoluene, 3-Nitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2,4,6-Trinitrotoluene, 3,4-Dinitrotoluene, 2-Amino-4,6-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
MRL standard (analyzed on 7/29/10 @ 16:11) - 2,4,6-Trinitrotoluene & 3,4-Dinitrotoluene
MRL standard (analyzed on 7/29/10 @ 23:52) - 2,4,6-Trinitrotoluene & 3,4-Dinitrotoluene
MRL standard (analyzed on 7/30/10 @ 10:51) - 2,4,6-Trinitrotoluene & 3,4-Dinitrotoluene
MRL standard (analyzed on 7/30/10 @ 15:15) - PETN , 2,4,6-Trinitrotoluene, & 3,4-Dinitrotoluene
Sample 14 – 2,4,6-Trinitrotoluene

Instrument LC10
MRL standard (analyzed on 7/22/10 @ 23:08) – Tetryl & Nitrobenzene
MRL standard (analyzed on 7/23/10 @ 23:08) – Tetryl & Nitrobenzene
MRL standard (analyzed on 7/28/10 @ 22:06) – Tetryl , 2-Amino-4,6-Dinitrotoluene, & Nitrobenzene
MRL standard (analyzed on 7/29/10 @ 06:49) – Tetryl & Nitrobenzene
Continuing calibration verification (CCV) standard (analyzed on 7/23/10 @ 07:04) - Tetryl & Nitrobenzene
CCV standard (analyzed on 7/28/10 @ 21:18) - Tetryl & Nitrobenzene
CCV standard (analyzed on 7/29/10 @ 06:01) - Tetryl & Nitrobenzene
Sample 1 - 3,4-Dinitrotoluene, 2-Amino-4,6-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
Sample 5 - 3,4-Dinitrotoluene, 2-Amino-4,6-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
Sample 12 – HMX & 3,4-Dinitrotoluene
Sample 15 – HMX & 3,4-Dinitrotoluene

Case Narrative

TestAmerica West Sacramento Project Number A0G090535

Instrument LC11
CCV standard (analyzed on 7/29/10 @ 12:25) - 3,4-Dinitrotoluene & 4-Amino-2,6-Dinitrotoluene
CCV standard (analyzed on 7/30/10 @ 00:15) - 3,4-Dinitrotoluene & 4-Amino-2,6-Dinitrotoluene
MRL standard (analyzed on 7/29/10 @ 13:36) -- Nitrobenzene, 3,4-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
MRL standard (analyzed on 7/30/10 @ 01:25) -- Nitrobenzene, 3,4-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
Sample 9 - 3,4-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
Sample 10 - 3,4-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene

WATER, 8330, Explosives
Sample(s): 4, 7, 14, 15
These samples were filtered prior to extraction since they contained excessive sediment/particulates. A filtered blank was included with the batch.

Sample(s): 5, 6, 7, 12, 13, 14, 15
The bracketing continuing calibration verification standards did not meet percent difference acceptance criteria for Nitrobenzene. Since the associated sample results were all "ND" for this analyte, no corrective action was performed.

There were no other anomalies associated with this project.

SAMPLE SUMMARY

A0G090535

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L31P9	001	FWGLL3mw-236C-1542-GW	07/08/10	09:15
L31QC	002	FWGLL3mw-232C-1540-GW	07/08/10	11:15
L31QD	003	FWGLL4mw-197C-1545-GW	07/08/10	14:15
L31QG	004	FWGLL2mw-059C-1531-GW	07/08/10	16:05
L31QH	005	FWGLL2mw-060C-1532-GW	07/08/10	17:15
L31QK	006	FWGLL2mw-262C-1534-GW	07/09/10	09:15
L31QM	007	FWGLL2mw-263C-1535-GW	07/09/10	10:35
L31QN	008	FWGEQUIPRINSE1-1578-GW	07/09/10	11:45
L31QP	009	FWGLL3mw-234C-1541-GW	07/08/10	09:10
L31QT	010	FWGLL3mw-DUP3-1568-GW	07/08/10	10:30
L31QV	011	FWGLL3mw-239C-1543-GW	07/08/10	12:40
L31QX	012	FWGLL4mw-196C-1544-GW	07/08/10	14:14
L31Q2	013	FWGSCFmw-006-1520-GW	07/08/10	16:20
L31Q4	014	FWGLL2mw-267C-1565-GW	07/09/10	09:10
L31Q9	015	FWGLL2mw-266C-1537-GW	07/09/10	10:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Erik Corbin	Mark Loeb	Team 1A
Address: 1800 Carillon Blvd	Telephone: 513-825-7500	Telephone: 513-825-7500	Telephone: 3304979396	1 of 2 COCs
City/State/Zip: Cincinnati, OH 45240	Email:			
Phone: 513-825-7500		TAT if different from below Per SOW		
Project Name: RVAAP	Method of Shipment/Carrier: Lab Pick-up	☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 30240.0006	Shipping/Tracking No: N/A			
PO# 156600				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Field Filtered	Lab Filtered	Analyses: VOC 8260	SVOL 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 Hg 7470	Sample Specific Notes / Special Instructions: Cooler ID
FWG Team 1 - Trip	7-8-10	0800		X						2					N	G	X								
FWGLL3mw-236C-1542-GW	7-8-10	9:15		X						3	1		9		N	G	X	X	X	X	X	X	X		185
FWGLL3mw-236C-1542-GF	7-8-10	9:15		X					1	~~4~~ NL 7-8-10					Y	G								X	185
FWGLL3mw-232C-1540-GW	7-8-10	11:15		X						9	3		27		N	G	X	X	X	X	X	X	X		MS/MSD A-1,313,182
FWGLL3mw-232C-1540-GF	7-8-10	11:15		X					3						Y	G								X	MS/MSD A-1,313,182
FWGLL4mw-197C-1545-GW	7-8-10	14:15		X						3	1		9		N	G	X	X	X	X	X	X	X		C10
FWGLL4mw-197C-1545-~~GW~~ GF NL 7-8-10	7-8-10	14:15		X					1						Y	G								X	C10
FWGLL2mw-059C-1531-GW	7-8-10	16:05		X						3	1		9		N	G	X	X	X	X	X	X	X		Cletus
FWGLL2mw-059C-1531-GF	7-8-10	16:05		X					1						Y	G								X	Cletus
FWGLL2mw-060C-1532-GW	7-8-10	17:15		X						3	1		9		N	G	X	X	X	X	X	X	X		ASD

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Metals are field filtered (GF)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EQM	7-9-10 1420		TestAmerica	7/9/10 1420
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	7/9/10 1540			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL NC	7/9/10 1540

Temps may not meet requirements if sample collection is close to lab pick up time.

ALL VOAs in cooler C333

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TAL-0018 (1008)

North Canton

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Chain of Custody Record

TestAmerica 16
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: Team 1B
Address: 1800 Carillon Blvd.	Telephone: 513-825-7500	Telephone: 513-825-7500	Telephone: 330 497 9396	2 of 2 COCs
City/State/Zip: Cincinnati, OH 45240	Email:			
Phone: 513-825-7500		TAT if different from below: per SOW		
Project Name: RVAAP	Method of Shipment/Carrier: Lab pick-up	☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 30740-0006	Shipping/Tracking No: N/A			
PO# 15660				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Field Filtered	Lab to Perform MS/MSD	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	NO3/NO2 353.2	Sample Specific Notes / Special Instructions:
FWGLL2mw-01eOC-1532-GW	7-9-10	17:15		X					X						Y	G								X		ASD1
FWGLL2mw-262C-1534-GW	7/9/10	09:15		X						3	1		9		N	G	X	X	X	X	X	X	X			0411
FWGLL2mw-262F-1534-GF	7/9/10	09:15		X					X						Y	G								X		0411
FWGLL2mw-263C-1535-GW	7/9/10	10:35		X						3	1		9		N	G	X	X	X	X	X	X	X			C333
FWGLL2mw-263C-1535-GF	7/9/10	10:35		X					1						Y	G								X		C333
FWGEQUIPRinse1-1578-GW	7/9/10	11:45		X				1	1	3	1		9		N	G	X	X	X	X	X	X	X	X	X	173 Metals not filtered
							EC		7/9/10																	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Metals are field filtered

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Stephanie Stenger	EQM	7-9-10 1420	Aaron Rickel	TestAmerica	7/9/10 1420
Relinquished by: Aaron Rickel	Company: TestAmerica	Date/Time: 7/9/10 1540	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Alexa M	Company: TAL NC	Date/Time: 7/9/10 1540

Temps may not meet requirements if sample collection is close to lab pick up time
ALL VOAs in cooler C333

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North Canton

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

17

STL-4124 (0901)

PM Acct = 336183

Client	Project Manager	Date	Chain of Custody Number
EDM	JOHN MILLER	7-8-10	336182
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page**
1800 Carillon Blvd	513 825 7500 (7495)	330479396	1 of 2
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Cincinnati OH 45240	E CORBIN	M LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP Ravenna Ohio	LAB PICK UP 7-9-10		
Contract/Purchase Order/Quote No.			
PN 30240.0006 PO # 15660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): VOC	SVOC	Pest	PCB	Endo	Reactant	Cyanide	Metals	NO2NO3			Special Instructions/ Conditions of Receipt
FWGTeam2-Trip ab	6 7-8-10	0800		X									2	X											Cooler ID# 316
FWGLL3mw-234C-1541-GW		910		X			9			3	1			X	X	X	X	X	X	X					E-120
FWGLL3mw-234C-1541-GF				X					1												X				FIELD FILTERED E-120
FWGLL3mw-DUP3-1568-GW		1030		X			9			3	1			X	X	X	X	X	X	X					757
FWGLL3mw-DUP3-1568-GF				X					1												X				FIELD FILTERED 757
FWGLL3mw-239C-1543-GW		1240		X			9			3	1			X	X	X	X	X	X	X					partial cyanide (75%) 465
FWGLL3mw-239C-1543-GF				X					1												X				partial (75%) metal FIELD FILTERED 465
FWGLL4mw-196C-1544-GW		1414		X			9			3	1			X	X	X	X	X	X	X		X			8
FWGLL4mw-196C-1544-GF				X					1												X				Field Filtered 8
FWGSCFmw-006-1520-GW		1620		X			9	1		3	1			X	X	X	X	X	X	X		X			316
FWGSCFmw-006-1520-GF				X					1												X				Field Filtered. 316
cont' on page 2																									Cal

Possible Hazard Identification

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other person

QC Requirements (Specify)

Metals (GF) are field filtered

	Relinquished By	Date	Time	Received By	Date	Time
1.	Stephanie Stuller	7-9-10	1420		7/9/10	1420
2.		7/9/10	1540		7/9/10	1540
3.		Date	Time		Date	Time

Comments

Temps may not meet requirements if sample collection is close to lab pickup. all VOAs in cooler 316

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

AKRON/CANTON VERSION

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

18

STL-4124 (0901)

pg 1 COC = 336182

Client	Project Manager	Date	Chain of Custody Number
EQM	JOHN MILLER	7-9-10	336183
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page**
1800 CARILLON BLVD	513 825 7500 (7495)	330197396	2 of 2
City / State / Zip Code	**Site Contact**	**Lab Contact**	
CINCINNATI / OH / 45240	E CORBIN	M LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP Ravenna OH	LAB PICK UP 7-9-10		
Contract/Purchase Order/Quote No.			
EQPN 30240.00016 PO 156160			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOC	SVOC	Pest	PCB	Solid Reactivity	Cyanide	Metals					Special Instructions/ Conditions of Receipt
																								Cooler ID#
FWGLL2mw-2676-1565-GW	7-9-10	910		X			9			3	1		X	X	X	X	X	X	X					B81
FWGLL2mw-2676-1565-GF	7-9-10	910		X					1										X					FIELD FILTERED B81
FWGLL2mw-2666C-1537-GW	7-9-10	1020		X			9			3	1		X	X	X	X	X	X						
FWGLL2mw-2666C-1537-GF	7-9-10	1020		X					1										X					FIELD FILTERED

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other Per SOW

QC Requirements (Specify)
Metals (GF) are field filtered

	Date	Time		Date	Time
1. Relinquished By: Stephanie Stuga	7-9-10	1420	1. Received By: [signature]	7/9/10	1420
2. Relinquished By: [signature]	7/9/10	1540	2. Received By: [signature]	7/9/10	1540
3. Relinquished By			3. Received By		

Comments
Some temps may not meet requirement if sample time is close to lab pick up time. ALL VOAs in 316 from pg 1 COC.

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 240090535
North Canton Facility

Client EQM Project RVAAP By: [signature]
Cooler Received on 7/9/10 Opened on 7/9/10 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 18 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:
~~Rec'd 1x250 H_2SO_4 bottle w/ ID FWGEQUIPBLNK2-1579-GW~~
~~on W.O.S on 7/9/10 not on COC~~ DNA for this lot.

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 051010-HNO_3; Sulfuric Acid Lot# 121709-H_2SO_4; Sodium Hydroxide Lot# 100108 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-$(CH_3COO)_2ZN$/NaOH.* What time was preserved added to sample(s)?

Client ID	pH	Date	Initials
1542 GW	~~>12~~ am 7/9/10	7/9/10	am
1540 GF	~~<2~~ <2 <2 <2		
1542 GF	<2		
1540 GW	7 12 7 12 >12		
1545 GW	>12		
1545 GF	<2		
1531 GW	>12		
1531 GF	<2		

TestAmerica Multiple Cooler Receipt Form/Narrative — Lot Number: AOG090535
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
757	3.8	IR	Wet ice	
465	2.6			
8	3.3			
316	3.0			
B81	2.7			
405	3.8			

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1532 GW	>12	7/9/10	AM
1532 GF	<2		
1534 GW	>12		
1534 GF	<2		
1535 GW	>12		
1535 GF	<2		
Rinse 1 1578 GW	>12		
Rinse 2 1579 GW	~~>12~~ <2 am 7/9/10		
Rinse 1 1578 GW	<2		
1541 GF	<2		
1541 GW	>12		
1568 GW	>12		
1568 GF	<2		
1543 GW	>12		
1543 GF	<2		
1544 GW	~~>12~~		
1544 GF	<2		
1520 GW	>12 <2		
1520 GF	<2		
1565 GW	>12		
1565 GF	<2		
1537 GW	>12		
1537 GF	<2		

Cooler #	Temp. °C	Method	Coolant
185	4.6	IR	wet ice
A1	3.7		
313	5.9		
182	~~3.~~ 4.2		
C10	3.8		
Cletus	4.6		
MSD1	5.2		
411	2.3		
C333	3.6		
173	5.3		
316	3.0		
E-120	2.9		

Discrepancies Cont'd:

8330 EXPLOSIVES DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 31, 2010

SDG: A0G090535 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.3 and 5.9 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓				LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?		✓		LC9- the following outliers were noted: • The MRL analyzed 7/23/10 @1400 recovered above control limits with a %D of 117% for 2,4,6-trinitrotoluene. • The MRL analyzed 7/23/10 @1946 recovered above control limits with a %D of 129% for 2,4,6-trinitrotoluene. • The MRL analyzed 7/23/10 @1400 recovered above control limits with a %D of 137% for 2,4,6-trinitrotoluene. The 2,4,6-trinitrotoluene results for samples FWGLL3mw-236c-1542-GW and FWGLL3mw-239c-1543-GW were qualified as estimated, "J".	LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			LC10 7/21/10 , LC9 7/21/10, LC11 6/23/10	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve).			✓		STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-	✓			LC10 7/21/10@0443, LC11 6/24/10@ 0847 LC9 7/22/10 @0641- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No	STL SOP Section 9.9 >115%=J;

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 31, 2010

SDG: A0G090535 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
115%?				qualifications made as LC9 was used as confirmation.	80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓			LC10- The CCV analyzed 7/28/10 @2118 recovered above limits for nitrobenzene with a %D of 22%. The CCV analyzed 7/29/10 @0610 recovered above limits for nitrobenzene with a %D of 21%. No qualifications were made as the CCV did not bracket any detected nitrobenzene concentrations. LC9- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation. The CCV analyzed 7/29/10@2246 recovered below control limits for nitrobenzene with a %D of 17%, 2-nitrotoluene with a %D of 21% and 3-nitrotoluene with a % D of 21%. AS LC9 was used for confirmation, the nitrobenzene, 2-nitrotoluene and 3-nitrotoluene results were qualified as estimated, "UJ".	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓			Due to excessive particulates, samples FWGLL2mw-059c-1531-GW, FWGLL2mw-263c-1535-GW, FWGLL2mw-267c-1565-GW and FWGLL2mw-266c-1537-GW required filtration. A filter blank was prepared and analyzed.	LCG Attachment A Section 5.6
16. Were target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR.	LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓				
18. Were target analytes in the field blank analyses < ½ the MRL?	✓			Checked by ADR. HMX was detected in FWGEQUIPRinse1-1578-GW at 0.21ug/L. the HMX results for samples FWGLL2mw-059c-1531-GW, FWGLL2mw-263c-1535-GW, FWGLL3mw-234c-1541-GW, FWGLL3mw-239c-1543-GW and FWGLL4mw-197c-1545-GW were qualified, "B" as the results were <5x the equipment rinse contamination.	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?		✓		Sample FWGLL3mw-DUP3-1568-GW was the field duplicate for FWGLL3mw-234c-1541-GW. The duplicate RPD was above control limits for 2-amino-4,6-dinitrotoluene at 93%, 4-amino-2,6-dinitrotoluene at 69% and RDX at 64% The 2-amino-4,6-dinitrotoluene, 4-amino-2,6-dinitrotolueneand RDX results for FWGLL3mw-DUP3-1568-GW and FWGLL3mw-234c-1541-GW were qualified as estimated, "J".	QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 31, 2010

SDG: A0G090535 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
20. Were all positive results confirmed with a second column confirmation? Were the RPDs ≤ 40%?		✓		The second column confirmation analyzed on sample FWGLL2mw-059c-1531-GW had an RPD above control limits for HMX. FWGLL3mw-239c-1543-GW had RPDs that were above control limits for 1,3,5-trinitrobenzene and 2,4,6-trinitrotolune. The results for the targets and samples listed above were qualified as estimated, "J".	LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR.	QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GW

HPLC

Lot-Sample #...: A0G090535-001 **Work Order #...:** L31P91AA **Matrix.....:** WG
Date Sampled...: 07/08/10 09:15 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0196200
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.032 J**	**0.098**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	**0.17**	**0.098**	**ug/L**	**0.098**
2,4,6-Trinitrotoluene	**0.31**	**0.098**	**ug/L**	**0.049**
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	**0.33**	**0.098**	**ug/L**	**0.049**
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GW

HPLC

Lot-Sample #...:	A0G090535-002	**Work Order #...:**	L31QC1AA	**Matrix.....:**	WG
Date Sampled...:	07/08/10 11:15	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0196200				
Dilution Factor:	0.97	**Method.....:**	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GW

HPLC

Lot-Sample #...: A0G090535-003 **Work Order #...:** L31QD1AA **Matrix.....:** WG
Date Sampled...: 07/08/10 14:15 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0196200
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	**0.041 J**	**0.097**	**ug/L**	**0.035**
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GW

HPLC

Lot-Sample #...:	A0G090535-004	**Work Order #...:**	L31QG1AA	**Matrix.....:**	WG
Date Sampled...:	07/08/10 16:05	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0196200				
Dilution Factor:	0.97	**Method.....:**	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.11**	**0.097**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	**0.31**	**0.097**	**ug/L**	**0.097**
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	**0.25**	**0.097**	**ug/L**	**0.048**
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	**0.29**	**0.097**	**ug/L**	**0.048**
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	**0.14 PG**	**0.097**	**ug/L**	**0.035**
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

NOTE(S):

PG The percent difference between the original and confirmation analyses is greater than 40%.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GW

HPLC

Lot-Sample #...: A0G090535-005 **Work Order #...:** L31QH1AA **Matrix.....:** WG
Date Sampled...: 07/08/10 17:15 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196200
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	**0.45**	**0.097**	**ug/L**	**0.097**
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	**0.54**	**0.097**	**ug/L**	**0.048**
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GW

HPLC

Lot-Sample #...: A0G090535-006 **Work Order #...:** L31QK1AA **Matrix.....:** WG
Date Sampled...: 07/09/10 09:15 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196200
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GW

HPLC

Lot-Sample #...: A0G090535-007 **Work Order #...:** L31QM1AA **Matrix.....:** WG
Date Sampled...: 07/09/10 10:35 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196200
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	**0.078 J**	**0.098**	**ug/L**	**0.035**
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	106	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

HPLC

Lot-Sample #...: A0G090535-008 **Work Order #...:** L31QN1AA **Matrix.....:** WQ
Date Sampled...: 07/09/10 11:45 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0196200
Dilution Factor: 0.99 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.099	ug/L	0.030
1,3-Dinitrobenzene	ND	0.099	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.099	ug/L	0.099
2,4,6-Trinitrotoluene	ND	0.099	ug/L	0.050
2,4-Dinitrotoluene	ND	0.099	ug/L	0.050
2,6-Dinitrotoluene	ND	0.099	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.087
3-Nitrotoluene	ND	0.50	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.099	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.087
HMX	**0.21**	**0.099**	**ug/L**	**0.036**
Nitrobenzene	ND	0.099	ug/L	0.050
Nitroglycerin	ND	0.64	ug/L	0.33
RDX	ND	0.099	ug/L	0.036
PETN	ND	0.64	ug/L	0.30
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GW

HPLC

Lot-Sample #...: A0G090535-009 Work Order #...: L31QP1AA Matrix.....: WG
Date Sampled...: 07/08/10 09:10 Date Received..: 07/09/10
Prep Date.....: 07/15/10 Analysis Date..: 07/29/10
Prep Batch #...: 0196200
Dilution Factor: 1.01 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	**0.41**	**0.10**	**ug/L**	**0.10**
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	**0.062 J**	**0.10**	**ug/L**	**0.050**
2-Nitrotoluene	ND	0.50	ug/L	0.089
3-Nitrotoluene	ND	0.50	ug/L	0.058
4-Amino-2,6-dinitrotoluene	**0.78**	**0.10**	**ug/L**	**0.050**
4-Nitrotoluene	ND	0.50	ug/L	0.089
HMX	**0.083 J**	**0.10**	**ug/L**	**0.036**
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.66	ug/L	0.33
RDX	**0.58**	**0.10**	**ug/L**	**0.036**
PETN	ND	0.66	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GW

HPLC

Lot-Sample #...: A0G090535-010 **Work Order #...:** L31QT1AA **Matrix.....:** WG
Date Sampled...: 07/08/10 10:30 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0196200
Dilution Factor: 1.05 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.032
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	**0.15**	**0.10**	**ug/L**	**0.10**
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.052
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.092
3-Nitrotoluene	ND	0.52	ug/L	0.060
4-Amino-2,6-dinitrotoluene	**0.38**	**0.10**	**ug/L**	**0.052**
4-Nitrotoluene	ND	0.52	ug/L	0.092
HMX	ND	0.10	ug/L	0.038
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.68	ug/L	0.35
RDX	**0.30**	**0.10**	**ug/L**	**0.038**
PETN	ND	0.68	ug/L	0.32
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GW

HPLC

Lot-Sample #...: A0G090535-011 Work Order #...: L31QV1AA Matrix.....: WG
Date Sampled...: 07/08/10 12:40 Date Received..: 07/09/10
Prep Date.....: 07/15/10 Analysis Date..: 07/29/10
Prep Batch #...: 0196200
Dilution Factor: 1.03 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.34 PG**	**0.10**	**ug/L**	**0.031**
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	**0.63**	**0.10**	**ug/L**	**0.10**
2,4,6-Trinitrotoluene	**0.26 PG**	**0.10**	**ug/L**	**0.052**
2,4-Dinitrotoluene	**0.11**	**0.10**	**ug/L**	**0.052**
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.091
3-Nitrotoluene	ND	0.52	ug/L	0.059
4-Amino-2,6-dinitrotoluene	**0.95**	**0.10**	**ug/L**	**0.052**
4-Nitrotoluene	ND	0.52	ug/L	0.091
HMX	**0.19**	**0.10**	**ug/L**	**0.037**
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.67	ug/L	0.34
RDX	**1.7**	**0.10**	**ug/L**	**0.037**
PETN	ND	0.67	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

NOTE(S):

PG The percent difference between the original and confirmation analyses is greater than 40%.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GW

HPLC

Lot-Sample #...: A0G090535-012 **Work Order #...:** L31QX1AA **Matrix.....:** WG
Date Sampled...: 07/08/10 14:14 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196200
Dilution Factor: 1 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.088
3-Nitrotoluene	ND	0.50	ug/L	0.057
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.65	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GW

HPLC

Lot-Sample #...: A0G090535-013 **Work Order #...:** L31Q21AA **Matrix.....:** WG
Date Sampled...: 07/08/10 16:20 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196200
Dilution Factor: 1.08 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.032
1,3-Dinitrobenzene	ND	0.11	ug/L	0.054
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.054
2,4-Dinitrotoluene	ND	0.11	ug/L	0.054
2,6-Dinitrotoluene	ND	0.11	ug/L	0.054
2-Nitrotoluene	ND	0.54	ug/L	0.095
3-Nitrotoluene	ND	0.54	ug/L	0.062
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.054
4-Nitrotoluene	**0.18 J**	**0.54**	**ug/L**	**0.095**
HMX	ND	0.11	ug/L	0.039
Nitrobenzene	ND	0.11	ug/L	0.054
Nitroglycerin	ND	0.70	ug/L	0.36
RDX	ND	0.11	ug/L	0.039
PETN	ND	0.70	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.054

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GW

HPLC

Lot-Sample #...: A0G090535-014 **Work Order #...:** L31Q41AA **Matrix.....:** WG
Date Sampled...: 07/09/10 09:10 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196200
Dilution Factor: 1.06 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.032
1,3-Dinitrobenzene	ND	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	**1.3**	**0.11**	**ug/L**	**0.11**
2,4,6-Trinitrotoluene	**0.27**	**0.11**	**ug/L**	**0.053**
2,4-Dinitrotoluene	**0.22**	**0.11**	**ug/L**	**0.053**
2,6-Dinitrotoluene	ND	0.11	ug/L	0.053
2-Nitrotoluene	ND	0.53	ug/L	0.093
3-Nitrotoluene	ND	0.53	ug/L	0.060
4-Amino-2,6-dinitrotoluene	**1.1**	**0.11**	**ug/L**	**0.053**
4-Nitrotoluene	ND	0.53	ug/L	0.093
HMX	**1.1**	**0.11**	**ug/L**	**0.038**
Nitrobenzene	ND	0.11	ug/L	0.053
Nitroglycerin	ND	0.69	ug/L	0.35
RDX	**1.1**	**0.11**	**ug/L**	**0.038**
PETN	ND	0.69	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GW

HPLC

Lot-Sample #...: A0G090535-015 **Work Order #...:** L31Q91AA **Matrix.....:** WG
Date Sampled...: 07/09/10 10:20 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196200
Dilution Factor: 1.01 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.089
3-Nitrotoluene	ND	0.50	ug/L	0.058
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.089
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.66	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.66	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G090535 **Work Order #...:** L37W31AA **Matrix.....:** WATER
MB Lot-Sample #: G0G150000-200

Prep Date.....: 07/15/10
Analysis Date..: 07/22/10 **Prep Batch #...:** 0196200
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	ND	0.10	ug/L	SW846 8330
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G090535 **Work Order #...:** L37W31AD **Matrix.....:** WATER
MB Lot-Sample #: G0G150000-200

Prep Date.....: 07/15/10
Analysis Date..: 07/23/10 **Prep Batch #...:** 0196200
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	ND	0.10	ug/L	SW846 8330
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G090535 Work Order #...: L37W31AC Matrix.....: WATER
LCS Lot-Sample#: G0G150000-200
Prep Date.....: 07/15/10 Analysis Date..: 07/23/10
Prep Batch #...: 0196200
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	104	(53 - 135)	SW846 8330
1,3-Dinitrobenzene	107	(54 - 120)	SW846 8330
2-Amino-4,6-dinitrotoluene	106	(53 - 120)	SW846 8330
2,4,6-Trinitrotoluene	102	(37 - 120)	SW846 8330
2,4-Dinitrotoluene	103	(58 - 136)	SW846 8330
2,6-Dinitrotoluene	103	(52 - 144)	SW846 8330
2-Nitrotoluene	98	(52 - 120)	SW846 8330
3-Nitrotoluene	98	(48 - 136)	SW846 8330
4-Amino-2,6-dinitrotoluene	101	(58 - 159)	SW846 8330
4-Nitrotoluene	99	(46 - 136)	SW846 8330
HMX	99	(45 - 140)	SW846 8330
Nitrobenzene	113	(49 - 120)	SW846 8330
Nitroglycerin	101	(60 - 120)	SW846 8330
RDX	110	(39 - 120)	SW846 8330
PETN	98	(60 - 120)	SW846 8330
Tetryl	103	(30 - 120)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G090535 Work Order #...: L31QC1AC-MS Matrix.....: WG
MS Lot-Sample #: A0G090535-002 L31QC1AD-MSD
Date Sampled...: 07/08/10 11:15 Date Received..: 07/09/10
Prep Date.....: 07/15/10 Analysis Date..: 07/23/10
Prep Batch #...: 0196200
Dilution Factor: 0.99

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	96	(50 - 150)			SW846 8330
	93	(50 - 150)	3.4	(0-50)	SW846 8330
1,3-Dinitrobenzene	103	(50 - 150)			SW846 8330
	104	(50 - 150)	0.19	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	103	(50 - 150)			SW846 8330
	103	(50 - 150)	0.98	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	98	(50 - 150)			SW846 8330
	97	(50 - 150)	1.5	(0-50)	SW846 8330
2,4-Dinitrotoluene	100	(50 - 150)			SW846 8330
	99	(50 - 150)	1.6	(0-50)	SW846 8330
2,6-Dinitrotoluene	100	(50 - 150)			SW846 8330
	98	(50 - 150)	3.0	(0-50)	SW846 8330
2-Nitrotoluene	98	(50 - 150)			SW846 8330
	98	(50 - 150)	1.0	(0-50)	SW846 8330
3-Nitrotoluene	98	(50 - 150)			SW846 8330
	98	(50 - 150)	0.38	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	98	(50 - 150)			SW846 8330
	102	(50 - 150)	2.8	(0-50)	SW846 8330
4-Nitrotoluene	103	(50 - 150)			SW846 8330
	106	(50 - 150)	1.9	(0-50)	SW846 8330
HMX	94	(50 - 150)			SW846 8330
	94	(50 - 150)	0.57	(0-50)	SW846 8330
Nitrobenzene	113	(50 - 150)			SW846 8330
	112	(50 - 150)	1.8	(0-50)	SW846 8330
Nitroglycerin	97	(50 - 150)			SW846 8330
	98	(50 - 150)	0.54	(0-50)	SW846 8330
RDX	104	(50 - 150)			SW846 8330
	105	(50 - 150)	0.48	(0-50)	SW846 8330
PETN	94	(50 - 150)			SW846 8330
	94	(50 - 150)	0.96	(0-50)	SW846 8330
Tetryl	100	(50 - 150)			SW846 8330
	96	(50 - 150)	5.2	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G090535 **Work Order #...:** L31QC1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G090535-002 L31QC1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)
	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC10 Batch ID: 07222010A
Method : Method 8330 Test : SOP SAC-LC-0009
ICAL Date: See Calibration Report

Date	Time	Operator	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
22-JUL-2010	15:58	RN	STD_06 10GCSV0217 8330 200-500	A-000001.	0 g	0 mL	1	
22-JUL-2010	16:47	RN	L39T01AA 0197182 G0G160000-182	A-000002.	1000 mL	20 mL	1	
22-JUL-2010	17:34	RN	L39T01AC 0197182 G0G160000-182	A-000003.	1000 mL	20 mL	1	
22-JUL-2010	18:22	RN	L355T1AA 0197182 G0G140461-1 1	A-000004.	1019.87 mL	20 mL	1	
22-JUL-2010	19:10	RN	L35591AA 0197182 G0G140461-2 1	A-000005.	1011.66 mL	20 mL	1	
22-JUL-2010	19:57	RN	L37351AA 0197182 G0G140461-3 1	A-000006.	1015.13 mL	20 mL	1	
22-JUL-2010	20:45	RN	L35851AA 0197182 G0G140477-1 1	A-000007.	1022.64 mL	20 mL	1	
22-JUL-2010	21:33	RN	L35881AA 0197182 G0G140477-2 1	A-000008.	917.81 mL	20 mL	1	
22-JUL-2010	22:20	RN	STD_05 10GCSV0210 8330 100-250	A-000009.	0 g	0 mL	1	
22-JUL-2010	23:08	RN	STD_MRL 10GCSV0309 8330 5-20ng	A-000010.	0 g	0 mL	1	
22-JUL-2010	23:56	RN	MB L37W31AA 0196200 G0G150000-200	A-000011.	1000 mL	20 mL	1	
23-JUL-2010	00:43	RN	FB L37W31AD 0196200 G0G150000-200	A-000012.	1000 mL	20 mL	1	
23-JUL-2010	01:31	RN	LCS L37W31AC 0196200 G0G150000-200	A-000013.	1000 mL	20 mL	1	
23-JUL-2010	02:18	RN	L31P91AA 0196200 A0G090535-1 1	A-000014.	1016 mL	20 mL	1	
23-JUL-2010	03:06	RN	L31QC1AA 0196200 A0G090535-2 1	A-000015.	1022.46 mL	20 mL	1	
23-JUL-2010	03:54	RN	MS L31QC1AC 0196200 A0G090535-2 S	A-000016.	1009.44 mL	20 mL	1	
23-JUL-2010	04:41	RN	MSD L31QC1AD 0196200 A0G090535-2 D	A-000017.	1016.37 mL	20 mL	1	
23-JUL-2010	05:29	RN	L31QD1AA 0196200 A0G090535-3 1	A-000018.	1021.06 mL	20 mL	1	
23-JUL-2010	06:17	RN	L31QG1AA 0196200 A0G090535-4 1	A-000019.	1026.48 mL	20 mL	1	
23-JUL-2010	07:04	RN	STD_05 10GCSV0210 8330 100-250	A-000020.	0 g	0 mL	1	
23-JUL-2010	07:52	RN	STD_MRL 10GCSV0309 8330 5-20ng	A-000021.	0 g	0 mL	1	
23-JUL-2010	08:40	RN	L31QH1AA 0196200 A0G090535-5 1	A-000022.	1023.9 mL	20 mL	1	
23-JUL-2010	09:56	RN	NG PETN QC TEST	A-000023.	1000 mL	20 mL	1	

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC10 Batch ID: 07282010
Method : Method 8330 Test : SOP SAC-LC-0009
ICAL Date: See Calibration Report

Date	Time	Operator	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
28-JUL-2010	10:58	RN	8330 PRIMER	A-000001.	0 g	0 mL	1	
28-JUL-2010	11:46	RN	8330 PRIMER	A-000002.	0 g	0 mL	1	
28-JUL-2010	12:33	RN	STD_06 10GCSV0217 8330 200-500	A-000003.	0 g	0 mL	1	
28-JUL-2010	13:23	RN	STD_MRL 10GCSV0309 8330 5-20ng	A-000004.	0 g	0 mL	1	
28-JUL-2010	14:10	RN	L31QH1AA 0196200 A0G090535-5 1	A-000005.	1023.9 mL	20 mL	1	
28-JUL-2010	14:58	RN	L31QK1AA 0196200 A0G090535-6 1	A-000006.	1010.86 mL	20 mL	1	
28-JUL-2010	15:46	RN	L31QM1AA 0196200 A0G090535-7 1	A-000007.	1015.22 mL	20 mL	1	
28-JUL-2010	16:33	RN	L31QN1AA 0196200 A0G090535-8 1	A-000008.	1006.82 mL	20 mL	1	RT, RT shift
28-JUL-2010	17:21	RN	L31QP1AA 0196200 A0G090535-9 1	A-000009.	983.29 mL	20 mL	1	
28-JUL-2010	18:08	RN	L31QT1AA 0196200 A0G090535-10	A-000010.	948.56 mL	20 mL	1	
28-JUL-2010	18:56	RN	L31QV1AA 0196200 A0G090535-11	A-000011.	964.86 mL	20 mL	1	
28-JUL-2010	19:43	RN	L31QX1AA 0196200 A0G090535-12	A-000012.	993.86 mL	20 mL	1	
28-JUL-2010	20:31	RN	L31Q21AA 0196200 A0G090535-13	A-000013.	922.33 mL	20 mL	1	
28-JUL-2010	21:18	RN	STD_05 10GCSV0320 8330 100-250	A-000014.	0 g	0 mL	1	22 Nitrobenzene -ND
28-JUL-2010	22:06	RN	STD_MRL 10GCSV0309 8330 5-20ng	A-000015.	0 g	0 mL	1	OK
28-JUL-2010	22:53	RN	L31Q41AA 0196200 A0G090535-14	A-000016.	942.66 mL	20 mL	1	
28-JUL-2010	23:41	RN	L31Q91AA 0196200 A0G090535-15	A-000017.	984.69 mL	20 mL	1	
29-JUL-2010	00:28	RN	L39KJ1AA 0197127 G0G160000-127	A-000018.	1000 mL	20 mL	1	
29-JUL-2010	01:16	RN	L39KJ1AD 0197127 G0G160000-127	A-000019.	1000 mL	20 mL	1	
29-JUL-2010	02:04	RN	L39KJ1AC 0197127 G0G160000-127	A-000020.	1000 mL	20 mL	1	
29-JUL-2010	02:51	RN	L34AN1AA 0197127 A0G130410-1 1	A-000021.	998.61 mL	20 mL	1	
29-JUL-2010	03:39	RN	L34AP1AA 0197127 A0G130410-2 1	A-000022.	1032.57 mL	20 mL	1	
29-JUL-2010	04:26	RN	L34AQ1AA 0197127 A0G130410-3 1	A-000023.	1048.81 mL	20 mL	1	
29-JUL-2010	05:14	RN	L34AQ1AC 0197127 A0G130410-3 S	A-000024.	1033.55 mL	20 mL	1	
29-JUL-2010	06:01	RN	STD_05 10GCSV0210 8330 100-250	A-000025.	0 g	0 mL	1	Nitrobenzene -ND
29-JUL-2010	06:49	RN	STD_MRL 10GCSV0309 8330 5-20ng	A-000026.	0 g	0 mL	1	OK
29-JUL-2010	07:36	RN	L34AQ1AD 0197127 A0G130410-3 D	A-000027.	1014.87 mL	20 mL	1	

TestAmerica West Sacramento

A-000025.D

Chromatography Summary

Injection Date: 7/29/2010 6:01 **Operator:** RN

DataFile: LC10 I\07282010.B\A-000025.D **Vial Num:** 4

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_05 10GCSV0210 8330 100-250ng/mL**

Method File: LC10.I\07282010.B\8330AB.M

Start Cal Date: 7/21/2010 19:43 **End Cal Date:** 7/22/2010 1:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** CAL SUB **SpikeList:** 0

Samp. Info: STD_05 10GCSV0210 8330 100-250ng/mL;2;

Misc. Info: ;5;,,;3;CAL.SUB;0;1;

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	17.40	4598	89.5800<	100	-10%	Acceptable		17.39	8707	89.6400	100	-10%	Acceptable		(±15)	
HMX	5.44	11864	92.8800<	100	-7%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.75	8306	97.2600<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	**8.93**	**20970**	**242.1000**	**200**	**21%**	**Fails**					200	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	10.17	14933	95.3100<	100	-5%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.85	14715	96.2200<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	14.27	9728	103.6000<	100	4%	Acceptable	M				100	-100%	Fails		(±15)	45
Nitrobenzene	**14.36**	**8961**	**121.2000<**	**100**	**21%**	**Fails**	M				100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	16.32	9226	95.8500<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	16.84	7044	95.0500<	100	-5%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	17.85	7820	96.4200<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	19.36	5509	96.8900<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	20.09	8909	96.5700<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	23.17	3910	95.7300<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	25.00	4753	96.2900<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	26.83	4664	95.8200<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				**100**	**-100%**	**Fails**		15.33	6131	94.0200<	100	-6%	Acceptable		(±15)	45
PETN				**100**	**-100%**	**Fails**		29.96	3319	92.5800<	100	-7%	Acceptable		(±15)	45
3,5-Dinitroaniline	13.69	9698	95.5400<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				**100**	**-100%**	**Fails**					100	-100%	Fails		(±15)	

NA

M and NP 7/30/10

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

NP 7/30/10

Notes: M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

Printed: 7/30/2010 9:07 AM

TestAmerica West Sacramento

A-000014.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 7/28/2010 21.18 **Operator:** RN
DataFile: LC10.I\07282010.B\A-000014.D **Vial Num:** 3
Instrument ID: LC10

Sample : **STD_05 10GCSV0320 8330 100-250ng/mL**

Method File: LC10.I\07282010.B\8330AB.M
Start Cal Date: 7/21/2010 19:43 **End Cal Date:** 7/22/2010 1:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** CAL.SUB **SpikeList:** 0
Samp. Info: STD_05 10GCSV0320 8330 100-250ng/mL;2;
Misc. Info: ;5;;;,3;CAL.SUB;0;1,

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	17.41	4646	90.5100<	100	-9%	Acceptable		17.41	8734	89.9200	100	-10%	Acceptable		(±15)	
HMX	5.44	11931	93.4000<	100	-7%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.76	8370	98.0100<	100	-2%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	**8.94**	**21086**	**243.4000**	**200**	**22%**	**Fails**	NA				200	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	10.18	14989	95.6700<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.86	14778	96.6300<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	14.29	9764	104.0000<	100	4%	Acceptable	M				100	-100%	Fails		(±15)	45
Nitrobenzene	**14.38**	**9019**	**122.0000<**	**100**	**22%**	**Fails**	M	T and ND			100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	16.33	9255	96.1500<	100	-4%	Acceptable		MD 7/30/10			100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	16.86	7050	95.1300<	100	-5%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	17.87	7845	96.7300<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	19.38	5520	97.0800<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	20.11	8922	96.7100<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	23.20	3906	95.6300<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	25.04	4721	95.6400<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	26.88	4642	95.3700<	100	-5%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				**100**	**-100%**	**Fails**		15.35	6128	93.9700<	100	-6%	Acceptable		(±15)	45
PETN				**100**	**-100%**	**Fails**		30.04	3369	93.9800<	100	-6%	Acceptable		(±15)	45
3,5-Dinitroaniline	13.71	9727	95.8300<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				**100**	**-100%**	**Fails**					100	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

MD 7/30/10

Printed: 7/29/2010 8:41 AM

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 15

Inst ID: LC11 Batch ID: 07282010A
Method : Method 8330 Test : SOP WS-LC-0009
ICAL Date: See Calibration Report

Date	Time	Operator	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
28-JUL-2010	16:06	RN	STD_5 PRIMER	M-000001.	0 g	0 mL	1	
28-JUL-2010	17:19	RN	STD_5 PRIMER	M-000002.	0 g	0 mL	1	
28-JUL-2010	18:30	RN	STD_06 10GCSV0217 8330 200-500	M-000003.	0 g	0 mL	1	
28-JUL-2010	19:41	RN	L4EAH1AA 0201179 G0G200000-179	M-000004.	10 g	80 mL	1	
28-JUL-2010	20:52	RN	L4EAH1AC 0201179 G0G200000-179	M-000005.	10 g	80 mL	1	
28-JUL-2010	22:03	RN	L39881AA 0201179 G0G160516-1 1	M-000006.	9.72 g	80 mL	1	
28-JUL-2010	23:14	RN	L39881AE 0201179 G0G160516-1 S	M-000007.	10.68 g	80 mL	1	
29-JUL-2010	00:25	RN	L39881AF 0201179 G0G160516-1 D	M-000008.	10.18 g	80 mL	1	
29-JUL-2010	01:36	RN	L39941AA 0201179 G0G160516-2 1	M-000009.	9.68 g	80 mL	1	
29-JUL-2010	02:46	RN	STD_05 10GCSV0210 8330 100-250	M-000010.	0 g	0 mL	1	
29-JUL-2010	03:57	RN	STD_MRL 10GCSV0309 8330 5-20ng	M-000011.	0 g	0 mL	1	
29-JUL-2010	05:08	RN	L4DW21AA 0200338 G0G190000-338	M-000012.	1000 mL	20 mL	1	
29-JUL-2010	06:19	RN	L4DW21AD 0200338 G0G190000-338	M-000013.	1000 mL	20 mL	1	
29-JUL-2010	07:30	RN	L4DW21AC 0200338 G0G190000-338	M-000014.	1000 mL	20 mL	1	
29-JUL-2010	08:51	RN	L4DW21AA 0200338 G0G190000-338	M-000015.	1000 mL	20 mL	1	
29-JUL-2010	10:03	RN	L4DW21AA 0200338 G0G190000-338	M-000016.	1000 mL	20 mL	1	08 as Inst. Blank
29-JUL-2010	11:14	RN	hplc H20	M-000017.	1000 mL	20 mL	1	
29-JUL-2010	12:25	RN	STD_05 10GCSV0210 8330 100-250	M-000018.	0 g	0 mL	1	
29-JUL-2010	13:36	RN	STD_MRL 10GCSV0309 8330 5-20ng	M-000019.	0 g	0 mL	1	
29-JUL-2010	14:47	RN	L350L1AC 01951512 G0G140000-15	M-000020.	1000 mL	20 mL	1	
29-JUL-2010	15:58	RN	L315X1AF 01951512 G0G090608-03	M-000021.	1016.48 mL	20 mL	1	
29-JUL-2010	17:09	RN	L315X1AG 01951512 G0G090608-03	M-000022.	1013.75 mL	20 mL	1	
29-JUL-2010	18:20	RN	L31QN1AA 0196200 A0G090535-8 1	M-000023.	1006.82 mL	20 mL	1	
29-JUL-2010	19:31	RN	L31QP1AA 0196200 A0G090535-9 1	M-000024.	983.29 mL	20 mL	1	
29-JUL-2010	20:42	RN	L31QT1AA 0196200 A0G090535-10	M-000025.	948.56 mL	20 mL	1	
29-JUL-2010	21:53	RN	L31QV1AA 0196200 A0G090535-11	M-000026.	964.86 mL	20 mL	1	
29-JUL-2010	23:04	RN	L4DW21AA 0200338 G0G190000-338	M-000027.	1000 mL	20 mL	1	
30-JUL-2010	00:15	RN	STD_05 10GCSV0210 8330 100-250	M-000028.	0 g	0 mL	1	
30-JUL-2010	01:25	RN	STD_MRL 10GCSV0309 8330 5-20ng	M-000029.	0 g	0 mL	1	
30-JUL-2010	02:36	RN	L4DW21AD 0200338 G0G190000-338	M-000030.	1000 mL	20 mL	1	
30-JUL-2010	03:47	RN	L4DW21AC 0200338 G0G190000-338	M-000031.	1000 mL	20 mL	1	
30-JUL-2010	04:58	RN	L37HP1AA 0200338 A0G150403-1 1	M-000032.	970.23 mL	20 mL	1	
30-JUL-2010	06:09	RN	L37HQ1AA 0200338 A0G150403-2 1	M-000033.	991.84 mL	20 mL	1	
30-JUL-2010	07:20	RN	L37HR1AA 0200338 A0G150403-3 1	M-000034.	1009.92 mL	20 mL	1	
30-JUL-2010	08:31	RN	L37HT1AA 0200338 A0G150403-4 1	M-000035.	998.3 mL	20 mL	1	
30-JUL-2010	09:42	RN	L37HV1AA 0200338 A0G150403-5 1	M-000036.	1028.73 mL	20 mL	1	
30-JUL-2010	10:53	RN	L37HW1AA 0200338 A0G150403-6 1	M-000037.	970.64 mL	20 mL	1	

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC9 Batch ID: 07222010
Method : Method 8330 Test : SOP WS-LC-0009
ICAL Date: See Calibration Report

Date	Time	Operator	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
22-JUL-2010	15:53	RN	8330 PRIMER	C-000001.	0 g	0 mL	1	
22-JUL-2010	16:59	RN	8330 PRIMER	C-000002.	0 g	0 mL	1	
22-JUL-2010	18:04	RN	STD_06 10GCSV0217 8330 200-500	C-000003.	0 g	0 mL	1	
22-JUL-2010	19:10	RN	L39T01AA 0197182 G0G160000-182	C-000004.	1000 mL	20 mL	1	
22-JUL-2010	20:16	RN	L355T1AA 0197182 G0G140461-1 1	C-000005.	1019.87 mL	20 mL	1	
22-JUL-2010	21:21	RN	L35591AA 0197182 G0G140461-2 1	C-000006.	1011.66 mL	20 mL	1	
22-JUL-2010	22:27	RN	L37351AA 0197182 G0G140461-3 1	C-000007.	1015.13 mL	20 mL	1	
22-JUL-2010	23:32	RN	L35851AA 0197182 G0G140477-1 1	C-000008.	1022.64 mL	20 mL	1	
23-JUL-2010	00:38	RN	L35881AA 0197182 G0G140477-2 1	C-000009.	917.81 mL	20 mL	1	
23-JUL-2010	01:44	RN	STD_05 10GCSV0210 8330 100-250	C-000010.	0 g	0 mL	1	
23-JUL-2010	02:49	RN	STD_MRL 10GCSV0309 8330 5-20ng	C-000011.	0 g	0 mL	1	
23-JUL-2010	03:55	RN	L37W31AA 0196200 G0G150000-200	C-000012.	1000 mL	20 mL	1	
23-JUL-2010	05:01	RN	L37W31AD 0196200 G0G150000-200	C-000013.	1000 mL	20 mL	1	
23-JUL-2010	06:06	RN	L31P91AA 0196200 A0G090535-1 1	C-000014.	1016 mL	20 mL	1	RT ↑ MRL
23-JUL-2010	07:12	RN	L31QC1AA 0196200 A0G090535-2 1	C-000015.	1022.46 mL	20 mL	1	not needed
23-JUL-2010	08:17	RN	L31QD1AA 0196200 A0G090535-3 1	C-000016.	1021.06 mL	20 mL	1	
23-JUL-2010	09:23	RN	L31QG1AA 0196200 A0G090535-4 1	C-000017.	1026.48 mL	20 mL	1	
23-JUL-2010	10:29	RN	L31QH1AA 0196200 A0G090535-5 1	C-000018.	1023.9 mL	20 mL	1	
23-JUL-2010	11:34	RN	L31QK1AA 0196200 A0G090535-6 1	C-000019.	1010.86 mL	20 mL	1	not needed
23-JUL-2010	12:40	RN	STD_05 10GCSV0210 8330 100-250	C-000020.	0 g	0 mL	1	
23-JUL-2010	14:00	RN	STD_MRL 10GCSV0309 8330 5-20ng	C-000021.	0 g	0 mL	1	2,4,6-TNT ↑
23-JUL-2010	15:06	RN	L31QM1AA 0196200 A0G090535-7 1	C-000022.	1015.22 mL	20 mL	1	

Sample 1 J flag.

TestAmerica West Sacramento

C-000021.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 7/23/2010 14:00 **Operator:** RN
DataFile: LC9.I\07222010.B\C-000021.D **Vial Num:** 5
Instrument ID: LC9

Sample : **STD_MRL 10GCSV0309 8330 5-20ng/mL**

Method File: LC9.I\07222010.B\8330METCNAB.M
Start Cal Date: 7/21/2010 18:40 **End Cal Date:** 7/22/2010 2:19

Matrix: NONE **SubList:** CAL.SUB **SpikeList:** 0
Samp. Info: STD_MRL 10GCSV0309 8330 5-20ng/mL,2,
Misc. Info: ;5;;;;3;CAL.SUB;0;1;

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

		Zorbax Cyano(250nm)						Zorbax Cyano(250nm-205nm)							
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	32.96	884	25.4200<	20	27%	Fails	M	OKE 30%			20	-100%	Fails		(±15)	45
HMX	37.99	166	5.1320<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
RDX	25.36	178	5.3040<	5	6%	Acceptable	M				5	-100%	Fails		(±15)	45
Picric ACID				50	-100%	Fails					50	-100%	Fails		(±15)	
1,3,5-Trinitrobenzene	20.15	311	5.1600<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	18.58	389	5.0670<	5	1%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	44.81	303	3.9080<	5	-22%	Fails		OKE 30%.			5	-100%	Fails		(±15)	45
Nitrobenzene	16.55	187	5.0170<	5	0%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	33.65	374	10.8300<	5	117%	Fails	M	NA OKE 30%.			5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	30.79	277	6.0960<	5	22%	Fails	M				5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	30.00	283	5.3050<	5	6%	Acceptable	M				5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	27.66	193	5.1990<	5	4%	Acceptable	M				5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	26.53	296	4.9840<	5	0%	Acceptable	M				5	-100%	Fails		(±15)	45
2-Nitrotoluene	23.22	157	8.3980	10	-16%	Fails	M	OKE 30%.			10	-100%	Fails		(±15)	45
4-Nitrotoluene				5	-100%	Fails					5	-100%	Fails		(±15)	
3-Nitrotoluene	23.88	120	4.4440<	5	-11%	Acceptable	M				5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		42.00	729	17.1300	20	-14%	Acceptable		(±15)	45
PETN				20	-100%	Fails		49.13	4240	18.2900<	20	-9%	Acceptable		(±15)	45
3,5-Dinitroaniline	24.58	282	5.2480	5	5%	Acceptable	M				5	-100%	Fails		(±15)	45
EGDN				20	-100%	Fails					20	-100%	Fails		(±15)	

MB 7/31/10

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

Notes: M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

MB 7/31/10

Printed: 7/31/2010 6:13 AM

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC9 Batch ID: 07232010
Method : Method 8330 Test : SOP WS-LC-0009
ICAL Date: See Calibration Report

Date	Time	Operator	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
23-JUL-2010	16:28	RN	8330 PRIMER	C-000001.	0 g	0 mL	1	
23-JUL-2010	17:34	RN	8330 PRIMER	C-000002.	0 g	0 mL	1	
23-JUL-2010	18:40	RN	STD_06 10GCSV0217 8330 200-500	C-000003.	0 g	0 mL	1	
23-JUL-2010	19:46	RN	STD_MRL 10GCSV0309 8330 5-20ng	C-000004.	0 g	0 mL	1	2,4,6-TNT ↑
23-JUL-2010	20:51	RN	L31QM1AA 0196200 A0G090535-7 1	C-000005.	1015.22 mL	20 mL	1	
23-JUL-2010	21:57	RN	L31QN1AA 0196200 A0G090535-8 1	C-000006.	1006.82 mL	20 mL	1	RL punch through
23-JUL-2010	23:03	RN	L31QP1AA 0196200 A0G090535-9 1	C-000007.	983.29 mL	20 mL	1	
24-JUL-2010	00:09.	RN	L31QT1AA 0196200 A0G090535-10	C-000008.	948.56 mL	20 mL	1	
24-JUL-2010	01:15	RN	L31QV1AA 0196200 A0G090535-11	C-000009.	964.86 mL	20 mL	1	
24-JUL-2010	02:20	RN	L31QX1AA 0196200 A0G090535-12	C-000010.	993.86 mL	20 mL	1	Not Needed
24-JUL-2010	03:26	RN	L31Q21AA 0196200 A0G090535-13	C-000011.	922.33 mL	20 mL	1	
24-JUL-2010	04:32	RN	L31Q41AA 0196200 A0G090535-14	C-000012.	942.66 mL	20 mL	1	RE CCV/MRL ↑
24-JUL-2010	05:37	RN	STD_05 10GCSV0320 8330 100-250	C-000013.	0 g	0 mL	1	
24-JUL-2010	06:43	RN	STD_MRL 10GCSV0309 8330 5-20ng	C-000014.	0 g	0 mL	1	2,4,6-TNT ↑ = //
24-JUL-2010	07:49	RN	L31Q91AA 0196200 A0G090535-15	C-000015.	984.69 mL	20 mL	1	Not Needed
24-JUL-2010	08:55	RN	L4H381AA 0203097 G0G220000-97	C-000016.	1000 mL	20 mL	1	
24-JUL-2010	10:01	RN	L4H381AD 0203097 G0G220000-97	C-000017.	1000 mL	20 mL	1	
24-JUL-2010	11:06	RN	L38WG1AA 0203097 A0G150582-1 1	C-000018.	978.57 mL	20 mL	1	
24-JUL-2010	12:12	RN	L38WJ1AA 0203097 A0G150582-2 1	C-000019.	1014.05 mL	20 mL	1	
24-JUL-2010	13:18	RN	L38WM1AA 0203097 A0G150582-3 1	C-000020.	1015.03 mL	20 mL	1	
24-JUL-2010	14:23	RN	L38WN1AA 0203097 A0G150582-4 1	C-000021.	949.75 mL	20 mL	1	
24-JUL-2010	15:29	RN	L38WQ1AA 0203097 A0G150582-5 1	C-000022.	1014.95 mL	20 mL	1	
24-JUL-2010	16:35	RN	STD_05 10GCSV0320 8330 100-250	C-000023.	0 g	0 mL	1	
24-JUL-2010	17:40	RN	STD_MRL 10GCSV0309 8330 5-20ng	C-000024.	0 g	0 mL	1	
24-JUL-2010	18:46	RN	L38WT1AA 0203097 A0G150582-6 1	C-000025.	930.19 mL	20 mL	1	
24-JUL-2010	19:52	RN	L38WV1AA 0203097 A0G150582-7 1	C-000026.	1017.74 mL	20 mL	1	
24-JUL-2010	20:57	RN	L38WW1AA 0203097 A0G150582-8 1	C-000027.	962.37 mL	20 mL	1	
24-JUL-2010	22:03	RN	L38WX1AA 0203097 A0G150582-9 1	C-000028.	1015.52 mL	20 mL	1	
24-JUL-2010	23:09	RN	L39KJ1AA 0197127 G0G160000-127	C-000029.	1000 mL	20 mL	1	
25-JUL-2010	00:15	RN	L39KJ1AD 0197127 G0G160000-127	C-000030.	1000 mL	20 mL	1	
25-JUL-2010	01:20	RN	L34AN1AA 0197127 A0G130410-1 1	C-000031.	998.61 mL	20 mL	1	
25-JUL-2010	02:26	RN	L34AP1AA 0197127 A0G130410-2 1	C-000032.	1032.57 mL	20 mL	1	
25-JUL-2010	03:32	RN	STD_05 10GCSV0210 8330 100-250	C-000033.	0 g	0 mL	1	
25-JUL-2010	04:37	RN	STD_MRL 10GCSV0309 8330 5-20ng	C-000034.	0 g	0 mL	1	
25-JUL-2010	05:43	RN	L34AQ1AA 0197127 A0G130410-3 1	C-000035.	1048.81 mL	20 mL	1	
25-JUL-2010	06:49	RN	L34AT1AA 0197127 A0G130410-4 1	C-000036.	1029.66 mL	20 mL	1	
25-JUL-2010	07:54	RN	L34AV1AA 0197127 A0G130410-5 1	C-000037.	942.87 mL	20 mL	1	
25-JUL-2010	09:00	RN	L34AW1AA 0197127 A0G130410-6 1	C-000038.	1012.64 mL	20 mL	1	
25-JUL-2010	10:06	RN	L34AX1AA 0197127 A0G130410-7 1	C-000039.	1000.71 mL	20 mL	1	
25-JUL-2010	11:11	RN	L34A11AA 0197127 A0G130410-8 1	C-000040.	846.84 mL	20 mL	1	
25-JUL-2010	12:17	RN	L34AZ1AA 0197127 A0G130410-9 1	C-000041.	1015.77 mL	20 mL	1	
25-JUL-2010	13:23	RN	L34A31AA 0197127 A0G130410-10	C-000042.	1023.76 mL	20 mL	1	
25-JUL-2010	14:29	RN	STD_05 10GCSV0320 8330 100-250	C-000043.	0 g	0 mL	1	
25-JUL-2010	15:34	RN	LOD MB 8330B-S 07022010	C-000044.	10 g	80 mL	1	
25-JUL-2010	16:40	RN	LOD 1 8330B-S 07022010	C-000045.	10 g	80 mL	1	
25-JUL-2010	17:45	RN	LOD 2 8330B-S 07022010	C-000046.	10 g	80 mL	1	
25-JUL-2010	18:51	RN	LOQ MB 8330B-S 07022010	C-000047.	10 g	80 mL	1	
25-JUL-2010	19:57	RN	LOQ 1 8330B-S 07022010	C-000048.	10 g	80 mL	1	
25-JUL-2010	21:03	RN	STD_05 10GCSV0320 8330 100-250	C-000049.	0 g	0 mL	1	
25-JUL-2010	22:09	RN	STD_MRL 10GCSV0309 8330 5-20ng	C-000050.	0 g	0 mL	1	

Sequence continued on next page

TestAmerica West Sacramento

C-000014.D

Chromatography Summary

Injection Date: 7/24/2010 6.43 **Operator:** RN

DataFile: LC9.I\07232010.B\C-000014.D **Vial Num:** 6

Instrument ID: LC9

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0309 8330 5-20ng/mL**

Method File: LC9.I\07232010.B\8330METCNAB.M

Start Cal Date: 7/21/2010 18:40 **End Cal Date:** 7/22/2010 2:19

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** CAL.SUB **SpikeList:** 0

Samp. Info: STD_MRL 10GCSV0309 8330 5-20ng/mL,2,

Misc. Info: ;5;;;;3;CAL.SUB,0;1;

	Zorbax Cyano(250nm)							Zorbax Cyano(250nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	32.82	917	26.3600<	20	32%	Fails	NA				20	-100%	Fails		(±15)	45
HMX	37 88	173	5 3480<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
RDX	25.24	180	5.3640<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
Picric ACID				50	-100%	Fails					50	-100%	Fails		(±15)	
1,3,5-Trinitrobenzene	20.08	309	5.1270<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	18.53	378	4.9230<	5	-2%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	44.67	298	3.8440<	5	-23%	Fails	OKC32.				5	-100%	Fails		(±15)	45
Nitrobenzene	16 44	173	4.6410<	5	-1%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	33.58	409	11.8400<	5	137%	Fails	NA NT 7/30/10				5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	30.63	281	6.1840<	5	24%	Fails	OKC397.				5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	29.87	303	5.6800<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	27.60	207	5.5760<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	26.43	308	5.1860<	5	4%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	23.09	179	9.5750	10	-4%	Acceptable					10	-100%	Fails		(±15)	45
4-Nitrotoluene				5	-100%	Fails					5	-100%	Fails		(±15)	
3-Nitrotoluene	23.65	123	4.5560<	5	-9%	Acceptable					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		41 87	888	20.8600	20	4%	Acceptable		(±15)	45
PETN				20	-100%	Fails		49.08	4480	19.3200<	20	-3%	Acceptable		(±15)	45
3,5-Dinitroaniline	24.54	270	5.0250	5	1%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				20	-100%	Fails					20	-100%	Fails		(±15)	

Sample 11 qualified J.

Notes: M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

Printed: 7/30/2010 12:27 PM

TestAmerica West Sacramento

C-000004.D

Chromatography Summary

Injection Date: 7/23/2010 19:46 **Operator:** RN

DataFile: LC9.I\07232010.B\C-000004.D **Vial Num:** 6

Instrument ID: LC9

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0309 8330 5-20ng/mL**

Method File: LC9.I\07232010.B\8330METCNAB.M

Start Cal Date: 7/21/2010 18:40 **End Cal Date:** 7/22/2010 2:19

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** CAL.SUB **SpikeList:** 0

Samp. Info: STD_MRL 10GCSV0309 8330 5-20ng/mL;2;

Misc. Info: ;5;;;;3;CAL.SUB;0;1;

	Zorbax Cyano(250nm)							Zorbax Cyano(250nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	32.82	907	26.0800<	20	30%	Fails					20	-100%	Fails		(±15)	45
HMX	37.85	158	4.8850<	5	-2%	Acceptable					5	-100%	Fails		(±15)	45
RDX	25.18	183	5.4530<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
Picric ACID				50	-100%	Fails					50	-100%	Fails		(±15)	
1,3,5-Trinitrobenzene	20.07	313	5.1940<	5	4%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	18.55	382	4.9760<	5	0%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	44.67	311	4.0110<	5	-20%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	16.45	189	5.0700<	5	1%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	33.58	396	11.4600<	5	129%	Fails					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	30.63	285	6.2720<	5	25%	Fails					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	29.91	307	5.7550<	5	15%	Fails					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	27.66	223	6.0070<	5	20%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	26.48	326	5.4890<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	23.16	207	11.0700	10	11%	Acceptable					10	-100%	Fails		(±15)	45
4-Nitrotoluene				5	-100%	Fails					5	-100%	Fails		(±15)	
3-Nitrotoluene	23.71	151	5.5930<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		41.88	869	20.4200	20	2%	Acceptable		(±15)	45
PETN				20	-100%	Fails		49.08	4360	18.8000<	20	-6%	Acceptable		(±15)	45
3,5-Dinitroaniline	24.52	282	5.2480	5	5%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				20	-100%	Fails					20	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

Sample 11 J

Printed: 7/30/2010 12:19 PM

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC9 Batch ID: 07292010
Method : Method 8330 Test : SOP WS-LC-0009
ICAL Date: See Calibration Report

Date	Time	Operator	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
29-JUL-2010	11:23	RN	8330 PRIMER	C-000001.	0 g	0 mL	1	
29-JUL-2010	12:29	RN	8330 PRIMER	C-000002.	0 g	0 mL	1	
29-JUL-2010	13:35	RN	STD_06 10GCSV0217 8330 200-500	C-000003.	0 g	0 mL	1	
29-JUL-2010	15:04	RN	L4EAH1AA 0201179 G0G200000-179	C-000004.	10 g	80 mL	1	
29-JUL-2010	16:11	RN	STD_MRL 10GCSV0309 8330 5-20ng	C-000005.	0 g	0 mL	1	
29-JUL-2010	17:17	RN	L31QN1AA 0196200 A0G090535-8 1	C-000006.	1006.82 mL	20 mL	1	
29-JUL-2010	18:22	RN	L4DW21AA 0200338 G0G190000-338	C-000007.	1000 mL	20 mL	1	
29-JUL-2010	19:28	RN	L4DW21AD 0200338 G0G190000-338	C-000008.	1000 mL	20 mL	1	
29-JUL-2010	20:34	RN	L37HP1AA 0200338 A0G150403-1 1	C-000009.	970.23 mL	20 mL	1	
29-JUL-2010	21:40	RN	L37HQ1AA 0200338 A0G150403-2 1	C-000010.	991.84 mL	20 mL	1	
29-JUL-2010	22:46	RN	STD_05 10GCSV0320 8330 100-250	C-000011.	0 g	0 mL	1	
29-JUL-2010	23:52	RN	STD_MRL 10GCSV0309 8330 5-20ng	C-000012.	0 g	0 mL	1	
30-JUL-2010	00:58	RN	L37HR1AA 0200338 A0G150403-3 1	C-000013.	1009.92 mL	20 mL	1	
30-JUL-2010	02:04	RN	L37HT1AA 0200338 A0G150403-4 1	C-000014.	998.3 mL	20 mL	1	
30-JUL-2010	03:09	RN	L37HV1AA 0200338 A0G150403-5 1	C-000015.	1028.73 mL	20 mL	1	
30-JUL-2010	04:15	RN	L37HW1AA 0200338 A0G150403-6 1	C-000016.	970.64 mL	20 mL	1	
30-JUL-2010	05:21	RN	L37HX1AA 0200338 A0G150403-7 1	C-000017.	939.86 mL	20 mL	1	
30-JUL-2010	06:27	RN	L37H01AA 0200338 A0G150403-8 1	C-000018.	956.88 mL	20 mL	1	
30-JUL-2010	07:33	RN	L37H11AA 0200338 A0G150403-9 1	C-000019.	986.43 mL	20 mL	1	
30-JUL-2010	08:39	RN	L37H21AA 0200338 A0G150403-10	C-000020.	922.86 mL	20 mL	1	
30-JUL-2010	09:45	RN	STD_05 10GCSV0320 8330 100-250	C-000021.	0 g	0 mL	1	
30-JUL-2010	10:51	RN	STD_MRL 10GCSV0213 8330 5ng/mL	C-000022.	0 g	0 mL	1	
30-JUL-2010	11:57	RN	L31P91AA 0196200 A0G090535-1 1	C-000023.	1016 mL	20 mL	1	
30-JUL-2010	13:03	RN	L31Q41AA 0196200 A0G090535-14	C-000024.	942.66 mL	20 mL	1	
30-JUL-2010	14:09	RN	STD_05 10GCSV0320 8330 100-250	C-000025.	0 g	0 mL	1	
30-JUL-2010	15:15	RN	STD_MRL 10GCSV0213 8330 5ng/mL	C-000026.	0 g	0 mL	1	

Sample 8 qual UJ
for
Nitrobenzene
2-Nitrotoluene
3-Nitrotoluene

TestAmerica West Sacramento

C-000011.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 7/29/2010 22:46 **Operator:** RN

DataFile: LC9.I\07292010.B\C-000011.D **Vial Num:** 3

Instrument ID: LC9

Sample : **STD_05 10GCSV0320 8330 100-250ng/mL**

Method File: LC9.I\07292010.B\8330METCNAB.M

Start Cal Date: 7/21/2010 18:40 **End Cal Date:** 7/22/2010 2:19

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** CAL.SUB **SpikeList:** 0

Samp. Info: STD_05 10GCSV0320 8330 100-250ng/mL;2;

Misc. Info: ;5;;;;3;CAL.SUB;0;1;

	Zorbax Cyano(250nm)							Zorbax Cyano(250nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	33.70	2681	77.0800<	100	-23%	Fails	NA				100	-100%	Fails		(±15)	45
HMX	38.71	3362	103.9000<	100	4%	Acceptable					100	-100%	Fails		(±15)	45
RDX	25.81	3251	96.8800<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID				200	-100%	Fails					200	-100%	Fails		(±15)	
1,3,5-Trinitrobenzene	20.23	5944	98.6300<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	18.80	7663	99.8100<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	45.29	8913	115.0000<	100	15%	Fails	OK CLS				100	-100%	Fails		(±15)	45
Nitrobenzene	16.73	3102	83.2200<	100	-17%	Fails	NA				100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	34.65	3329	96.3700<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	31.48	4369	96.1400<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	30.68	5310	99.5500<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	28.26	3542	95.4200<	100	-5%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	27.02	5833	98.2200<	100	-2%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	23.67	2941	157.3000	200	-21%	Fails	NA				200	-100%	Fails		(±15)	45
4-Nitrotoluene				200	-100%	Fails					200	-100%	Fails		(±15)	
3-Nitrotoluene	24.25	2140	79.2600<	100	-21%	Fails	NA				100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	Fails		42.55	4279	100.5000	100	1%	Acceptable		(±15)	45
PETN				100	-100%	Fails		49.20	23455	101.2000<	100	1%	Acceptable		(±15)	45
3,5-Dinitroaniline	25.05	5283	98.3200	100	-2%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails					100	-100%	Fails		(±15)	

7/30/10

Notes:
M = Manually Integrated
D = Operator Disabled Result
/ O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

Printed: 7/30/2010 12:55 PM

JG

TestAmerica West Sacramento
ESC-Extraction Master Sheet

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

810

TP 7/15/10

Holding Time Due: ~~7/14/10~~ 7/15/10 Project Due: 7/23/10

BATCH #: 0196200 Initiated By: TP Date: 7/15/10

Test #: 8330-L Extn Comp'd By: MC Date: 7/20/10

QC Code	Lot ID	Sample #	Sample Size / Initial Mass	Final Volume / Final Mass	Chlorine checked
10	MB		See weight sheet		N/A
C	LCS				N/A
	AOG090535	01	#100715P		N/A
		02			N/A
S		2MS			N/A
D		2MSD	10		N/A
		03			N/A
		04	TP 7/20/10		N/A
		05			N/A
		06			N/A
		07			N/A
		08			N/A
		09			N/A
		10			N/A
		11			N/A
		12	10		N/A
		13			N/A
		14			N/A
		15			N/A
	FB				N/A
	TP 7/20/10				

SOP No.: WS-LC-0009

EXTRACTION COMMENTS:

Multi-incremental Sampling/Date: N/A

Dried/Date N/A Ground//Date N/A

Sonicated - Start: N/A End: N/A Date: N/A

Cleanup by/Date MC 7/20/10 Dilution by/Date MC 7/20/10

Final Vialling /Date MC 7/20/10

Millipore Water Dispensed / Date 7/14/10 TP 7/15/10

SPE Cartridge: Waters Lot # ~~000~~ 0033300284

Samples AOG 090535-4, 7, 14, 15 were filtered prior to extraction.

QC Codes	Standard Information				
	Volume	STD ID	Exp. Date	STD Name/Conc.	ppm/ppb
All	50uL	10GCSV0188	11/19/10	3,4-DNT 50ug/mL	
C,S,D	20uL	10GCSV0187	11/19/10	8330+DNA 50ug/mL	
C,S,D	100uL	10GCSV0166	10/7/10	NG/PETN 50ug/mL	

Spiked By / Date: TP 7/15/10 Witnessed By / Date: HA 7-15-10

QC Codes: B = MB, C = LCS, L = LCSD, S = MS, D = SD, FB = Filter Blank

North Canton

8330MOD NITROGUANIDINE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 31, 2010

SDG: A0G090535 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.3 and 5.9 °C.	QAPP Table 4-2
3. Were holding times met?	✓			Checked by ADR.	QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			7/30/2010	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			Varian Star #1 ICAL: 4/20/10 primary column Stds: 20, 50, 100, 200, 500, 1000	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve)	✓			Linear fit used. No qualifications were made as r>0.995.	STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			4/21/10 @ 0143	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓				LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 31, 2010

SDG: A0G090535 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes reported in the method blank <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓				
18. Were target analytes reported in the field blank analyses < ½ the MRL?	✓				<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓				QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?			✓		LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 31, 2010

SDG: A0G090535 R0
Analysis: SW846 8330M Nitroguanadine

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0010 "Determination of Nitroguanidine Based on Method 8330, SW-846" April 2007, revision 2.0

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-001	**Work Order #...:**	L31P91AD	**Matrix.....:**	WG
Date Sampled...:	07/08/10 09:15	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-002	**Work Order #...:**	L31QC1AH	**Matrix.....:**	WG
Date Sampled...:	07/08/10 11:15	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-003	**Work Order #...:**	L31QD1AD	**Matrix.....:**	WG
Date Sampled...:	07/08/10 14:15	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-004	**Work Order #...:**	L31QG1AD	**Matrix.....:**	WG
Date Sampled...:	07/08/10 16:05	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-005	**Work Order #...:**	L31QH1AD	**Matrix.....:**	WG
Date Sampled...:	07/08/10 17:15	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-006	**Work Order #...:**	L31QK1AD	**Matrix.....:**	WG
Date Sampled...:	07/09/10 09:15	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-007	**Work Order #...:**	L31QM1AD	**Matrix.....:**	WG
Date Sampled...:	07/09/10 10:35	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-008	**Work Order #...:**	L31QN1AD	**Matrix.....:**	WQ
Date Sampled...:	07/09/10 11:45	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GW

Dissolved HPLC

Lot-Sample #...: A0G090535-009 **Work Order #...:** L31QP1AD **Matrix.....:** WG
Date Sampled...: 07/08/10 09:10 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0196251
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-010	**Work Order #...:**	L31QT1AD	**Matrix.....:**	WG
Date Sampled...:	07/08/10 10:30	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-011	**Work Order #...:**	L31QV1AD	**Matrix.....:**	WG
Date Sampled...:	07/08/10 12:40	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GW

Dissolved HPLC

Lot-Sample #...: A0G090535-012 **Work Order #...:** L31QX1AD **Matrix.....:** WG
Date Sampled...: 07/08/10 14:14 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0196251
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-013	**Work Order #...:**	L31Q21AD	**Matrix.....:**	WG
Date Sampled...:	07/08/10 16:20	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-014	**Work Order #...:**	L31Q41AD	**Matrix.....:**	WG
Date Sampled...:	07/09/10 09:10	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GW

Dissolved HPLC

Lot-Sample #...:	A0G090535-015	**Work Order #...:**	L31Q91AD	**Matrix.....:**	WG
Date Sampled...:	07/09/10 10:20	**Date Received..:**	07/09/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/31/10		
Prep Batch #...:	0196251				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G090535 **Work Order #...:** L38QX1AA **Matrix.....:** WATER
MB Lot-Sample #: G0G150000-251

Prep Date.....: 07/15/10
Analysis Date..: 07/30/10 **Prep Batch #...:** 0196251
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitroguanidine	ND	20	ug/L	SW846 8330 (Modif

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G090535 **Work Order #...:** L38QX1AC **Matrix.....:** WATER
LCS Lot-Sample#: G0G150000-251
Prep Date.....: 07/15/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0196251
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	**106**	**(73 - 117)**	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G090535 **Work Order #...:** L31QC1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G090535-002 L31QC1AK-MSD
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0196251
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**112**	**(73 - 117)**			**SW846 8330 (Modified**
	113	**(73 - 117)**	**0.37**	**(0-15)**	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

SDG: A0G090535 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.3 and 5.9 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3.7
7. Was Acetone used to extract the samples? Was the Acetone evaporated using Nitrogen?	✓				STL SOP Sections 11.4
8. Does the initial calibration curve consist of 5 concentration levels with the low standard near but > MDL?	✓			Instrument FS4; ICAL 7/22/10 Stds- 0, 0.05, 0.2, 0.4, 1, 2	STL SOP Section 10.2 R
9. Was the correlation coefficient >0.995?	✓				STL SOP Section 10.2
10. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D <30%?	✓				LCG Table 5 >30%=J
11. Was a second source verification (ICV) analyzed after the ICAL? Were all analytes 90-110%?	✓				STL SOP Section 9.8, 10.3, LCG >110%=J; 90-85%=J/UJ; <85%=J/R
12. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 9.8, LCG < 5x = U
13. Was a CCV run every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.4
14. Was the ICV and CCV a mid-level standard from the initial calibration curve?	✓				STL SOP Section 10.3.1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

SDG: A0G090535 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
15. Were all CCV calibration analytes within 90-110%?	✓				STL SOP Section 10.4, LCG >110%=J; 85-90%=J/UJ; <85%=J/R
16. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 10.4, LCG < 5x = U
17. Was the Nitrocellulose assay available and/or analyzed to be within 10%?	✓				STL SOP Section 7.14.1 R
18. Was a method blank prepared and analyzed with each batch?	✓				
19. Were target analytes reported in the method blank <1/2 the MRL?	✓			ADR checked section.	STL SOP Section 9.4, LCG <5x=B
20. Was a field blank collected and analyzed?	✓				
21. Were target analytes reported in the field blank analyses <1/2 the MRL?	✓				<5x=B
22. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			ADR checked section.	QAPP Table 3-2 RPD > 30% = J
23. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within lab's in-house limits% (26-144%)?	✓				>UL%=J; 50-LL%=J/UJ; <50%=J/R
24. Was a MS/MSD pair prepared with each batch?	✓				
25. Was the MS/MSD parent a Ravenna sample?	✓				
26. Were MS/MSD recoveries 26-144% and RPD ≤20?	✓			ADR checked section.	Method EPA 353.2 Section 9.4.2 >UL%=J; <LL%=J/UJ; RPD>20%=J/UJ
27. Were sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

SDG: A0G090535 Rev 0
Analysis: EPA 353.2- Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.		✓			

References: *STL SOP SAC-WC-0050 "Preparation and Analysis of Nitrocellulose in Aqueous and Soil/Sediment Samples by Colorimetric Autoanalyzer", Jan 2007, rev. 2.0*

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GW

General Chemistry

Lot-Sample #...: A0G090535-001 **Work Order #...:** L31P9 **Matrix.....:** WG
Date Sampled...: 07/08/10 09:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GW

General Chemistry

Lot-Sample #...: A0G090535-002 **Work Order #...:** L31QC **Matrix.....:** WG
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GW

General Chemistry

Lot-Sample #...: A0G090535-003 **Work Order #...:** L31QD **Matrix.....:** WG
Date Sampled...: 07/08/10 14:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: **FWGLL2mw-059C-1531-GW**

General Chemistry

Lot-Sample #...: A0G090535-004 **Work Order #...:** L31QG **Matrix.....:** WG
Date Sampled...: 07/08/10 16:05 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GW

General Chemistry

Lot-Sample #...: A0G090535-005 **Work Order #...:** L31QH **Matrix.....:** WG
Date Sampled...: 07/08/10 17:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GW

General Chemistry

Lot-Sample #...: A0G090535-006 **Work Order #...:** L31QK **Matrix.....:** WG
Date Sampled...: 07/09/10 09:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GW

General Chemistry

Lot-Sample #...: A0G090535-007 **Work Order #...:** L31QM **Matrix.....:** WG
Date Sampled...: 07/09/10 10:35 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

General Chemistry

Lot-Sample #...: A0G090535-008 **Work Order #...:** L31QN **Matrix.....:** WQ
Date Sampled...: 07/09/10 11:45 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GW

General Chemistry

Lot-Sample #...: A0G090535-009 **Work Order #...:** L31QP **Matrix.....:** WG
Date Sampled...: 07/08/10 09:10 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GW

General Chemistry

Lot-Sample #...: A0G090535-010 **Work Order #...:** L31QT **Matrix.....:** WG
Date Sampled...: 07/08/10 10:30 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GW

General Chemistry

Lot-Sample #...: A0G090535-011 **Work Order #...:** L31QV **Matrix.....:** WG
Date Sampled...: 07/08/10 12:40 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GW

General Chemistry

Lot-Sample #...: A0G090535-012 Work Order #...: L31QX Matrix.....: WG
Date Sampled...: 07/08/10 14:14 Date Received..: 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GW

General Chemistry

Lot-Sample #...: A0G090535-013 **Work Order #...:** L31Q2 **Matrix.....:** WG
Date Sampled...: 07/08/10 16:20 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GW

General Chemistry

Lot-Sample #...: A0G090535-014 **Work Order #...:** L31Q4 **Matrix.....:** WG
Date Sampled...: 07/09/10 09:10 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GW

General Chemistry

Lot-Sample #...: A0G090535-015 **Work Order #...:** L31Q9 **Matrix.....:** WG
Date Sampled...: 07/09/10 10:20 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197

Dilution Factor: 1 MDL.....: 0.12

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0G090535 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: L4C981AA		MB Lot-Sample #: G0G190000-197		
	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/19-07/22/10	0200197
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G090535 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: L4C981AC LCS Lot-Sample#: G0G190000-197			
	80	(26 - 144)	TAL-SOP WS-WC-005	07/19-07/22/10	0200197
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G090535 **Matrix.....:** WG
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: L31QC1AF-MS/L31QC1AG-MSD			MS Lot-Sample #: A0G090535-002		
	76	(26 - 144)			TAL-SOP WS-WC-005	07/19-07/22/10	0200197
	76	(26 - 144)	0.0	(0-45)	TAL-SOP WS-WC-005	07/19-07/22/10	0200197
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G090535										
8330	FWGEQUIPRINSE1-1578-GW	AQ	EB							
				2-Nitrotoluene	0.50	0.50U		UJ	ug/L	W
				3-Nitrotoluene	0.50	0.50U		UJ	ug/L	W
				Nitrobenzene	0.099	0.099U		UJ	ug/L	W
8330	FWGLL2mw-059C-1531-GW	AQ	N							
				HMX	0.097	0.14PG		JB	ug/L	Pj,N
8330	FWGLL2mw-263C-1535-GW	AQ	N							
				HMX	0.098	0.078J		JB	ug/L	L,N
8330	FWGLL3mw-234C-1541-GW	AQ	N							
				2,6-Dinitrotoluene	0.10	0.062J		J	ug/L	L,P
				2-Amino-4,6-dinitrotoluene	0.10	0.41		J	ug/L	Pj,P
				4-Amino-2,6-Dinitrotoluene	0.10	0.78		J	ug/L	Pj,P
				HMX	0.10	0.083J		JB	ug/L	L,N,P
				RDX	0.10	0.58		J	ug/L	Pj,P
8330	FWGLL3mw-236C-1542-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.098	0.032J		J	ug/L	L
				2,4,6-TNT	0.098	0.31		J	ug/L	Pj
8330	FWGLL3mw-239C-1543-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.34PG		J	ug/L	Pj
				2,4,6-TNT	0.10	0.26PG		J	ug/L	Pj
				HMX	0.10	0.19		B	ug/L	N
8330	FWGLL3mw-DUP3-1568-GW	AQ	FD							
				2-Amino-4,6-dinitrotoluene	0.10	0.15		J	ug/L	Pj
				4-Amino-2,6-Dinitrotoluene	0.10	0.38		J	ug/L	Pj
				RDX	0.10	0.30		J	ug/L	Pj

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G090535										
8330	FWGLL4mw-197C-1545-GW	AQ	N							
				HMX	0.097	0.041J		JB	ug/L	L,N
8330	FWGSCFmw-006-1520-GW	AQ	N							
				4-Nitrotoluene	0.54	0.18J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE1-1578-GW **Lab Report Batch :** A0G090535 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G090535008

Reviewed By / Date : asd 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.99**															
2-Nitrotoluene	0.50		ug/L	U	YES	UJ														UJ	W
3-Nitrotoluene	0.50		ug/L	U	YES	UJ														UJ	W
Nitrobenzene	0.099		ug/L	U	YES	UJ														UJ	W

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-059C-1531-GW **Lab Report Batch :** A0G090535 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G090535004

Reviewed By / Date : asd 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.97**															
HMX	0.14		ug/L	PG	YES	UJ JB										JB					Pj,N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-263C-1535-GW **Lab Report Batch :** A0G090535 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G090535007

Reviewed By / Date : asd 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330																**Dilution: 0.98**					
HMX	0.078		ug/L	J	YES	UJ BB								J		UB					L,N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-234C-1541-GW **Lab Report Batch :** A0G090535 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G090535009

Reviewed By / Date : asd 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.01**															
2,6-Dinitrotoluene	0.062		ug/L	J	YES	J								J							L,P
2-Amino-4,6-dinitrotoluene	0.41		ug/L		YES	J															Pj,P
4-Amino-2,6-Dinitrotoluene	0.78		ug/L		YES	J															Pj,P
HMX	0.083		ug/L	J	YES	UJ BB								J		Y/B					L,N,P
RDX	0.58		ug/L		YES	J															Pj,P

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-236C-1542-GW **Lab Report Batch :** A0G090535 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G090535001

Reviewed By / Date : asd 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.98**															
1,3,5-Trinitrobenzene	0.032		ug/L	J	YES	J								J							L
2,4,6-TNT	0.31		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-239C-1543-GW **Lab Report Batch :** A0G090535 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G090535011

Reviewed By / Date : asd 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.03**															
1,3,5-Trinitrobenzene	0.34		ug/L	PG	YES	J															Pj
2,4,6-TNT	0.26		ug/L	PG	YES	J															Pj
HMX	0.19		ug/L		YES	U															N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-DUP3-1568-GW **Lab Report Batch :** A0G090535 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G090535010

Reviewed By / Date : asd 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.05**															
2-Amino-4,6-dinitrotoluene	0.15		ug/L		YES	J															Pj
4-Amino-2,6-Dinitrotoluene	0.38		ug/L		YES	J															Pj
RDX	0.30		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-006-1520-GW **Lab Report Batch :** A0G090535 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G090535013

Reviewed By / Date : asd 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.08**															
4-Nitrotoluene	0.18		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL4mw-197C-1545-GW **Lab Report Batch :** A0G090535 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G090535003

Reviewed By / Date : asd 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330																**Dilution: 0.97**					
HMX	0.041		ug/L	J	YES	UJ								J		UB					L,N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G090535 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE1-1578	A0G090535008	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL2mw-059C-1531-G	A0G090535004	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL2mw-060C-1532-G	A0G090535005	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL2mw-262C-1534-G	A0G090535006	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL2mw-263C-1535-G	A0G090535007	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL2mw-266C-1537-G	A0G090535015	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL2mw-267C-1565-G	A0G090535014	8330	AQ	2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.53	0.21	ug/L
				3-Nitrotoluene	U	0.53	0.21	ug/L
				4-Nitrotoluene	U	0.53	0.21	ug/L
FWGLL3mw-232C-1540-G	A0G090535002	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL3mw-234C-1541-G	A0G090535009	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G090535 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL2mw-263C-1535-G	A0G090535007	8330	AQ	HMX	J	0.078	0.098	ug/L
FWGLL3mw-234C-1541-G	A0G090535009			2,6-Dinitrotoluene	J	0.062	0.10	ug/L
				HMX	J	0.083	0.10	ug/L
FWGLL3mw-236C-1542-G	A0G090535001			1,3,5-Trinitrobenzene	J	0.032	0.098	ug/L
FWGLL4mw-197C-1545-G	A0G090535003			HMX	J	0.041	0.097	ug/L
FWGSCFmw-006-1520-G	A0G090535013			4-Nitrotoluene	J	0.18	0.54	ug/L

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0G090535
Lab ID: TALCAN
Method/Preparation Batch : 0196200 / 0196200
Analysis Date : 07/29/2010
Client Sample ID : FWGEQUIPRINSE1-1578-GW
Preparation Date : 07/15/2010
Lab Sample ID : A0G090535008
Preparation Type : 3535

Analysis Method : 8330

HMX	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.21	0.099	ug/L		

HMX was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL2mw-059C-1531-GW	A0G090535004	0.97	0.14	PG	ug/L
FWGLL2mw-263C-1535-GW	A0G090535007	0.98	0.078	J	ug/L
FWGLL3mw-234C-1541-GW	A0G090535009	1.01	0.083	J	ug/L
FWGLL3mw-239C-1543-GW	A0G090535011	1.03	0.19		ug/L
FWGLL4mw-197C-1545-GW	A0G090535003	0.97	0.041	J	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A0G090535 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
8330	AQ	2,6-Dinitrotoluene	FWGLL3mw-234C	DL	0.062	J	FWGLL3mw-DUP	DL	0.10	U	200.0	30	ug/L
	AQ	2-Amino-4,6-dinitrotoluene		DL	0.41			DL	0.15		92.9	30	ug/L
	AQ	4-Amino-2,6-Dinitrotoluene		DL	0.78			DL	0.38		69.0	30	ug/L
	AQ	HMX		DL	0.083	J		DL	0.10	U	200.0	30	ug/L
	AQ	RDX		DL	0.58			DL	0.30		63.6	30	ug/L

Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 18, 2010
STL Sample Delivery Group: A0G090540 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 8 and 9, 2010 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0G090540.

Field Sample ID	Analytes	Method
FWGLL3mw-236c-1542-GW	VOCs SVOCs Pesticides PCBs Cyanide Nitrate/Nitrite	SW846 8260B SW846 8270C SW846 8081A SW846 8082 SW846 9012A 353.2
FWGLL3mw-232c-1540-GW		
FWGLL4mw-197c-1545-GW		
FWGLL2mw-059c-1531-GW		
FWGLL2mw-060c-1532-GW		
FWGLL2mw-262c-1534-GW		
FWGLL2mw-263c-1535-GW		
FWGLL3mw-234c-1541-GW		
FWGEQUIPRinse1-1578-GW		
FWGLL3mw-DUP3-1568-GW		
FWGLL3mw-239c-1543-GW		
FWGLL4mw-196c-1544-GW		
FWGSCFmw-006-1520-GW		
FWGLL2mw-267c-1565-GW		
FWGLL2mw-266c-1537-GW		
FWGEQUIPRinse1-1578-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL3mw-236c-1542-GW	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGLL3mw-232c-1540-GW		
FWGLL4mw-197c-1545-GW		
FWGLL2mw-059c-1531-GW		
FWGLL2mw-060c-1532-GW		
FWGLL2mw-262c-1534-GW		
FWGLL2mw-263c-1535-GW		
FWGLL3mw-234c-1541-GW		
FWGLL3mw-DUP3-1568-GW		
FWGLL3mw-239c-1543-GW		
FWGLL4mw-196c-1544-GW		
FWGSCFmw-006-1520-GW		
FWGLL2mw-267c-1565-GW		
FWGLL2mw-266c-1537-GW		
FWGTEAM1-Trip	VOCs	SW846 8260B
FWGTEAM2-Trip		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004*, Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The cooler temperatures were documented as being received from 2.3°C – 5.9°C.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted

in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

VOAs - 8260B

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- CCV criteria
- Initial Calibration Criteria including SPCC and CCC compounds
- Internal standard area counts and retention times
- MDL verification criteria
- Surrogate recoveries
- Field duplicate RPD criteria
- LCS Recovery criteria
- Matrix Spike Recovery Criteria and RPD

QC/MRL

- The opening MRL check analyzed 7/21/10 at 1028 had methylene chloride recover above limits at 160% and bromoform at 164%.
- The closing MRL check analyzed 7/21/10 at 1845 had methylene chloride recover above limits at 160% and bromoform at 154%.

The methylene chloride result for FWGEQUIPRINSE-1-1578-GW was qualified as estimated, "J".

Blanks

- Methylene chloride was detected in the method blank at 0.65ug/L. Sample FWGEQUIPRinse1-1578-GW was qualified, "B".
- FWGEQUIPRinse1-1578-GW had 2-butanone detected at 24ug/L, acetone at 36ug/L, m&p-xylenes at 0.35ug/L, methylene chloride at 1.0ug/L, o-xylene at 0.14ug/L, toluene at 0.87ug/L and total xlenes at 0.49 ug/L.
- The trip blanks had acetone contamination detected from 1.6- 1.8ug/L.

The acetone results for samples FWGLL2mw-266c-1537-GW and FWGSCFmw-006-1520-GW were qualified, "B" as the results were <10x the equipment rinse and trip blank contamination. As there were no detected concentrations of the other blank contaminants, no additional qualifications were made.

SVOCs- 8270C

The following QC criteria were reviewed with acceptable results:

- Preservation, holding time and sample handling
- Tuning criteria
- Initial Calibration criteria including CCC and SPCC compounds
- ICV/ CCV criteria
- MDL Level Verification
- MRL Verification
- Internal standard area counts and retention times

Blanks

- bis(2-Ethylhexyl) phthalate was detected in the method blank at 2.3ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate <5x contamination were qualified, "B". See Appendix 1 for list of impacted samples.
- FWGEQUIPRinse1-1578-GW had detected concentrations of bis(2-ethylhexyl) phthalate at 1.3ug/L, benzyl alcohol at 0.41ug/L and diethyl phthalate at 0.60ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate and benzyl alcohol <5x contamination were qualified, "B". See Appendix 1 for list of impacted samples. No qualifications were made for diethyl phthalate contamination as there were no detected concentrations of this contaminant in the associated samples.

LCS Recovery

The LCS recovered below control limits of 10% at 9%. The benzoic acid results were qualified as estimated, "J/UJ".

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 18, 2010
STL Sample Delivery Group: A0G090540 **Revision:** 0

Field Duplicate RPD
Sample FWGLL3mw-DUP3-1568-GW was the field duplicate for sample FWGLL3mw-234c-1541-GW. Only detected sample results were evaluated. The duplicate RPD was above control limits for bis(2-ethylhexyl)phthalate, benzyl alcohol and di-n-butyl phthalate at 200%. Detected bis (2-ethylhexyl) phthalate, benzyl alcohol and di-n-butyl phthalate results for samples FWGLL3mw-DUP3-1568-GW and FWGLL3mw-234c-1541-GW were qualified as estimated, "J".

Matrix Spike Recovery
Sample FWGLL3mw-232c-1540-GW was the parent MS/MSD sample from this SDG.

- The MS and MSD recovered below control limits for 3,3'-dichorobenzidine at 12%, hexachlorobutadiene at 31% and 41%, and n-nitrosodiphenylamine at 31 and 33%.
- The MS recovered below control limits for 1,2-dichlorobenzene at 44% with and RPD of 23%, 1,3-dichorobenzene recovered at 39% with an RPD of 28%, hexachlorocyclopentadiene recovered at 44% and hexachloroethane recovered at 31% with and RPD of 37%.

No qualifications were made for these outliers as the associated LCS recovered within limits.

Surrogate Recovery
2-Fluorophenol recovered below control limits for all samples but above 10%. No qualification was made based solely on the 2-fluorophenol outliers as LCG allows for one surrogate from each fraction to be below control limits without qualification. Additionally, in sample FWGLL3mw-236c-1542-GW, 2,4,6-tribromophenol recovered below limits at 35%, phenol-d5 at 32% and 2-fluorobiphenyl at 46%. The acid targets for FWGLL3mw-236c-1542-GW were qualified as estimated, "J/UJ". For sample FWGLL3mw-234c-1541-GW, phenol-d5 recovered below limits at 45% and 2-fluorobiphenyl at 49%. The acid targets for FWGLL3mw-234c-1541-GW were qualified as estimated, "J/UJ".

Pesticides- 8081A
The following QC criteria were reviewed with acceptable results:

- Preservation, holding time and sample handling
- Initial Calibration criteria
- DDT and Endrin breakdown criteria
- Retention time criteria
- ICV criteria
- CCV Criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS Recoveries
- Field Duplicate Criteria
- MDL verification criteria
- MRL verification criteria

Matrix Spike Recovery
The spike analyses performed on sample FWGLL3mw-232c-1540-GW had a MS/MSD RPD of 22% for alpha BHC. No qualification was made as the LCS recovered within limits.

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in sample FWGLL2mw-266c-1537-GW at 38%. The associated result was qualified as estimated, "J/UJ".

PCBs- 8082
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MDL verification criteria
- ICV/ CCV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS/ LCSD percent recoveries and RPD value criteria

- Second Column confirmation criteria
- Field Duplicate RPD criteria
- MRL Verification Criteria

Matrix Spike Recoveries
The spike analyses performed on sample FWGLL3mw-232c-1540-GW had a MS/MSD RPD of 24% for Aroclors 1016 and 1260. No qualification was made as the LCS recovered within limits.

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in sample FWGLL2mw-266c-1537-GW at 31%. The associated result was qualified as estimated, "J/UJ".

Metals - 6010B
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV criteria
- Interference Check Sample (ICSA/ICSAB) criteria
- LCS recovery criteria
- MS/MSD recovery criteria
- MDL Verification criteria
- MRL verification criteria
- Serial Dilution

Blanks

- The ICB analyzed 7/15/10 had detected potassium at 152ug/L. The potassium results for FWGLL2mw-060c-1532-GF, FWGLL2mw-267c-1565-GF and FWGLL4mw-196c-1544-GF were qualified, "U", as the detected concentrations were <5x blank contamination.
- The CCBs analyzed 7/15/10 had detected potassium from 151ug/L to 164ug/L. In addition to the potassium qualifications made for the ICB contamination, the potassium result for FWGLL2mw-263c-1535-GF was qualified "U", as the detected concentration was <5x blank contamination.

No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

CCV
The CCVs analyzed on 2/1 at 0920 and 1033 had recoveries above control limits for selenium. No qualifications were made as there were no detected selenium concentrations reported for the bracketed samples.

Field Duplicate RPD
For the field duplicate pair analyzed on FWGLL3mw-234c-1541-GF and FWGLL3mw-DUP3-1568-GF, the duplicate RPD was above control limits for barium at 62%, calcium at 100%, cobalt at 165%, magnesium at 78.4%, manganese at 53.2% and nickel at 83%. The barium, calcium, cobalt, magnesium, manganese and nickel results for FWGLL3mw-234c-1541-GF and FWGLL3mw-DUP3-1568-GF were qualified as estimated, "J".

Metals - 6020
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Internal standard and tune criteria
- Initial Calibration criteria
- ICV criteria
- MDL Verification Data
- MRL verification criteria
- Interference Check Sample (ICSA/ICSAB) criteria
- LCS Recovery Criteria
- MS recovery criteria
- Lab Duplicate RPD
- Field Duplicate RPD

Blanks

- The ICB analyzed 7/29/10 had thallium detected at 0.18ug/L and antimony at 0.092 ug/L. The thallium results for samples FWGLL3mw-236c-1542-GF, FWGLL4mw-197c-1545-GF and FWGLL2mw-060c-1532-GF were <5x the ICB contamination and were qualified, "U". As there were no detected antimony concentrations no qualifications were made.
- The ICB analyzed 7/30/10 had thallium detected at 0.23ug/L. As there were no detected thallium concentrations associated with this ICB, no qualifications were made
- The CCBs analyzed 7/29/2010 had detected antimony from 0.068 to 0.091ug/L, beryllium from 0.012 to 0.026ug/L, cadmium at 0.039-0.048ug/L, iron from 3.2ug/L to 22.7ug/L and thallium from 0.15ug/L to 0.2ug/L. No additional antimony qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all detected contaminants were >5x the blank contamination.
- The CCBs analyzed 7/30/2010 had detected cadmium at 0.0083-0.017ug/L, iron from 3.5ug/L to 4ug/L and thallium from 0.22ug/L to 0.27ug/L. Contaminants in the calibration blanks did not require qualification of the data as all detected sample results >5x the blank contamination.
- Zinc was detected in the method blank at 6.5ug/L. The zinc results for samples FWGLL2mw-059c-1531-GF, FWGLL2mw-266c-1537-GF, FWGLL3mw-232c-1540-GF, FWGLL3mw-236c-1542-GF and FWGLL3mw-239c-1543-GF were qualified, "B", as the sample results were <5x contamination

No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

CCV Recovery

The CCVs analyzed 7/30/2010 at 1522 and 1624 had recoveries above control limits for beryllium. No qualifications were made as there were no detected beryllium concentrations reported for the bracketed samples.

Mercury - 7470A

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- ICB /CCBs were free from contamination
- The method blank was free from contamination
- The equipment blank was free from contamination
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

No QC outliers were noted.

Cyanide- 9012

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 18, 2010
STL Sample Delivery Group: A0G090540 **Revision:** 0

Nitrate/Nitrite- 353.2

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Data Reviewer:
Date: 8/18/10

2nd Level Data Reviewer:
Date:

SAMPLE SUMMARY

A0G090540

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L31RE	001	FWGTEAM1-TRIP	07/08/10	08:00
L31RG	002	FWGLL3mw-236C-1542-GW	07/08/10	09:15
L31RQ	003	FWGLL3mw-236C-1542-GF	07/08/10	09:15
L31RW	004	FWGLL3mw-232C-1540-GW	07/08/10	11:15
L31R3	005	FWGLL3mw-232C-1540-GF	07/08/10	11:15
L31R5	006	FWGLL4mw-197C-1545-GW	07/08/10	14:15
L31TH	007	FWGLL4mw-197C-1545-GF	07/08/10	14:15
L31TK	008	FWGLL2mw-059C-1531-GW	07/08/10	16:05
L31TL	009	FWGLL2mw-059C-1531-GF	07/08/10	16:05
L31TM	010	FWGLL2mw-060C-1532-GW	07/08/10	17:15
L31TN	011	FWGLL2mw-060C-1532-GF	07/08/10	17:15
L31TP	012	FWGLL2mw-262C-1534-GW	07/09/10	09:15
L31TQ	013	FWGLL2mw-262C-1534-GF	07/09/10	09:15
L31TR	014	FWGLL2mw-263C-1535-GW	07/09/10	10:35
L31TT	015	FWGLL2mw-263C-1535-GF	07/09/10	10:35
L31TV	016	FWGEQUIPRINSE1-1578-GW	07/09/10	11:45
L31TW	017	FWGTEAM2-TRIP	07/08/10	08:00
L31T1	018	FWGLL3mw-234C-1541-GW	07/08/10	09:10
L31T6	019	FWGLL3mw-234C-1541-GF	07/08/10	09:10
L31T7	020	FWGLL3mw-DUP3-1568-GW	07/08/10	10:30
L31T8	021	FWGLL3mw-DUP3-1568-GF	07/08/10	10:30
L31VC	022	FWGLL3mw-239C-1543-GW	07/08/10	12:40
L31VE	023	FWGLL3mw-239C-1543-GF	07/08/10	12:40
L31VG	024	FWGLL4mw-196C-1544-GW	07/08/10	14:14
L31VH	025	FWGLL4mw-196C-1544-GF	07/08/10	14:14
L31VJ	026	FWGSCFmw-006-1520-GW	07/08/10	16:20
L31VK	027	FWGSCFmw-006-1520-GF	07/08/10	16:20
L31VL	028	FWGLL2mw-267C-1565-GW	07/09/10	09:10
L31VQ	029	FWGLL2mw-267C-1565-GF	07/09/10	09:10
L31VR	030	FWGLL2mw-266C-1537-GW	07/09/10	10:20
L31VT	031	FWGLL2mw-266C-1537-GF	07/09/10	10:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica 22
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: Team 1A
Address: 1800 Carillon Blvd	Telephone: 513-825-7500	Telephone: 513-825-7500	Telephone: 3304979396	1 of 2 COCs
City/State/Zip: Cincinnati, OH 45240	Email:			
Phone: 513-825-7500		TAT if different from below: Per SOW ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP	Method of Shipment/Carrier: Lab Pick-up			
Project Number: 30240.0006	Shipping/Tracking No: N/A			
PO# 156660				

Analyses

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Field Filtered	Perform MS/MSD	VOC 8260	SVOL 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470			Sample Specific Notes / Special Instructions: Cooler ID
FWGTeam1-Trip	7-8-10	0800		X						2					N	G	X										
FWGLL3mw-236C-1542-GW	7-8-10	9:15		X						3	1		9		N	G	X	X	X	X	X	X	X				185
FWGLL3mw-236C-1542-GF	7-8-10	9:15		X					1	~~4~~ 3 NL 7-8-10					Y	G								X			185
FWGLL3mw-232C-1540-GW	7-8-10	11:15		X						9	3		27		N	G	X	X	X	X	X	X	X				MS/MSD A-1,313,182
FWGLL3mw-232C-1540-GF	7-8-10	11:15		X					3						Y	G								X			MS/MSD A-1,313,182
FWGLL4mw-197C-1545-GW	7-8-10	14:15		X						3	1		9		N	G	X	X	X	X	X	X	X				C10
FWGLL4mw-197C-1545-~~GW~~ NL 7-8-10 GF	7-8-10	14:15		X					1						Y	G								X			C10
FWGLL2mw-059C-1531-GW	7-8-10	16:05		X						3	1		9		N	G	X	X	X	X	X	X	X				Cletus
FWGLL2mw-059C-1531-GF	7-8-10	16:05		X					1						Y	G								X			Cletus
FWGLL2mw-060C-1532-GW	7-8-10	17:15		X						3	1		9		N	G	X	X	X	X	X	X	X				ASD1

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Metals are field filtered (GF)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	EQM	7-9-10 1420	[signature]	TestAmerica	7/9/10 1420
[signature]	TestAmerica	7/9/10 1540			
			Received in Laboratory by: [signature]	TAL NC	7/9/10 1540

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Temps may not meet requirements if sample collection is close to lab pick up time.
ALL VOAs in cooler C333

TAL-0018 (1008)

North Canton

Chain of Custody Record

TestAmerica 23
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: Team 1B
Address: 1800 Carillon Blvd.	Telephone: 513-825-7500	Telephone: 513-825-7500	Telephone: 330 497 9396	2 of 2 COCs
City/State/Zip: Cincinnati, OH 45240	Email:	Sampler:		
Phone: 513-825-7500		TAT if different from below Per SOW: ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP	Method of Shipment/Carrier: Lab pick-up			
Project Number: 30240-0006	Shipping/Tracking No: N/A			
PO# 15660				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Field Filtered	Lab Filtered	Analyses: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	NO3/NO2 353.2		Sample Specific Notes / Special Instructions:
FWGLL2mw-0160C-1532-GW (ML 7-9-10 F)	7-9-10	17:15		X					X						Y	G								X			ASD1
FWGLL2mw-262C-1534-GW	7/9/10	09:15		X						3	1		9		N	G	X	X	X	X	X	X	X				0411
FWGLL2mw-262F-1534-GF	7/9/10	09:15		X					X						Y	G								X			0411
FWGLL2mw-263C-1535-GW	7/9/10	10:35		X						3	1		9		N	G	X	X	X	X	X	X	X				C333
FWGLL2mw-263C-1535-GF	7/9/10	10:35		X					1						Y	G								X			C333
FWGEQUIPRinse1-1578-GW	7/9/10	11:45		X				1	1	3	1		9		N	G	X	X	X	X	X	X	X	X	X		173 Metals not filtered
							EC		7/9/10																		

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Metals are field filtered

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	EQM	7-9-10 1420	[signature]	TestAmerica	7/9/10 1420
[signature]	TestAmerica	7/9/10 1540			
			Received in Laboratory by: [signature]	TAL NC	7/9/10 1540

Temps may not meet requirements if sample collection is close to lab pick up time
ALL VOAs in cooler C333

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North Canton

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

STL-4124 (0901)

PM Loc = 336183

Client	Project Manager	Date	Chain of Custody Number
EQM	JOHN MILLER	7-8-10	336182
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 2
1800 Carillon Blvd	513 825 7500 (7495)	330479396	
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Cincinnati / OH / 45240	E CORBIN	M LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP Ravenna Ohio	LAB PICK UP 7-9-10		
Contract/Purchase Order/Quote No.			
PN 30240.0006 PO # 15600			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis: VOC	SVOC	Pest	PCB	8260	Rapid Hgmt	Cyanide	Metals	NO2/NO3			Special Instructions/ Conditions of Receipt
																									Cooler ID#
FWGTeam2-Trip	7-8-10	0800		X									2	X											316
FWGLL3mw-234C-1541-GW		910		X			9			3	1			X	X	X	X	X	X	X					E-120
FWGLL3mw-234C-1541-GF				X					1												X				FIELD FILTERED E-120
FWGLL3mw-DUP3-1529-GW		1030		X			9			3	1			X	X	X	X	X	X	X					757
FWGLL3mw-DUP3-1560-GF				X					1												X				FIELD FILTERED 757
FWGLL3mw-239C-1543-GW		1240		X			9			3	1			X	X	X	X	X	X	X					partial cyanide (75%) 465
FWGLL3mw-239C-1580-GF				X					1												X				partial (75%) metal FIELD FILTERED 465
FWGLL4mw-196C-1544-GW		1414		X			9			3	1			X	X	X	X	X	X	X		X[2]			8
FWGLL4mw-196C-1544-GF				X					1												X				Field Filtered 8
FWGSCFmw-006-1520-GW		1620		X			9	1		3	1			X	X	X	X	X	X	X		X			316
FWGSCFmw-006-1520-GF				X					1												X				Field Filtered. 316
——— cont'd on page 2																									

Possible Hazard Identification

[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal

[ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

[ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other person

QC Requirements (Specify)

Metals (GF) are field filtered

1. Relinquished By	Date	Time	1. Received By	Date	Time
Steph Stuteger	7-9-10	1420		7/9/10	1420
2. Relinquished By	**Date**	**Time**	**2. Received By**	**Date**	**Time**
	7/9/10	1540		7/9/10	1540
3. Relinquished By	**Date**	**Time**	**3. Received By**	**Date**	**Time**

Comments

Temps may not meet requirements if sample collection is close to lab pickup. All VOAs in cooler 316

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

AKRON/CANTON PICKUP

Chain of Custody Record

SEVERN TRENT STL

Severn Trent Laboratories, Inc.

25

pg 1 COC = 336182

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
EQM	JOHN MILLER	9-9-10	336183
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page**
1800 CARILLON BLVD	513 825 7500 (7495)	330979396	Page 2 of 2
City / State / Zip Code	**Site Contact**	**Lab Contact**	
CINCINNATI / OH / 45240	E CORBIN	M LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP Ravenna OH	LAB PICK UP 7-9-10		
Contract/Purchase Order/Quote No.			
EQPN 30240.00006. PO 151660			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOC	SVOC	Pest	PCB	Explo	Propellant	Cyanide	Metals	Special Instructions/ Conditions of Receipt
FWGU2mw-2607C-1565-GW	7-9-10	910		X			9			3	1		X	X	X	X	X	X	X		Cooler ID# BB1
FWGU2mw-2607C-1565-GF	7-9-10	910		X					1											X	FIELD FILTERED BB1
FWGU2mw-2606C-1537-GW	7-9-10	1020		X			9			3	1		X	XX	X	XXX					
FWGU2mw-2606C-1537-GF	7-9-10	1020		X					1											X	FIELD FILTERED

Possible Hazard Identification

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other PerSOW

QC Requirements (Specify)

Metals (GF) are field filtered

	Relinquished By	Date	Time	Received By	Date	Time
1.	Stephen Stewart	7-9-10	1420	[signature]	7/9/10	1420
2.	[signature]	7/9/10	1540	[signature]	7/9/10	1540
3.						

Comments

Some temps may not meet requirement if sample time is close to lab pick up time. ALL VOAs in 316 from pg 1 COC.

North Canton

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 440090540
North Canton Facility

Client EQM Project RVAAP By: Maura M
Cooler Received on 7/9/10 Opened on 7/9/10 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other
1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
If YES, Quantity 18 Quantity Unsalvageable
Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
Were custody seals on the bottle(s)? Yes ☐ No ☒
If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt °C See back of form for multiple coolers/temps ☒
METHOD: IR ☒ Other ☐
COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐
Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:
Rec'd 1x250 H_2SO_4 bottle w/ ID FWGEQUIPRinse2-1579-GW @ 11:45 on 7/9/10 not on COC. Will log as FWGEQUIPRinse1-1578-GW per COC.

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample
Receiving to meet recommended pH level(s). *Nitric Acid Lot# 051010-HNO_3; Sulfuric Acid Lot# 121709-H_2SO_4; Sodium Hydroxide Lot# 100108 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
1542 GW	~~>2~~ >12 am 7/9/10	7/9/10	am
1540 GF	~~<2~~ <2 <2 <2		
1542 GF	<2		
1540 GW	>12 >12 >12		
1545 GW	>12		
1545 GF	<2		
1531 GW	>12		
1531 GF	<2		

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A0G090540
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
757	3.8	IR	Wet ice	
4165	2.6			
8	3.3			
316	3.0			
381	2.7			
405	3.8			

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1532 GW	>12	7/9/10	AM
1532 GF	<2		
1534 GW	>12		
1534 GF	<2		
1535 GW	>12		
1535 GF	<2		
Rinse 1 1578 GW	>12		
Rinse 2 1579 GW	~~>12~~ <2 AM 7/9/10		
Rinse 1 1578 GW	<2		
1541 GF	<2		
1541 GW	>12		
1568 GW	>12		
1568 GF	<2		
1543 GW	>12		
1543 GF	<2		
1544 GW	~~>12~~		
1544 GF	<2		
1520 GW	>12 <2		
1520 GF	<2		
1565 GW	>12		
1565 GF	<2		
1537 GW	>12		
1537 GF	<2		

Cooler #	Temp. °C	Method	Coolant
185	4.6	IR	wet ice
A1	3.7		
313	5.9		
182	~~5.~~ 4.2		
C10	0.8		
Cletus	4.6		
ASD1	5.2		
411	2.3		
C333	3.6		
173	5.3		
316	3.0		
E-120	2.9		

Discrepancies Cont'd:

CASE NARRATIVE

A0G090540

The following report contains the analytical results for twenty-nine water samples and two quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 09, 2010, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 02, 2010. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.3 to 5.9° C.

See TestAmerica's Cooler Receipt Form for additional information.

GC/MS VOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

GC/MS SEMIVOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL3mw-232C-1540-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The LCS associated with batch 0191015 had a recovery for Benzoic Acid of 8.8%. No corrective action required per the clients request.

CASE NARRATIVE (continued)

GS/MS SEMIVOLATILES (cont)

All samples, including the Method Blank and LCS, had a recovery for 2-fluorophenol below acceptance criteria, but above 10%. Additionally, sample FWGTEAM1-TRIP had all three acid surrogates and BN surrogate 2-fluorobiphenyl below acceptance criteria, but above 10%, and sample FWGLLmw-234C-1514-GW had 2 acid surrogates and BN suurogate 2-fluorobiphenyl below acceptance criteria but above 10%. Since LCG criterion is that all surrogates be above 10%, no corrective action is required.

PESTICIDES-8081

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

For sample(s) the LCS associated with batch 0191010 and FWGLL2mw-266C-1537-GW the recovery for one surrogate compound is outside acceptance criteria. Since the LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit but above 10%)

The opening CCV passed average but failed Alpha BHC, Gamma BHC, Beta-BHC, Delta BHC, Aldrin, alpha chlordane, gamma chlordane and DDE biased high for samples FWGLL3mw-236C-1542-GW, FWGLL3mw-232C-1540-GW, FWGLL4mw-197C-1545-GW, FWGLL2mw-059C-1531-GW, FWGLL2mw-060C-1532-GW, FWGLL2mw-262C-1534-GW, FWGLL2mw-263C-1535-GW, FWGEQUIPRINSE1-1578-GW, FWGLL3mw-234C-1541-GW, FWGLL3mw-DUP3-1568-GW, FWGLL3mw-239C-1543-GW, FWGLL4mw-196C-1544-GW, FWGSCFmw-006-1520-GW, FWGLL2mw-267C-1565-GW, and FWGLL2mw-266C-1537-GW. Since the samples were non-detect or J-flag hits, no corrective action is necessary.

POLYCHLORINATED BIPHENYLS-8082

For sample(s) the LCS associated with batch 0191011 and FWGLL2mw-266C-1537-GW the recovery for one surrogate compound is outside acceptance criteria. The surrogate was below acceptance limit but above 10%. Since the LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required.

CASE NARRATIVE (continued)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analyte(s).

The CCV associated with samples FWGLL2mw-267C-1565-GF and FWGLL2mw-266C-1537-GF exceeded method criteria on the high side for Beryllium. Since the sample result(s) was/were below the requested reporting limit the result(s) was/were accepted.

GENERAL CHEMISTRY

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

MANUAL INTEGRATION SUMMARY

Lot A0G090540

Client ID: FWGLL3mw-232C-1540-
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 037F3701.D
Inj. Date and Time: 22-JUL-2010 19:34
Manual Integration Reason: Split Peak

Client ID: FWGLL3mw-232C-1540-
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 038F3801.D
Inj. Date and Time: 22-JUL-2010 19:49
Manual Integration Reason: Split Peak

Client ID: FWGLL3mw-239C-1543-
Compound Name: alpha-BHC
Instrument ID: a2hp9.i
File Name: 057F5701.D
Inj. Date and Time: 21-JUL-2010 05:02
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 054F5401.D
Inj. Date and Time: 22-JUL-2010 23:46
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: 1,4-Dioxane
Instrument ID: a4hp9.i
File Name: L31911AC.D
Inj. Date and Time: 14-JUL-2010 11:07
Manual Integration Reason: Poor Chromatography

Client ID: INTRA-LAB CHECK
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: L31911AC.D
Inj. Date and Time: 14-JUL-2010 11:07
Manual Integration Reason: Peak not found

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.3 – 5.9 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3.3
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-3
7. Was the GC/MS system tuned with bromofluorobenzene (BFB)?	✓				LCG Table 1
8. Was the criteria met during each 12 hour shift (prior to ICAL and Cal Ver.)?	✓				SW846 8260B 7.3.1
9. Did the initial calibration curve consist of 5 concentration levels?	✓			Instrument A3UX11 – 6/17/10 stds – 5, 10, 25, 50, 100, 200 ng on column	LCG Table 1 R
10. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviations (%RSD) ≤ 30%?	✓				LCG Table 1 R
11. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 1
12. Were all other target analytes ≤ 15% RSD? OR Was the average RSD ≤ 15%? Was a different calibration option used?	✓			Acetone, trans-1,3-dichloropropene, dibromochloromethane and bromoform used weighted linear curves.	LCG Table 1 15% <RSD< 20% = J/UJ
13. If a linear regression curve was used, was the correlation coefficient r≥0.99?	✓			All correlation coefficients were ≥0.99. No qualifications were made since the correlation coefficients were acceptable.	LCG Table 1 R<0.99=-J/R
14. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/21/10 @1907	LCG Table 1 R
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Were the QC/MRL recoveries 70-130%?		✓		The opening MRL check analyzed 7/21/10 at 1028 had methylene chloride recover above limits at 160% and bromoform at 164%. The closing MRL check analyzed 7/21/10 at 1845 had methylene chloride recover above limits at 160% and bromoform at 154%. The methylene chloride result for FWGEQUIPRINSE-1-1578-GW was qualified as estimated, "J".	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed after the ICAL? Were results 80-120%?	✓			6/17/10 @ 1442	LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
18. Was a CCV run every 12 hours?	✓			7/21/10 @0919	LCG Table 1
19. Did the CCCs have a %Difference < 20%?	✓				LCG Table 1
20. Were the minimum RFs for the SPCCs within limits?	✓				LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓				LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1
26. Were target analytes detected in the method blank >1/2 the MRL?		✓		Checked by ADR. Methylene chloride was detected in the method blank at 0.65ug/L. Sample FWGEQUIPRinse1-1578-GW was qualified,"B".	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse1-1578-GW	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGEQUIPRinse1-1578-GW had 2-butanone detected at 24ug/L, acetone at 36ug/L, m&p-xylenes at 0.35ug/L, methylene chloride at 1.0ug/L, o-xylene at 0.14ug/L, toluene at 0.87ug/L and total xlenes at 0.49 ug/L. • The trip blanks had acetone contamination detected from 1.6-1.8ug/L. The acetone results for samples FWGLL2mw-266c-1537-GW and FWGSCFmw-006-1520-GW were qualified, "B" as the results were <10x the equipment rinse and trip blank contamination. As there were no detected concentrations of the other blank contaminants, no additional qualifications were made.	<5/10X =B
29. Was a field duplicate analyzed?	✓			Sample FWGLL3mw-DUP3-1568-GW was the field duplicate for sample FWGLL3mw-234c-1541-GW.	
30. Were the Field duplicates RPDs within ±30%?	✓			ADR checked section;	QAPP Table 3-2 RPD >30=J
31. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 1
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?	✓			ADR checked section;	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent sample a Ravenna sample?	✓			Sample FWGLL3mw-232c-1540-GW was the parent MS/MSD sample from this SDG.	
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?	✓			ADR checked section.	LCG Table 1 Pj
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% -50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G090540-001 **Work Order #...:** L31RE1AA **Matrix.....:** WQ
Date Sampled...: 07/08/10 08:00 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.8 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G090540-001 **Work Order #...:** L31RE1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-002 **Work Order #...:** L31RG1AA **Matrix.....:** WG
Date Sampled...: 07/08/10 09:15 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-002 Work Order #...: L31RG1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-004 **Work Order #...:** L31RW1AA **Matrix.....:** WG
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-004 Work Order #...: L31RW1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	98	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-006 Work Order #...: L31R51AA Matrix.....: WG
Date Sampled...: 07/08/10 14:15 Date Received..: 07/09/10
Prep Date.....: 07/21/10 Analysis Date..: 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-006 **Work Order #...:** L31R51AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-008 **Work Order #...:** L31TK1AA **Matrix.....:** WG
Date Sampled...: 07/08/10 16:05 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-008 Work Order #...: L31TK1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-010	**Work Order #...:** L31TM1AA	**Matrix.....:** WG	
Date Sampled...: 07/08/10 17:15	**Date Received..:** 07/09/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/21/10		
Prep Batch #...: 0202112			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-010 Work Order #...: L31TM1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	101	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-012 **Work Order #...:** L31TP1AA **Matrix.....:** WG
Date Sampled...: 07/09/10 09:15 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-012 **Work Order #...:** L31TP1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	98	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-014	**Work Order #...:** L31TR1AA	**Matrix.....:** WG	
Date Sampled...: 07/09/10 10:35	**Date Received..:** 07/09/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/21/10		
Prep Batch #...: 0202112			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-014 **Work Order #...:** L31TR1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	98	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-016 **Work Order #...:** L31TV1AA **Matrix.....:** WQ
Date Sampled...: 07/09/10 11:45 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	**0.14 J**	**1.0**	**ug/L**	**0.14**
m-Xylene & p-Xylene	**0.35 J**	**2.0**	**ug/L**	**0.24**
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	**1.0 J,B**	**2.0**	**ug/L**	**0.33**
Acetone	**36**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**24**	**10**	**ug/L**	**0.57**
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	**0.87 J**	**1.0**	**ug/L**	**0.13**
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-016 Work Order #...: L31TV1AA Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	**0.49 J**	**2.0**	**ug/L**	**0.28**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	88	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G090540-017 **Work Order #...:** L31TW1AA **Matrix.....:** WQ
Date Sampled...: 07/08/10 08:00 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.6 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G090540-017 **Work Order #...:** L31TW1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	99	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-018 **Work Order #...:** L31T11AA **Matrix.....:** WG
Date Sampled...: 07/08/10 09:10 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-018 Work Order #...: L31T11AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	98	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-020 **Work Order #...:** L31T71AA **Matrix.....:** WG
Date Sampled...: 07/08/10 10:30 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-020 **Work Order #...:** L31T71AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	99	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-022 **Work Order #...:** L31VC1AA **Matrix.....:** WG
Date Sampled...: 07/08/10 12:40 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	**0.52 J**	**1.0**	**ug/L**	**0.16**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	**0.37 J**	**1.0**	**ug/L**	**0.13**
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-022 **Work Order #...:** L31VC1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	100	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-024	**Work Order #...:** L31VG1AA	**Matrix.....:** WG	
Date Sampled...: 07/08/10 14:14	**Date Received..:** 07/09/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/21/10		
Prep Batch #...: 0202112			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-024 **Work Order #...:** L31VG1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	101	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-026 **Work Order #...:** L31VJ1AA **Matrix.....:** WG
Date Sampled...: 07/08/10 16:20 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**4.9 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-026 Work Order #...: L31VJ1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	103	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-028	**Work Order #...:** L31VL1AA	**Matrix.....:** WG	
Date Sampled...: 07/09/10 09:10	**Date Received..:** 07/09/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/21/10		
Prep Batch #...: 0202112			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-028 **Work Order #...:** L31VL1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	104	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-030 **Work Order #...:** L31VR1AA **Matrix.....:** WG
Date Sampled...: 07/09/10 10:20 **Date Received..:** 07/09/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**2.5 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GW

GC/MS Volatiles

Lot-Sample #...: A0G090540-030 Work Order #...: L31VR1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	100	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	80	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G090540 **Work Order #...:** L4F2K1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G210000-112

Prep Date.....: 07/21/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/21/10 **Prep Batch #...:** 0202112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	**0.65 J**	**2.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G090540 **Work Order #...:** L4F2K1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G090540 Work Order #...: L4F2K1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G210000-112 L4F2K1AD-LCSD
Prep Date.....: 07/21/10 Analysis Date..: 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	100	(73 - 133)			SW846 8260B
	104	(73 - 133)	4.4	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	105	(75 - 134)			SW846 8260B
	110	(75 - 134)	4.5	(0-30)	SW846 8260B
1,2-Dibromoethane	99	(75 - 127)			SW846 8260B
	104	(75 - 127)	5.1	(0-30)	SW846 8260B
Bromochloromethane	99	(75 - 127)			SW846 8260B
	104	(75 - 127)	5.5	(0-30)	SW846 8260B
m-Xylene & p-Xylene	101	(75 - 122)			SW846 8260B
	104	(75 - 122)	3.2	(0-30)	SW846 8260B
o-Xylene	102	(75 - 118)			SW846 8260B
	106	(75 - 118)	3.8	(0-30)	SW846 8260B
Chloromethane	78	(58 - 135)			SW846 8260B
	78	(58 - 135)	0.94	(0-30)	SW846 8260B
Bromomethane	96	(35 - 153)			SW846 8260B
	97	(35 - 153)	1.4	(0-30)	SW846 8260B
Vinyl chloride	75	(73 - 134)			SW846 8260B
	73	(73 - 134)	3.2	(0-30)	SW846 8260B
Chloroethane	92	(72 - 129)			SW846 8260B
	92	(72 - 129)	0.20	(0-30)	SW846 8260B
Methylene chloride	98	(69 - 118)			SW846 8260B
	102	(69 - 118)	4.6	(0-30)	SW846 8260B
Acetone	106	(51 - 157)			SW846 8260B
	107	(51 - 157)	0.88	(0-30)	SW846 8260B
Carbon disulfide	122	(74 - 123)			SW846 8260B
	122	(74 - 123)	0.29	(0-30)	SW846 8260B
1,1-Dichloroethene	105	(75 - 125)			SW846 8260B
	102	(75 - 125)	2.9	(0-30)	SW846 8260B
1,1-Dichloroethane	109	(75 - 133)			SW846 8260B
	112	(75 - 133)	2.7	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	102	(85 - 111)			SW846 8260B
	107	(85 - 111)	4.5	(0-30)	SW846 8260B
Chloroform	104	(74 - 127)			SW846 8260B
	109	(74 - 127)	5.1	(0-30)	SW846 8260B
1,2-Dichloroethane	109	(67 - 132)			SW846 8260B
	114	(67 - 132)	4.1	(0-30)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G090540 Work Order #...: L4F2K1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G210000-112 L4F2K1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	103	(45 - 150)			SW846 8260B
	102	(45 - 150)	1.3	(0-30)	SW846 8260B
1,1,1-Trichloroethane	100	(70 - 127)			SW846 8260B
	101	(70 - 127)	0.29	(0-30)	SW846 8260B
Carbon tetrachloride	104	(71 - 132)			SW846 8260B
	99	(71 - 132)	4.8	(0-30)	SW846 8260B
Bromodichloromethane	111	(70 - 130)			SW846 8260B
	116	(70 - 130)	3.8	(0-30)	SW846 8260B
1,2-Dichloropropane	105	(75 - 127)			SW846 8260B
	111	(75 - 127)	5.4	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	105	(73 - 132)			SW846 8260B
	110	(73 - 132)	4.4	(0-30)	SW846 8260B
Trichloroethene	94	(67 - 128)			SW846 8260B
	99	(67 - 128)	4.5	(0-30)	SW846 8260B
Dibromochloromethane	104	(74 - 145)			SW846 8260B
	110	(74 - 145)	4.9	(0-30)	SW846 8260B
1,1,2-Trichloroethane	102	(75 - 136)			SW846 8260B
	107	(75 - 136)	4.9	(0-30)	SW846 8260B
Benzene	103	(75 - 126)			SW846 8260B
	108	(75 - 126)	4.1	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	104	(74 - 131)			SW846 8260B
	109	(74 - 131)	4.9	(0-30)	SW846 8260B
Bromoform	113	(72 - 136)			SW846 8260B
	114	(72 - 136)	1.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	109	(59 - 150)			SW846 8260B
	109	(59 - 150)	0.11	(0-30)	SW846 8260B
2-Hexanone	109	(53 - 139)			SW846 8260B
	108	(53 - 139)	0.51	(0-30)	SW846 8260B
Tetrachloroethene	95	(75 - 129)			SW846 8260B
	96	(75 - 129)	1.5	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	103	(68 - 129)			SW846 8260B
	103	(68 - 129)	0.13	(0-30)	SW846 8260B
Toluene	100	(75 - 125)			SW846 8260B
	105	(75 - 125)	5.1	(0-30)	SW846 8260B
Chlorobenzene	97	(75 - 127)			SW846 8260B
	101	(75 - 127)	4.2	(0-30)	SW846 8260B
Ethylbenzene	99	(75 - 120)			SW846 8260B
	103	(75 - 120)	4.4	(0-30)	SW846 8260B
Styrene	102	(75 - 130)			SW846 8260B
	108	(75 - 130)	5.2	(0-30)	SW846 8260B
Xylenes (total)	101	(90 - 114)			SW846 8260B
	104	(90 - 114)	3.4	(0-30)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G090540 **Work Order #...:** L4F2K1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0G210000-112 L4F2K1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
	92	(50 - 150)
1,2-Dichloroethane-d4	100	(50 - 150)
	99	(50 - 150)
Toluene-d8	94	(50 - 150)
	94	(50 - 150)
4-Bromofluorobenzene	97	(50 - 150)
	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G090540 Work Order #...: L31RW1AG-MS Matrix.....: WG
MS Lot-Sample #: A0G090540-004 L31RW1AH-MSD
Date Sampled...: 07/08/10 11:15 Date Received..: 07/09/10
Prep Date.....: 07/21/10 Analysis Date..: 07/21/10
Prep Batch #...: 0202112
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	95	(70 - 130)			SW846 8260B
	97	(70 - 130)	2.0	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	103	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.87	(0-30)	SW846 8260B
1,2-Dibromoethane	96	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.7	(0-30)	SW846 8260B
Bromochloromethane	95	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.3	(0-30)	SW846 8260B
m-Xylene & p-Xylene	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.8	(0-30)	SW846 8260B
o-Xylene	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.84	(0-30)	SW846 8260B
Chloromethane	77	(70 - 130)			SW846 8260B
	77	(70 - 130)	0.01	(0-30)	SW846 8260B
Bromomethane	91	(70 - 130)			SW846 8260B
	93	(70 - 130)	1.8	(0-30)	SW846 8260B
Vinyl chloride	74	(70 - 130)			SW846 8260B
	74	(70 - 130)	0.29	(0-30)	SW846 8260B
Chloroethane	91	(70 - 130)			SW846 8260B
	90	(70 - 130)	1.1	(0-30)	SW846 8260B
Methylene chloride	91	(70 - 130)			SW846 8260B
	90	(70 - 130)	0.79	(0-30)	SW846 8260B
Acetone	106	(70 - 130)			SW846 8260B
	96	(70 - 130)	9.3	(0-30)	SW846 8260B
Carbon disulfide	121	(70 - 130)			SW846 8260B
	121	(70 - 130)	0.65	(0-30)	SW846 8260B
1,1-Dichloroethene	107	(70 - 130)			SW846 8260B
	107	(70 - 130)	0.45	(0-30)	SW846 8260B
1,1-Dichloroethane	106	(70 - 130)			SW846 8260B
	107	(70 - 130)	0.19	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.50	(0-30)	SW846 8260B
Chloroform	100	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.3	(0-30)	SW846 8260B
1,2-Dichloroethane	105	(70 - 130)			SW846 8260B
	103	(70 - 130)	1.3	(0-30)	SW846 8260B
2-Butanone	99	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.1	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G090540 Work Order #...: L31RW1AG-MS Matrix.....: WG
MS Lot-Sample #: A0G090540-004 L31RW1AH-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.31	(0-30)	SW846 8260B
Carbon tetrachloride	102	(70 - 130)			SW846 8260B
	104	(70 - 130)	1.9	(0-30)	SW846 8260B
Bromodichloromethane	105	(70 - 130)			SW846 8260B
	106	(70 - 130)	0.61	(0-30)	SW846 8260B
1,2-Dichloropropane	103	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.1	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	95	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.0	(0-30)	SW846 8260B
Trichloroethene	92	(70 - 130)			SW846 8260B
	93	(70 - 130)	2.1	(0-30)	SW846 8260B
Dibromochloromethane	99	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.7	(0-30)	SW846 8260B
1,1,2-Trichloroethane	97	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.9	(0-30)	SW846 8260B
Benzene	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.87	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.58	(0-30)	SW846 8260B
Bromoform	104	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.24	(0-30)	SW846 8260B
4-Methyl-2-pentanone	104	(70 - 130)			SW846 8260B
	104	(70 - 130)	0.60	(0-30)	SW846 8260B
2-Hexanone	107	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.9	(0-30)	SW846 8260B
Tetrachloroethene	96	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.4	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	97	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.17	(0-30)	SW846 8260B
Toluene	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.4	(0-30)	SW846 8260B
Chlorobenzene	93	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.56	(0-30)	SW846 8260B
Ethylbenzene	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.53	(0-30)	SW846 8260B
Styrene	97	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.68	(0-30)	SW846 8260B
Xylenes (total)	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.5	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G090540 **Work Order #...:** L31RW1AG-MS **Matrix.....:** WG
MS Lot-Sample #: A0G090540-004 L31RW1AH-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
	92	(50 - 150)
1,2-Dichloroethane-d4	100	(50 - 150)
	97	(50 - 150)
Toluene-d8	93	(50 - 150)
	92	(50 - 150)
4-Bromofluorobenzene	99	(50 - 150)
	95	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00721A.b\UXJ0907.D
Report Date: 22-Jul-2010 08:03

TestAmerica North Canton

RECOVERY REPORT

7/21/10 @ 1845

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 2-8260.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00721A.b\8260LLUX11.m
Misc Info: J00721A,8260LLUX11,,43582

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.107	110.66	70-130
	42	Trichloroethene	1.000	0.9972	99.72	70-130
	59	Chlorobenzene	1.000	0.9858	98.58	70-130
	50	Toluene	1.000	1.101	110.14	70-130
	41	Benzene	1.000	1.071	107.15	70-130
	16	Acetone	2.000	2.092	104.60	70-130
	20	Carbon Disulfide	1.000	1.078	107.77	70-130
	9	Chloromethane	1.000	0.8765	87.65	70-130
	11	Bromomethane	1.000	1.138	113.76	70-130
	10	Vinyl Chloride	1.000	0.8786	87.86	70-130
	12	Chloroethane	1.000	1.286	128.57	70-130
	21	Methylene Chloride	1.000	1.604	160.46*	70-130
	28	1,1-Dichloroethane	1.000	1.141	114.15	70-130
M	31	1,2-Dichloroethene	2.000	2.002	100.10	70-130
	35	Chloroform	1.000	1.154	115.45	70-130
	40	1,2-Dichloroethane	1.000	1.220	122.05	70-130
	30	2-Butanone	2.000	2.521	126.07	70-130
	37	1,1,1-Trichloroeth	1.000	1.091	109.10	70-130
	39	Carbon Tetrachlori	1.000	0.9889	98.89	70-130
	46	Bromodichlorometha	1.000	1.110	111.05	70-130
	43	1,2-Dichloropropan	1.000	1.063	106.26	70-130
	48	cis-1,3-Dichloropr	1.000	0.8750	87.50	70-130
	54	1,3-Dichloropropan	1.000	1.044	104.39	70-130
	57	Dibromochlorometha	1.000	1.184	118.45	70-130
	53	1,1,2-Trichloroeth	1.000	1.060	106.03	70-130
	51	trans-1,3-Dichloro	1.000	1.141	114.11	70-130
	49	4-Methyl-2-pentano	2.000	1.804	90.21	70-130
	56	2-Hexanone	2.000	1.934	96.71	70-130
	55	Tetrachloroethene	1.000	0.9757	97.57	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.088	108.81	70-130
	66	Bromoform	1.000	1.536	153.63*	70-130
	61	Ethylbenzene	1.000	0.8398	83.98	70-130
	65	Styrene	1.000	0.7648	76.48	70-130
M	63	Xylenes (total)	3.000	2.447	81.57	70-130
	32	cis-1,2-dichloroet	1.000	0.9498	94.98	70-130
	25	trans-1,2-Dichloro	1.000	1.052	105.21	70-130
	8	Dichlorodifluorome	1.000	0.8116	81.16	70-130
	13	Trichlorofluoromet	1.000	1.084	108.36	70-130

70	1,2,3-Trichloropro	1.000	1.182	118.23	70-130
18	Freon-113	1.000	1.201	120.09	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00721A.b\UXJ0907.D
Report Date: 22-Jul-2010 08:03

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.9172	91.72	70-130
58 1,2-Dibromoethane	1.000	1.043	104.27	70-130
67 Isopropylbenzene	1.000	0.7230	72.30	70-130
80 1,3-Dichlorobenzen	1.000	0.9102	91.03	70-130
81 1,4-Dichlorobenzen	1.000	1.003	100.27	70-130
83 1,2-Dichlorobenzen	1.000	0.9679	96.79	70-130
84 1,2-Dibromo-3-chlo	1.000	0.9635	96.35	70-130
85 1,2,4-Trichloroben	1.000	1.023	102.27	70-130
98 Cyclohexane	1.000	0.7749	77.49	70-130
143 Methyl Acetate	2.000	2.478	123.92	70-130
144 Methylcyclohexane	1.000	0.7306	73.06	70-130
71 Bromobenzene	1.000	0.9226	92.26	70-130
34 Bromochloromethane	1.000	1.078	107.80	70-130
82 n-Butylbenzene	1.000	0.6854	68.54*	70-130
78 sec-Butylbenzene	1.000	0.7475	74.75	70-130
76 tert-Butylbenzene	1.000	0.7321	73.21	70-130
73 2-Chlorotoluene	1.000	0.9171	91.71	70-130
75 4-Chlorotoluene	1.000	0.8375	83.75	70-130
45 Dibromomethane	1.000	1.071	107.08	70-130
33 2,2-Dichloropropan	1.000	0.8903	89.03	70-130
38 1,1-Dichloropropen	1.000	0.9585	95.85	70-130
86 Hexachlorobutadien	1.000	1.348	134.85*	70-130
19 Iodomethane	1.000	0.8344	83.44	70-130
79 4-Isopropyltoluene	1.000	0.6924	69.24*	70-130
87 Naphthalene	1.000	0.9537	95.37	70-130
72 n-Propylbenzene	1.000	0.7641	76.41	70-130
60 1,1,1,2-Tetrachlor	1.000	0.9650	96.50	70-130
88 1,2,3-Trichloroben	1.000	0.9076	90.76	70-130
77 1,2,4-Trimethylben	1.000	0.7048	70.49	70-130
74 1,3,5-Trimethylben	1.000	0.7544	75.44	70-130
150 Vinyl Acetate-86	1.000	0.4970	49.70*	70-130
62 m + p-Xylene	2.000	1.646	82.29	70-130
64 Xylene-o	1.000	0.8014	80.14	70-130
49 4-Methyl-2-pentano	2.000	1.804	90.21	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.782	97.82	73-122
$ 5 1,2-Dichloroethane	10.000	10.128	101.28	61-128
$ 6 Toluene-d8	10.000	9.318	93.18	76-110
$ 7 Bromofluorobenzene	10.000	9.041	90.41	74-116

7/21/10
@ 1028

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00721A.b\UXJ0885.D
Report Date: 21-Jul-2010 10:50

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 2-8260.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00721A.b\8260LLUX11.m
Misc Info: J00721A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.030	102.96	70-130
	42	Trichloroethene	1.000	1.006	100.57	70-130
	59	Chlorobenzene	1.000	1.051	105.14	70-130
	50	Toluene	1.000	1.155	115.53	70-130
	41	Benzene	1.000	1.055	105.49	70-130
	16	Acetone	2.000	2.104	105.19	70-130
	20	Carbon Disulfide	1.000	1.153	115.33	70-130
	9	Chloromethane	1.000	0.9629	96.29	70-130
	11	Bromomethane	1.000	1.114	111.36	70-130
	10	Vinyl Chloride	1.000	0.8737	87.37	70-130
	12	Chloroethane	1.000	1.245	124.51	70-130
	21	Methylene Chloride	1.000	1.596	159.63*	70-130
	28	1,1-Dichloroethane	1.000	1.163	116.27	70-130
M	31	1,2-Dichloroethene	2.000	2.075	103.77	70-130
	35	Chloroform	1.000	1.125	112.52	70-130
	40	1,2-Dichloroethane	1.000	1.145	114.52	70-130
	30	2-Butanone	2.000	2.663	133.15*	70-130
	37	1,1,1-Trichloroeth	1.000	1.046	104.58	70-130
	39	Carbon Tetrachlori	1.000	0.9931	99.31	70-130
	46	Bromodichlorometha	1.000	1.047	104.72	70-130
	43	1,2-Dichloropropan	1.000	1.085	108.53	70-130
	48	cis-1,3-Dichloropr	1.000	0.9390	93.90	70-130
	54	1,3-Dichloropropan	1.000	1.046	104.66	70-130
	57	Dibromochlorometha	1.000	1.210	121.02	70-130
	53	1,1,2-Trichloroeth	1.000	1.054	105.44	70-130
	51	trans-1,3-Dichloro	1.000	1.217	121.69	70-130
	49	4-Methyl-2-pentano	2.000	1.944	97.20	70-130
	56	2-Hexanone	2.000	1.948	97.42	70-130
	55	Tetrachloroethene	1.000	1.024	102.40	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.126	112.58	70-130
	66	Bromoform	1.000	1.641	164.07*	70-130
	61	Ethylbenzene	1.000	0.8812	88.13	70-130
	65	Styrene	1.000	0.8279	82.79	70-130
M	63	Xylenes (total)	3.000	2.644	88.12	70-130
	32	cis-1,2-dichloroet	1.000	0.9816	98.16	70-130
	25	trans-1,2-Dichloro	1.000	1.094	109.37	70-130
	8	Dichlorodifluorome	1.000	0.8255	82.55	70-130
	13	Trichlorofluoromet	1.000	1.059	105.91	70-130

70	1,2,3-Trichloropro	1.000	1.246	124.61	70-130
18	Freon-113	1.000	0.9960	99.60	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00721A.b\UXJ0885.D
Report Date: 21-Jul-2010 10:50

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.9497	94.97	70-130
58 1,2-Dibromoethane	1.000	0.9549	95.49	70-130
67 Isopropylbenzene	1.000	0.8108	81.09	70-130
80 1,3-Dichlorobenzen	1.000	0.9932	99.32	70-130
81 1,4-Dichlorobenzen	1.000	1.031	103.10	70-130
83 1,2-Dichlorobenzen	1.000	1.016	101.55	70-130
84 1,2-Dibromo-3-chlo	1.000	1.064	106.37	70-130
85 1,2,4-Trichloroben	1.000	1.176	117.57	70-130
98 Cyclohexane	1.000	0.9197	91.97	70-130
143 Methyl Acetate	2.000	2.364	118.19	70-130
144 Methylcyclohexane	1.000	0.8391	83.91	70-130
71 Bromobenzene	1.000	0.0000	*	70-130
34 Bromochloromethane	1.000	0.9639	96.39	70-130
82 n-Butylbenzene	1.000	0.8472	84.72	70-130
78 sec-Butylbenzene	1.000	0.8261	82.61	70-130
76 tert-Butylbenzene	1.000	0.7901	79.01	70-130
73 2-Chlorotoluene	1.000	0.9132	91.32	70-130
75 4-Chlorotoluene	1.000	0.9594	95.94	70-130
45 Dibromomethane	1.000	1.038	103.79	70-130
33 2,2-Dichloropropan	1.000	0.9544	95.44	70-130
38 1,1-Dichloropropen	1.000	0.9946	99.47	70-130
86 Hexachlorobutadien	1.000	1.748	174.76*	70-130
19 Iodomethane	1.000	0.8669	86.69	70-130
79 4-Isopropyltoluene	1.000	0.8172	81.72	70-130
87 Naphthalene	1.000	1.092	109.23	70-130
72 n-Propylbenzene	1.000	0.8957	89.57	70-130
60 1,1,1,2-Tetrachlor	1.000	0.9608	96.08	70-130
88 1,2,3-Trichloroben	1.000	1.053	105.28	70-130
77 1,2,4-Trimethylben	1.000	0.8173	81.73	70-130
74 1,3,5-Trimethylben	1.000	0.8244	82.44	70-130
150 Vinyl Acetate-86	1.000	0.8704	87.04	70-130
62 m + p-Xylene	2.000	1.746	87.32	70-130
64 Xylene-o	1.000	0.8971	89.71	70-130
49 4-Methyl-2-pentano	2.000	1.944	97.20	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.343	93.43	73-122
$ 5 1,2-Dichloroethane	10.000	9.535	95.35	61-128
$ 6 Toluene-d8	10.000	9.309	93.09	76-110
$ 7 Bromofluorobenzene	10.000	9.149	91.49	74-116

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.3-5.9 °C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP9-7/13/2010 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 2 R
12. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviation (%RSD) ≤ 30%?	✓				LCG Table 2 R
13. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 2 R
14. Was each target analyte <15 % RSD, or was the average RSD <15%?	✓				LCG Table 2 15% <RSD< 30% = J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			Benzoic acid, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol and pentachlorophenol used a quadratic fit. No qualifications were made as coefficients of determination (COD)(r) were≥0.99.	LCG Table 2 r<0.99=-J/R
16. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			6/8/10	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓			7/14/10 @1028, 7/14/10 @1007	LCG Table 2
18. Were the QC/MRL recoveries 70-130%?	✓				LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			7/13/10 @ 1718	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?	✓			7/14/10 @1007	LCG Table 2
21. Was the percent difference (% D) for the CCCs ≤ 20%? (see Table 1) (% drift if regression fit model used)	✓				LCG Table 2
22. Were the minimum RFs for the SPCCs met? (see Table 2)	✓				LCG Table 2
23. Was the %Difference or %Drift ≤20% for all target analytes? OR was the average %D ≤20% with no individual analyte ≥30%D?	✓				LCG Table 2 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>30% (neg) = J/R D>30% (pos) = J
24. Were the internal standards added to every sample?	✓				LCG Table 2

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
25. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point ICAL std?	✓				LCG Table 2 R
26. Did the areas of all IS compounds vary by no more than -50% to +100% from the ICAL EICP area?	✓				LCG Table 2 R
27. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 2
28. Were all target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. bis(2-Ethylhexyl) phthalate was detected in the method blank at 2.3ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate <5x contamination were qualified, "B". See Appendix 1 for list of impacted samples.	LCG Table 2 <5/10x blank = B
29. Was a field blank collected and analyzed?	✓				
30. Were all target analytes in the field blank analysis <1/2 the MRL?		✓		Checked by ADR. FWGEQUIPRinse1-1578-GW had detected concentrations of bis(2-eEthylhexyl) phthalate at 1.3ug/L, benzyl alcohol at 0.41ug/L and diethyl phthalate at 0.60ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate and benzyl alcohol <5x contamination were qualified, "B". See Appendix 1 for list of impacted samples. No qualifications were made for diethyl phthalate contamination as there were no detected concentrations of this contaminant in the associated samples.	<5/10x blank = B
31. Was a field duplicate analyzed?	✓			Sample FWGLL3mw-DUP3-1568-GW was the field duplicate for sample FWGLL3mw-234c-1541-GW.	
32. Were the field duplicate RPDs ≤30%?	✓			Checked by ADR. Only detected sample results were evaluatedthe duplicate RPD was above control limits for bis(2-ethylhexyl)phthalate, benzyl alcohol and di-n-butyl phthalate at 200%. Detected bis (2-ethylhexyl) phthalate, benzyl alcohol and di-n-butyl phthalate results for samples FWGLL3mw-DUP3-1568-GW and FWGLL3mw-234c-1541-GW were qualified as estimated, "J".	QAPP Table 3-2 RPD >30=J
33. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 2
34. Were the LCS recoveries within limits specified in LCG Appendix C?		✓		Checked by ADR. The LCS recovered below control limits of 10% at 9%. The benzoic acid results were qualified as estimated, "J/UJ".	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
35. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 2

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
36. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL3mw-232c-1540-GW was the parent MS/MSD sample from this SDG.	
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		The MS and MSD recovered below control limits for 3,3'-dichorobenzidine at 12%, hexachlorobutadiene at 31% and 41%, and n-nitrosodiphenylamine at 31 and 33%. The MS recovered below control limits for 1,2-dichlorobenzene at 44% with and RPD of 23%, 1,3-dichorobenzene recovered at 39% with an RPD of 28%, hexachlorocyclopentadiene recovered at 44% and hexachloroethane recovered at 31% with and RPD of 37%. No qualifications were made for these outliers as the associated LCS recovered within limits.	LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?		✓		2-Fluorophenol recovered below control limits for all samples but above 10%. No qualification was made based solely on the 2-fluorophenol outliers as LCG allows for one surrogate from each fraction to be below control limits without qualification. Additionally, in sample FWGLL3mw-236c-1542-GW, 2,4,6-tribromophenol recovered below limits at 35%, phenol-d5 at 32% and 2-fluorobiphenyl at 46%. The acid targets for FWGLL3mw-236c-1542-GW were qualified as estimated, "J/UJ". For sample FWGLL3mw-234c-1541-GW, phenol-d5 recovered below limits at 45% and 2-fluorobiphenyl at 49%. The acid targets for FWGLL3mw-234c-1541-GW were qualified as estimated, "J/UJ".	LCG Table 2 >150%=J; 10% -50%=J/UJ; <10%=J/R
39. Were reported sample concentrations within calibration range?	✓				
40. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
41. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding MS outliers and surrogate outliers. The surrogate outliers portion of the narrative incorrectly lists FWGTeam1-Trip as having multiple outliers instead of FWGLL3mw-236c-1542-GW.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 2 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8270C (including PAHs)

Table 1: CCCs *(All analytes if CCCs not included in standard)*

Base / Neutral Compunds	Acid Compounds
Acenaphthalene	4-Chloro-3-methylphenol
1,4-Dichlorobenzene	2,4-Dichlorophenol
Hexachlorobutadiene	2-Nitrophenol
N-Nitrosodiphehylamine	Phenol
Di-n-octylphthalate	Pentachlorophenol
Fluoroanthene	2,4,6-Trichlorophenol
Benzo(a)pyrene	

Table 2: SPCCs

N-Nitroso-di-n-propylamine	0.050
Hexachlorocyclopentadiene	0.050
2,4-Dinitrophenol	0.050
4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-002 **Work Order #...:** L31RG1AC **Matrix.....:** WG
Date Sampled...: 07/08/10 09:15 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-002 Work Order #...: L31RG1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-002 **Work Order #...:** L31RG1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	52	(50 - 150)
2-Fluorobiphenyl	46 *	(50 - 150)
Terphenyl-d14	58	(50 - 150)
Phenol-d5	32 *	(50 - 150)
2-Fluorophenol	15 *	(50 - 150)
2,4,6-Tribromophenol	35 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-004 **Work Order #...:** L31RW1AC **Matrix.....:** WG
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-004 **Work Order #...:** L31RW1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-004 Work Order #...: L31RW1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	34 *	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-006 Work Order #...: L31R51AC Matrix.....: WG
Date Sampled...: 07/08/10 14:15 Date Received..: 07/09/10
Prep Date.....: 07/10/10 Analysis Date..: 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 Initial Wgt/Vol: 980 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-006 Work Order #...: L31R51AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-006 **Work Order #...:** L31R51AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	58	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	59	(50 - 150)
2-Fluorophenol	38 *	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-008 **Work Order #...:** L31TK1AC **Matrix.....:** WG
Date Sampled...: 07/08/10 16:05 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-008 **Work Order #...:** L31TK1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-008 Work Order #...: L31TK1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	82	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	34 *	(50 - 150)
2,4,6-Tribromophenol	78	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-010 **Work Order #...:** L31TM1AC **Matrix.....:** WG
Date Sampled...: 07/08/10 17:15 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-010 **Work Order #...:** L31TM1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-010 **Work Order #...:** L31TM1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	59	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	58	(50 - 150)
2-Fluorophenol	29 *	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-012 **Work Order #...:** L31TP1AC **Matrix.....:** WG
Date Sampled...: 07/09/10 09:15 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-012 Work Order #...: L31TP1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-012 **Work Order #...:** L31TP1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	58	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	60	(50 - 150)
2-Fluorophenol	23 *	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-014 **Work Order #...:** L31TR1AC **Matrix.....:** WG
Date Sampled...: 07/09/10 10:35 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-014 Work Order #...: L31TR1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-014 **Work Order #...:** L31TR1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	57	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	60	(50 - 150)
2-Fluorophenol	40 *	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-016 **Work Order #...:** L31TV1AC **Matrix.....:** WQ
Date Sampled...: 07/09/10 11:45 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	**0.41 J**	**5.0**	**ug/L**	**0.38**
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.3 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	**0.60 J**	**1.0**	**ug/L**	**0.60**
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-016 **Work Order #...:** L31TV1AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-016 **Work Order #...:** L31TV1AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	82	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	49 *	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-018 **Work Order #...:** L31T11AC **Matrix.....:** WG
Date Sampled...: 07/08/10 09:10 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 940 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	**0.84 J**	**5.0**	**ug/L**	**0.38**
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	**2.0**	**1.0**	**ug/L**	**0.80**
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-018 Work Order #...: L31T11AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-018 **Work Order #...:** L31T11AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	57	(50 - 150)
2-Fluorobiphenyl	49 *	(50 - 150)
Terphenyl-d14	65	(50 - 150)
Phenol-d5	45 *	(50 - 150)
2-Fluorophenol	20 *	(50 - 150)
2,4,6-Tribromophenol	59	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-020 **Work Order #...:** L31T71AC **Matrix.....:** WG
Date Sampled...: 07/08/10 10:30 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.9 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.72 J**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-020 **Work Order #...:** L31T71AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-020 **Work Order #...:** L31T71AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	56	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	52	(50 - 150)
2-Fluorophenol	27 *	(50 - 150)
2,4,6-Tribromophenol	66	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-022 **Work Order #...:** L31VC1AC **Matrix.....:** WG
Date Sampled...: 07/08/10 12:40 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**8.7 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-022 **Work Order #...:** L31VC1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-022 Work Order #...: L31VC1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	59	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	42 *	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-024	**Work Order #...:** L31VG1AC	**Matrix.....:** WG	
Date Sampled...: 07/08/10 14:14	**Date Received..:** 07/09/10		
Prep Date.....: 07/10/10	**Analysis Date..:** 07/14/10		
Prep Batch #...: 0191015			
Dilution Factor: 1	**Initial Wgt/Vol:** 1000 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**8.2 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-024 Work Order #...: L31VG1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-024 **Work Order #...:** L31VG1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	54	(50 - 150)
2-Fluorophenol	11 *	(50 - 150)
2,4,6-Tribromophenol	75	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-026 **Work Order #...:** L31VJ1AC **Matrix.....:** WG
Date Sampled...: 07/08/10 16:20 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 940 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**3.7 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-026 Work Order #...: L31VJ1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-026 **Work Order #...:** L31VJ1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	61	(50 - 150)
2-Fluorobiphenyl	51	(50 - 150)
Terphenyl-d14	67	(50 - 150)
Phenol-d5	53	(50 - 150)
2-Fluorophenol	33 *	(50 - 150)
2,4,6-Tribromophenol	62	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-028 **Work Order #...:** L31VL1AC **Matrix.....:** WG
Date Sampled...: 07/09/10 09:10 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.3 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-028 Work Order #...: L31VL1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-028 Work Order #...: L31VL1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	60	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	57	(50 - 150)
2-Fluorophenol	31 *	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-030 **Work Order #...:** L31VR1AC **Matrix.....:** WG
Date Sampled...: 07/09/10 10:20 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 930 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**5.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-030 Work Order #...: L31VR1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G090540-030 Work Order #...: L31VR1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(50 - 150)
2-Fluorobiphenyl	55	(50 - 150)
Terphenyl-d14	71	(50 - 150)
Phenol-d5	50	(50 - 150)
2-Fluorophenol	16 *	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L31911AA **Matrix.....:** WATER
MB Lot-Sample #: A0G100000-015

Prep Date.....: 07/10/10 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/14/10 **Prep Batch #...:** 0191015
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzoic acid	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**2.3 J**	**10**	**ug/L**	**SW846 8270C**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L31911AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	37 *	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L31911AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	75	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G090540 Work Order #...: L31911AC Matrix.....: WATER
LCS Lot-Sample#: A0G100000-015
Prep Date.....: 07/10/10 Analysis Date..: 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	50	(30 - 120)	SW846 8270C
Acenaphthene	63	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	76	(34 - 151)	SW846 8270C
Pyrene	60	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	71	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	51	(30 - 115)	SW846 8270C
Pentachlorophenol	50	(30 - 150)	SW846 8270C
Phenol	62	(30 - 115)	SW846 8270C
2-Chlorophenol	59	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	69	(31 - 121)	SW846 8270C
4-Nitrophenol	66	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	50	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	45	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	67	(36 - 135)	SW846 8270C
4-Methylphenol	63	(31 - 115)	SW846 8270C
4-Nitroaniline	72	(30 - 140)	SW846 8270C
Acenaphthylene	65	(37 - 115)	SW846 8270C
Anthracene	62	(45 - 118)	SW846 8270C
Benzo(a)anthracene	60	(43 - 138)	SW846 8270C
Benzo(a)pyrene	56	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	70	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	71	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	57	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	70	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	67	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	67	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	91	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G090540 Work Order #...: L31911AC Matrix.....: WATER
LCS Lot-Sample#: A0G100000-015

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichlorophenol	66	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	68	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	62	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	44	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	77	(43 - 122)	SW846 8270C
2-Chloronaphthalene	61	(35 - 115)	SW846 8270C
2-Methylnaphthalene	65	(32 - 115)	SW846 8270C
2-Methylphenol	64	(30 - 116)	SW846 8270C
2-Nitroaniline	70	(36 - 140)	SW846 8270C
2-Nitrophenol	73	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	50	(30 - 160)	SW846 8270C
3-Nitroaniline	71	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	63	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	67	(43 - 118)	SW846 8270C
4-Chloroaniline	66	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	68	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	68	(37 - 136)	SW846 8270C
Carbazole	64	(49 - 126)	SW846 8270C
Chrysene	62	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	71	(38 - 130)	SW846 8270C
Dibenzofuran	64	(40 - 115)	SW846 8270C
Diethyl phthalate	73	(43 - 132)	SW846 8270C
Dimethyl phthalate	72	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	70	(36 - 151)	SW846 8270C
Fluoranthene	63	(47 - 132)	SW846 8270C
Fluorene	65	(41 - 115)	SW846 8270C
Hexachlorobenzene	63	(42 - 123)	SW846 8270C
Hexachlorobutadiene	36	(30 - 120)	SW846 8270C
Hexachloroethane	37	(30 - 120)	SW846 8270C
Isophorone	71	(33 - 115)	SW846 8270C
Naphthalene	60	(30 - 119)	SW846 8270C
Nitrobenzene	73	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	62	(35 - 124)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L31911AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G100000-015

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	61	(45 - 117)	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	71	(37 - 130)	**SW846 8270C**
Di-n-butyl phthalate	65	(46 - 123)	**SW846 8270C**
Hexachlorocyclopenta-diene	43	(30 - 115)	**SW846 8270C**
Benzoic acid	8.8 a	(30 - 136)	**SW846 8270C**
Benzyl alcohol	65	(29 - 115)	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	73	(50 - 150)
Phenol-d5	61	(50 - 150)
2-Fluorophenol	40 *	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G090540 Work Order #...: L31RW1AT-MS Matrix.....: WG
MS Lot-Sample #: A0G090540-004 L31RW1AU-MSD
Date Sampled...: 07/08/10 11:15 Date Received..: 07/09/10
Prep Date.....: 07/10/10 Analysis Date..: 07/14/10
Prep Batch #...: 0191015
Dilution Factor: 1 Initial Wgt/Vol: 505 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	45	(45 - 135)			SW846 8270C
	56	(45 - 135)	20	(0-40)	SW846 8270C
Acenaphthene	60	(45 - 135)			SW846 8270C
	64	(45 - 135)	7.2	(0-40)	SW846 8270C
2,4-Dinitrotoluene	70	(45 - 135)			SW846 8270C
	74	(45 - 135)	5.7	(0-40)	SW846 8270C
Pyrene	62	(45 - 135)			SW846 8270C
	64	(45 - 135)	3.2	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	64	(45 - 135)			SW846 8270C
	73	(45 - 135)	13	(0-40)	SW846 8270C
1,4-Dichlorobenzene	45	(45 - 135)			SW846 8270C
	57	(45 - 135)	25	(0-40)	SW846 8270C
Pentachlorophenol	58	(45 - 135)			SW846 8270C
	61	(45 - 135)	6.1	(0-40)	SW846 8270C
Phenol	55	(45 - 135)			SW846 8270C
	59	(45 - 135)	8.0	(0-40)	SW846 8270C
2-Chlorophenol	46	(45 - 135)			SW846 8270C
	49	(45 - 135)	6.3	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	63	(45 - 135)			SW846 8270C
	69	(45 - 135)	9.4	(0-40)	SW846 8270C
4-Nitrophenol	61	(45 - 135)			SW846 8270C
	65	(45 - 135)	5.0	(0-40)	SW846 8270C
Acenaphthylene	61	(45 - 135)			SW846 8270C
	66	(45 - 135)	7.4	(0-40)	SW846 8270C
Anthracene	59	(45 - 135)			SW846 8270C
	61	(45 - 135)	3.6	(0-40)	SW846 8270C
Benzo(a)anthracene	61	(45 - 135)			SW846 8270C
	62	(45 - 135)	2.2	(0-40)	SW846 8270C
Benzo(b)fluoranthene	65	(45 - 135)			SW846 8270C
	72	(45 - 135)	9.7	(0-40)	SW846 8270C
Benzo(k)fluoranthene	61	(45 - 135)			SW846 8270C
	59	(45 - 135)	3.5	(0-40)	SW846 8270C
Benzo(ghi)perylene	70	(45 - 135)			SW846 8270C
	73	(45 - 135)	4.7	(0-40)	SW846 8270C
Benzo(a)pyrene	54	(45 - 135)			SW846 8270C
	56	(45 - 135)	2.9	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L31RW1AT-MS **Matrix.....:** WG
MS Lot-Sample #: A0G090540-004 L31RW1AU-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	63	(45 - 135)			SW846 8270C
	70	(45 - 135)	11	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	56	(45 - 135)			SW846 8270C
	67	(45 - 135)	17	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	61	(45 - 135)			SW846 8270C
	68	(45 - 135)	11	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	70	(45 - 135)			SW846 8270C
	74	(45 - 135)	4.7	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	66	(45 - 135)			SW846 8270C
	69	(45 - 135)	4.9	(0-40)	SW846 8270C
Butyl benzyl phthalate	71	(45 - 135)			SW846 8270C
	72	(45 - 135)	1.3	(0-40)	SW846 8270C
Carbazole	60	(45 - 135)			SW846 8270C
	62	(45 - 135)	2.6	(0-40)	SW846 8270C
4-Chloroaniline	53	(45 - 135)			SW846 8270C
	58	(45 - 135)	8.2	(0-40)	SW846 8270C
2-Chloronaphthalene	58	(45 - 135)			SW846 8270C
	64	(45 - 135)	9.4	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	65	(45 - 135)			SW846 8270C
	69	(45 - 135)	6.0	(0-40)	SW846 8270C
Chrysene	61	(45 - 135)			SW846 8270C
	61	(45 - 135)	0.05	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	71	(45 - 135)			SW846 8270C
	75	(45 - 135)	4.6	(0-40)	SW846 8270C
Dibenzofuran	61	(45 - 135)			SW846 8270C
	66	(45 - 135)	8.2	(0-40)	SW846 8270C
Di-n-butyl phthalate	64	(45 - 135)			SW846 8270C
	68	(45 - 135)	6.2	(0-40)	SW846 8270C
1,2-Dichlorobenzene	44 a	(45 - 135)			SW846 8270C
	55	(45 - 135)	23	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L31RW1AT-MS **Matrix.....:** WG
MS Lot-Sample #: A0G090540-004 L31RW1AU-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	39 a	(45 - 135)			SW846 8270C
	51	(45 - 135)	28	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	12 a	(45 - 135)			SW846 8270C
	12 a	(45 - 135)	5.1	(0-40)	SW846 8270C
2,4-Dichlorophenol	60	(45 - 135)			SW846 8270C
	65	(45 - 135)	7.6	(0-40)	SW846 8270C
Diethyl phthalate	66	(45 - 135)			SW846 8270C
	72	(45 - 135)	8.4	(0-40)	SW846 8270C
2,4-Dimethylphenol	47	(45 - 135)			SW846 8270C
	51	(45 - 135)	8.7	(0-40)	SW846 8270C
Dimethyl phthalate	66	(45 - 135)			SW846 8270C
	71	(45 - 135)	8.0	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	64	(45 - 135)			SW846 8270C
	68	(45 - 135)	6.1	(0-40)	SW846 8270C
2,4-Dinitrophenol	59	(45 - 135)			SW846 8270C
	64	(45 - 135)	8.6	(0-40)	SW846 8270C
2,6-Dinitrotoluene	70	(45 - 135)			SW846 8270C
	77	(45 - 135)	10	(0-40)	SW846 8270C
Di-n-octyl phthalate	69	(45 - 135)			SW846 8270C
	72	(45 - 135)	4.8	(0-40)	SW846 8270C
Fluoranthene	63	(45 - 135)			SW846 8270C
	63	(45 - 135)	0.65	(0-40)	SW846 8270C
Fluorene	61	(45 - 135)			SW846 8270C
	66	(45 - 135)	8.1	(0-40)	SW846 8270C
Hexachlorobenzene	62	(45 - 135)			SW846 8270C
	65	(45 - 135)	5.3	(0-40)	SW846 8270C
Hexachlorobutadiene	31 a	(45 - 135)			SW846 8270C
	41 a	(45 - 135)	28	(0-40)	SW846 8270C
Hexachlorocyclopenta-diene	44 a	(45 - 135)			SW846 8270C
	53	(45 - 135)	19	(0-40)	SW846 8270C
Hexachloroethane	31 a	(45 - 135)			SW846 8270C
	45	(45 - 135)	37	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	70	(45 - 135)			SW846 8270C
	74	(45 - 135)	4.8	(0-40)	SW846 8270C
Isophorone	63	(45 - 135)			SW846 8270C
	69	(45 - 135)	10	(0-40)	SW846 8270C
2-Methylnaphthalene	59	(45 - 135)			SW846 8270C
	68	(45 - 135)	14	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L31RW1AT-MS **Matrix.....:** WG
MS Lot-Sample #: A0G090540-004 L31RW1AU-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	57	(45 - 135)			SW846 8270C
	64	(45 - 135)	12	(0-40)	SW846 8270C
4-Methylphenol	56	(45 - 135)			SW846 8270C
	63	(45 - 135)	12	(0-40)	SW846 8270C
Naphthalene	54	(45 - 135)			SW846 8270C
	61	(45 - 135)	12	(0-40)	SW846 8270C
2-Nitroaniline	66	(45 - 135)			SW846 8270C
	72	(45 - 135)	8.2	(0-40)	SW846 8270C
3-Nitroaniline	65	(45 - 135)			SW846 8270C
	68	(45 - 135)	5.9	(0-50)	SW846 8270C
4-Nitroaniline	67	(45 - 135)			SW846 8270C
	68	(45 - 135)	1.7	(0-40)	SW846 8270C
Nitrobenzene	66	(45 - 135)			SW846 8270C
	72	(45 - 135)	9.6	(0-40)	SW846 8270C
2-Nitrophenol	65	(45 - 135)			SW846 8270C
	70	(45 - 135)	7.7	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	31 a	(45 - 135)			SW846 8270C
	33 a	(45 - 135)	6.1	(0-40)	SW846 8270C
Phenanthrene	60	(45 - 135)			SW846 8270C
	63	(45 - 135)	4.0	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	64	(45 - 135)			SW846 8270C
	68	(45 - 135)	5.9	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	60	(45 - 135)			SW846 8270C
	65	(45 - 135)	9.0	(0-40)	SW846 8270C
Benzoic acid	58	(45 - 135)			SW846 8270C
	68	(45 - 135)	15	(0-40)	SW846 8270C
Benzyl alcohol	60	(45 - 135)			SW846 8270C
	70	(45 - 135)	15	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(50 - 150)
	73	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
	66	(50 - 150)
Terphenyl-d14	76	(50 - 150)
	82	(50 - 150)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L31RW1AT-MS **Matrix.....:** WG
MS Lot-Sample #: A0G090540-004 L31RW1AU-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	54	(50 - 150)
	61	(50 - 150)
2-Fluorophenol	20 *	(50 - 150)
	21 *	(50 - 150)
2,4,6-Tribromophenol	63	(50 - 150)
	70	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

* Surrogate recovery is outside stated control limits.

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 17, 2010

SDG: A0G0905404 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.3 – 5.9°C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Was a DDT standard analyzed every 12 hours? Was the DDT %breakdown < 15%?	✓				LCG Table 4 >15%=J/R
8. Was an endrin standard analyzed every 12 hours? Was endrin %breakdown <15%?	✓				LCG Table 4 >15%=J/R
9. Does the initial calibration curve consist of 5 concentration levels?	✓			Instrument A2HP9 7/20/10 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 4 R
10. Were the %RSDs for each analyte ≤ 20%? OR was the average %RSD ≤ 20% with the r^2 >0.990?	✓				LCG Table 4 RSD>20% or r<0.99=J/R
11. Was a blank run prior to the initial calibration?			✓	No data provided to evaluate.	
12. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			4/14/10 @ 0240	LCG Table 4 R
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?	✓			7/20/10 @2332, 7/21/10 @ 0833	LCG Table 4 >130%=J; 65-70%%=J/UJ; <65%=J/R
14. Was a second source (ICV) verification analyzed after the ICAL? Were results 85-115%?	✓			7/20/10 @1911	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 17, 2010

SDG: A0G0905404 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a CCV run every 12 hours?	✓			7/20/10 @2308, 7/21/10 @ 0809, 7/21/10 @ 0840	LCG Table 4
16. Was the %D for all target analytes ≤15%? OR was the average %D ≤ 15% with no individual analyte >30%?	✓			For the CCV analyzed 7/20 @ 2308, several targets had a %D >15%, but no qualification was made as the average %D was ≤15%.	LCG Table 4 D>30% (neg) =J/R D>30% (pos) = J
17. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 4
18. Were target analytes < ½ the MRL?	✓				LCG Table 4 <5x=B
19. Was a field blank collected and analyzed?	✓				
20. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓				<5x =B
21. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 4
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL3mw-232c-1540-GW was the parent MS/MSD sample from this SDG.	
25. Were MS/MSD recoveries 50-150% and RPD ≤20%?		✓		Checked by ADR. The spike analyses performed on sample FWGLL3mw-232c-1540-GW had a MS/MSD RPD of 22% for alpha BHC. No qualification was made as the LCS recovered within limits.	*Was QAPP Table 3-2*, Pj
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in sample FWGLL2mw-266c-1537-GW at 38%. The associated result was qualified as estimated, "J/UJ".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Sample FWGLL3mw-DUP3-1568-GW was the field duplicate for sample FWGLL3mw-234c-1541-GW.	QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPD's ≤ 40?			✓	.No concentrations were reported above the reporting limit.	LCG Table 4 >40 RPD=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 17, 2010

SDG: A0G0905404 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Were reported sample concentrations within calibration range?	✓				
30. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
31. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 4 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

The second column was not evaluated as there were no detected concentrations reprted.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-002 **Work Order #...:** L31RG1AD **Matrix.....:** WG
Date Sampled...: 07/08/10 09:15 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	70	(50 - 150)
Decachlorobiphenyl	67	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-004 **Work Order #...:** L31RW1AD **Matrix.....:** WG
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	103	(50 - 150)
Decachlorobiphenyl	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-006 **Work Order #...:** L31R51AD **Matrix.....:** WG
Date Sampled...: 07/08/10 14:15 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	65	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-008 **Work Order #...:** L31TK1AD **Matrix.....:** WG
Date Sampled...: 07/08/10 16:05 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	71	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-010 **Work Order #...:** L31TM1AD **Matrix.....:** WG
Date Sampled...: 07/08/10 17:15 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
Decachlorobiphenyl	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-012 **Work Order #...:** L31TP1AD **Matrix.....:** WG
Date Sampled...: 07/09/10 09:15 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	88	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-014 **Work Order #...:** L31TR1AD **Matrix.....:** WG
Date Sampled...: 07/09/10 10:35 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93	(50 - 150)
Decachlorobiphenyl	70	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-016 **Work Order #...:** L31TV1AD **Matrix.....:** WQ
Date Sampled...: 07/09/10 11:45 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-018 **Work Order #...:** L31T11AD **Matrix.....:** WG
Date Sampled...: 07/08/10 09:10 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93	(50 - 150)
Decachlorobiphenyl	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-020 Work Order #...: L31T71AD Matrix.....: WG
Date Sampled...: 07/08/10 10:30 Date Received..: 07/09/10
Prep Date.....: 07/10/10 Analysis Date..: 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.015 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	64	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-022 **Work Order #...:** L31VC1AD **Matrix.....:** WG
Date Sampled...: 07/08/10 12:40 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	64	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-024 Work Order #...: L31VG1AD Matrix.....: WG
Date Sampled...: 07/08/10 14:14 Date Received..: 07/09/10
Prep Date.....: 07/10/10 Analysis Date..: 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 Initial Wgt/Vol: 1020 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	54	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-026 **Work Order #...:** L31VJ1AD **Matrix.....:** WG
Date Sampled...: 07/08/10 16:20 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 930 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.020 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	72	(50 - 150)
Decachlorobiphenyl	62	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-028 **Work Order #...:** L31VL1AD **Matrix.....:** WG
Date Sampled...: 07/09/10 09:10 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
Decachlorobiphenyl	63	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-030 **Work Order #...:** L31VR1AD **Matrix.....:** WG
Date Sampled...: 07/09/10 10:20 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.029 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	38 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L319T1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G100000-010

Prep Date.....: 07/10/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/21/10 **Prep Batch #...:** 0191010
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
alpha-BHC	ND	0.030	ug/L	SW846 8081A
beta-BHC	ND	0.030	ug/L	SW846 8081A
delta-BHC	ND	0.030	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.030	ug/L	SW846 8081A
Heptachlor	ND	0.030	ug/L	SW846 8081A
Aldrin	ND	0.030	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.030	ug/L	SW846 8081A
Endosulfan I	ND	0.025	ug/L	SW846 8081A
Dieldrin	ND	0.030	ug/L	SW846 8081A
4,4'-DDE	ND	0.030	ug/L	SW846 8081A
Endrin	ND	0.030	ug/L	SW846 8081A
Endosulfan II	ND	0.025	ug/L	SW846 8081A
4,4'-DDD	ND	0.030	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.030	ug/L	SW846 8081A
4,4'-DDT	ND	0.030	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Endrin ketone	ND	0.030	ug/L	SW846 8081A
Endrin aldehyde	ND	0.030	ug/L	SW846 8081A
alpha-Chlordane	ND	0.030	ug/L	SW846 8081A
gamma-Chlordane	ND	0.030	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92	(50 - 150)
Decachlorobiphenyl	93	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G090540 Work Order #...: L319T1AC Matrix.....: WATER
LCS Lot-Sample#: A0G100000-010
Prep Date.....: 07/10/10 Analysis Date..: 07/20/10
Prep Batch #...: 0191010
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	98	(44 - 137)	**SW846 8081A**
beta-BHC	90	(50 - 135)	**SW846 8081A**
delta-BHC	98	(58 - 160)	**SW846 8081A**
gamma-BHC (Lindane)	89	(58 - 127)	**SW846 8081A**
Heptachlor	69	(48 - 150)	**SW846 8081A**
Aldrin	89	(53 - 128)	**SW846 8081A**
Heptachlor epoxide	89	(50 - 127)	**SW846 8081A**
Endosulfan I	58	(50 - 160)	**SW846 8081A**
Dieldrin	88	(50 - 124)	**SW846 8081A**
4,4'-DDE	94	(50 - 130)	**SW846 8081A**
Endrin	82	(50 - 137)	**SW846 8081A**
Endosulfan II	64	(50 - 144)	**SW846 8081A**
4,4'-DDD	84	(50 - 137)	**SW846 8081A**
Endosulfan sulfate	87	(50 - 160)	**SW846 8081A**
4,4'-DDT	71	(50 - 145)	**SW846 8081A**
Methoxychlor	79	(50 - 160)	**SW846 8081A**
Endrin ketone	78	(50 - 150)	**SW846 8081A**
Endrin aldehyde	61	(30 - 160)	**SW846 8081A**
alpha-Chlordane	89	(50 - 122)	**SW846 8081A**
gamma-Chlordane	89	(50 - 130)	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G090540 Work Order #...: L31RW1AL-MS Matrix.....: WG
MS Lot-Sample #: A0G090540-004 L31RW1AM-MSD
Date Sampled...: 07/08/10 11:15 Date Received..: 07/09/10
Prep Date.....: 07/10/10 Analysis Date..: 07/21/10
Prep Batch #...: 0191010
Dilution Factor: 2 Initial Wgt/Vol: 505 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	97	(50 - 150)			SW846 8081A
	121	(50 - 150)	22	(0-50)	SW846 8081A
beta-BHC	93	(50 - 150)			SW846 8081A
	114	(50 - 150)	20	(0-50)	SW846 8081A
delta-BHC	94	(50 - 150)			SW846 8081A
	115	(50 - 150)	19	(0-50)	SW846 8081A
gamma-BHC (Lindane)	82	(50 - 150)			SW846 8081A
	100	(50 - 150)	20	(0-50)	SW846 8081A
Heptachlor	73	(50 - 150)			SW846 8081A
	83	(50 - 150)	12	(0-50)	SW846 8081A
Aldrin	96	(50 - 150)			SW846 8081A
	112	(50 - 150)	15	(0-50)	SW846 8081A
Heptachlor epoxide	97	(50 - 150)			SW846 8081A
	116	(50 - 150)	17	(0-50)	SW846 8081A
Endosulfan I	63	(50 - 150)			SW846 8081A
	74	(50 - 150)	17	(0-50)	SW846 8081A
Dieldrin	93	(50 - 150)			SW846 8081A
	109	(50 - 150)	15	(0-50)	SW846 8081A
4,4'-DDE	105	(50 - 150)			SW846 8081A
	113	(50 - 150)	7.5	(0-50)	SW846 8081A
Endrin	90	(50 - 150)			SW846 8081A
	105	(50 - 150)	16	(0-50)	SW846 8081A
Endosulfan II	66	(50 - 150)			SW846 8081A
	78	(50 - 150)	17	(0-50)	SW846 8081A
4,4'-DDD	89	(50 - 150)			SW846 8081A
	102	(50 - 150)	14	(0-50)	SW846 8081A
Endosulfan sulfate	85	(50 - 150)			SW846 8081A
	96	(50 - 150)	12	(0-50)	SW846 8081A
4,4'-DDT	74	(50 - 150)			SW846 8081A
	82	(50 - 150)	9.8	(0-50)	SW846 8081A
Methoxychlor	81	(50 - 150)			SW846 8081A
	91	(50 - 150)	11	(0-50)	SW846 8081A
Endrin ketone	78	(50 - 150)			SW846 8081A
	87	(50 - 150)	11	(0-50)	SW846 8081A
Endrin aldehyde	62	(50 - 150)			SW846 8081A
	68	(50 - 150)	9.8	(0-50)	SW846 8081A
alpha-Chlordane	95	(50 - 150)			SW846 8081A
	108	(50 - 150)	14	(0-50)	SW846 8081A
gamma-Chlordane	91	(50 - 150)			SW846 8081A
	107	(50 - 150)	16	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L31RW1AL-MS **Matrix.....:** WG
MS Lot-Sample #: A0G090540-004 L31RW1AM-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
	95	(50 - 150)
Decachlorobiphenyl	100	(50 - 150)
	106	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

FORM 8
PESTICIDES ANALYTICAL SEQUENCE

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A0G090540

GC Column: CLP PESTICIDES II ID: 0.53 (mm) Init. Calib. Date(s): 07/20/10 07/20/10

Instrument ID: A2HP9

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION						
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT	#	RT	#
01	ICAL	TOX1 E115	07/20/10	0829				
02	ICAL	TOX2 E115	07/20/10	0853				
03	ICAL	TOX3 E115	07/20/10	0917				
04	ICAL	TOX4 E115	07/20/10	0942				
05	ICAL	TOX5 E115	07/20/10	1005				
06		PEM E115	07/20/10	1935				
07		AB3 E101	07/20/10	2308				
08		MRL	07/20/10	2332				
09	L319TCHK	L319T1AC	07/20/10	2355				
10	FWGLL3MW-236	L31RG1AD	07/21/10	0019				
11	FWGLL3MW-232	L31RW1AD	07/21/10	0043				
12	FWGLL3MW-232	L31RW1AL	07/21/10	0106				
13	FWGLL3MW-232	L31RW1AM	07/21/10	0130				
14	FWGLL4MW-197	L31R51AD	07/21/10	0154				
15	FWGLL2MW-059	L31TK1AD	07/21/10	0217				
16	FWGLL2MW-060	L31TM1AD	07/21/10	0241				
17	FWGLL2MW-262	L31TP1AD	07/21/10	0305				
18	FWGLL2MW-263	L31TR1AD	07/21/10	0328				
19	FWGEQUIPRINS	L31TV1AD	07/21/10	0351				
20	FWGLL3MW-234	L31T11AD	07/21/10	0415				
21	FWGLL3MW-DUP	L31T71AD	07/21/10	0438				
22	FWGLL3MW-239	L31VC1AD	07/21/10	0502				
23	FWGLL4MW-196	L31VG1AD	07/21/10	0525				
24	FWGSCFMW-006	L31VJ1AD	07/21/10	0549				
25	FWGLL2MW-267	L31VL1AD	07/21/10	0612				
26	FWGLL2MW-266	L31VR1AD	07/21/10	0635				
27	L319TBLK	L319T1AA	07/21/10	0723				
28		PEM E115	07/21/10	0746				
29		AB3 E101	07/21/10	0809				
30		MRL	07/21/10	0833				
31		TOX3 E115	07/21/10	1140				
32								

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Data File: 042F4201.D
Report Date: 22-Jul-2010 08:34

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i
Lab File ID: 042F4201.D
Analysis Type:
Lab Sample ID: AB3 E101
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\100720IC-1.b\PEST9.m\PEST9r.m

Injection Date: 20-JUL-2010 23:08
Init. Cal. Date(s): 20-JUL-2010 20-JUL-2010
Init. Cal. Times: 08:29 18:48
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	47525631	55394560	55394560	0.000	-16.55723	15.00000	Averaged	<-
4 alpha-BHC	44669093	56707200	56707200	0.010	-26.94952	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	66099355	78092840	78092840	0.010	-18.14463	15.00000	Averaged	<-
6 beta-BHC	12770608	15573760	15573760	0.010	-21.95002	15.00000	Averaged	<-
7 delta-BHC	67956842	81584080	81584080	0.010	-20.05278	15.00000	Averaged	<-
8 Heptachlor	60746903	61936440	61936440	0.010	-1.95818	15.00000	Averaged	
10 Aldrin	75718043	95245600	95245600	0.010	-25.78983	15.00000	Averaged	<-
12 Heptachlor epoxide	22899940	25767440	25767440	0.010	-12.52187	15.00000	Averaged	
13 gamma-Chlordane	61374814	72610920	72610920	0.010	-18.30736	15.00000	Averaged	<-
14 alpha-Chlordane	61580253	72929680	72929680	0.010	-18.43030	15.00000	Averaged	<-
15 Endosulfan I	53408023	57270280	57270280	0.010	-7.23160	15.00000	Averaged	
16 4,4'-DDE	61515323	77493360	77493360	0.010	-25.97408	15.00000	Averaged	<-
17 Dieldrin	57271714	62666880	62666880	0.010	-9.42030	15.00000	Averaged	
18 Endrin	21955103	22492640	22492640	0.010	-2.44835	15.00000	Averaged	
21 4,4'-DDD	40950218	42034400	42034400	0.010	-2.64756	15.00000	Averaged	
22 Endosulfan II	22353475	23128400	23128400	0.010	-3.46669	15.00000	Averaged	
24 4,4'-DDT	41069695	40744920	40744920	0.010	0.79079	15.00000	Averaged	
25 Endrin aldehyde	18219244	18180680	18180680	0.010	0.21167	15.00000	Averaged	
26 Endosulfan sulfate	20878776	22196800	22196800	0.010	-6.31275	15.00000	Averaged	
27 Methoxychlor	20598843	21144840	21144840	0.010	-2.65062	15.00000	Averaged	
29 Endrin ketone	23759416	23985120	23985120	0.010	-0.94996	15.00000	Averaged	
$ 30 Decachlorobiphenyl	47199065	57832160	57832160	0.010	-22.52819	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 12.05883
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.3 – 5.9 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Does the initial calibration curve consist of 5 concentration levels of Aroclors 1016 and 1260?	✓			Instrument A2HP13; ICAL on 7/20/10 Stds = 0.05, 0.1, 0.2, 0.5, 1.0, 2.0	LCG Table 3 R
8. Was the % RSD ≤ 20%? Were the r^2s >0.990?	✓				LCG Table 3 RSD>20% or r<0.99= J/R
9. Was a MDL Level Verification performed once per quarter? Were all target analytes detected?	✓			No data provided for evaluation.	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			7/21/10@ 0320	LCG Table 3 >115%=J; 80-85%=J/UJ; <80%=J/R
12. Were single standards of the other five Aroclors run to aid in pattern recognition and to determine a single point calibration factor?	✓				Method 8082 Section 5.6.2
13. Was a CCV run every 12 hours?	✓				LCG Table 3

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the % D ≤ 15 % for each analyte or the average %D across all analytes ≤ 15% with a maximum %D for each target analyte ≤30%?	✓				LCG Table 3 D>30% (neg) =J/R D>30% (pos) =J
15. Was a method blank prepared and analyzed with each batch?	✓			Section checked by ADR	LCG Table 5
16. Were target analytes <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was an equipment blank collected and analyzed?	✓				
18. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓			Section checked by ADR	<5x = B
19. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 3
20. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C >UL=J; LL-30%=J/UJ; <30%=J/R
21. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL3mw-232c-1540-GW was the parent MS/MSD sample from this SDG.	
23. Were MS/MSD recoveries 50-150% and RPD ≤20%?		✓		Checked by ADR. The spike analyses performed on sample FWGLL3mw-232c-1540-GW had a MS/MSD RPD of 24% for Aroclors 1016 and 1260. No qualification was made as the LCS recovered within limits.	QAPP Table 3-2 Pj
24. Was the surrogate spiked into all samples?	✓				
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in sample FWGLL2mw-266c-1537-GW at 31%. The associated result was qualified as estimated, "J/UJ".	LCG Table 3 >150%=J; 10-50%=J/UJ; <10%=R
26. Was a field duplicate analyzed? Were the RPDs <30%?	✓			Sample FWGLL3mw-DUP3-1568-GW was the field duplicate for sample FWGLL3mw-234c-1541-GW.	QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 17, 2010

SDG: A0G090540 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
27. Were all positive results verified by a second dissimilar column confirmation? Was the RPD ≤ 40?			✓	No detected concentrations were reported.	LCG Table 3 RPD>40=J
28. Were reported sample concentrations within calibration range?			✓	No detected concentrations were reported.	
29. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.	✓			See narrative for surrogate outliers.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 3 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GW

GC Semivolatiles

Lot-Sample #...:	A0G090540-002	**Work Order #...:**	L31RG1AF	**Matrix.....:**	WG
Date Sampled...:	07/08/10 09:15	**Date Received..:**	07/09/10		
Prep Date.....:	07/10/10	**Analysis Date..:**	07/22/10		
Prep Batch #...:	0191011				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	74	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GW

GC Semivolatiles

Lot-Sample #...:	A0G090540-004	**Work Order #...:**	L31RW1AF	**Matrix.....:**	WG
Date Sampled...:	07/08/10 11:15	**Date Received..:**	07/09/10		
Prep Date.....:	07/10/10	**Analysis Date..:**	07/22/10		
Prep Batch #...:	0191011				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-006 **Work Order #...:** L31R51AF **Matrix.....:** WG
Date Sampled...: 07/08/10 14:15 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0191011
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	54	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-008	Work Order #...: L31TK1AF	Matrix.....: WG	
Date Sampled...: 07/08/10 16:05	Date Received..: 07/09/10		
Prep Date.....: 07/10/10	Analysis Date..: 07/22/10		
Prep Batch #...: 0191011			
Dilution Factor: 1	Initial Wgt/Vol: 1000 mL	Final Wgt/Vol..: 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	61	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GW

GC Semivolatiles

Lot-Sample #...:	A0G090540-010	**Work Order #...:**	L31TM1AF	**Matrix.....:**	WG
Date Sampled...:	07/08/10 17:15	**Date Received..:**	07/09/10		
Prep Date.....:	07/10/10	**Analysis Date..:**	07/22/10		
Prep Batch #...:	0191011				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	66	(50 - 150)
Decachlorobiphenyl	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GW

GC Semivolatiles

Lot-Sample #...:	A0G090540-012	**Work Order #...:**	L31TP1AF	**Matrix.....:**	WG
Date Sampled...:	07/09/10 09:15	**Date Received..:**	07/09/10		
Prep Date.....:	07/10/10	**Analysis Date..:**	07/22/10		
Prep Batch #...:	0191011				
Dilution Factor:	1	**Initial Wgt/Vol:**	1010 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GW

GC Semivolatiles

Lot-Sample #...:	A0G090540-014	**Work Order #...:**	L31TR1AF	**Matrix.....:**	WG
Date Sampled...:	07/09/10 10:35	**Date Received..:**	07/09/10		
Prep Date.....:	07/10/10	**Analysis Date..:**	07/22/10		
Prep Batch #...:	0191011				
Dilution Factor:	1	**Initial Wgt/Vol:**	1010 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	57	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

GC Semivolatiles

Lot-Sample #...:	A0G090540-016	**Work Order #...:**	L31TV1AF	**Matrix.....:**	WQ
Date Sampled...:	07/09/10 11:45	**Date Received..:**	07/09/10		
Prep Date.....:	07/10/10	**Analysis Date..:**	07/22/10		
Prep Batch #...:	0191011				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-018 Work Order #...: L31T11AF Matrix.....: WG
Date Sampled...: 07/08/10 09:10 Date Received..: 07/09/10
Prep Date.....: 07/10/10 Analysis Date..: 07/22/10
Prep Batch #...: 0191011
Dilution Factor: 1 Initial Wgt/Vol: 990 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	71	(50 - 150)
Decachlorobiphenyl	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GW

GC Semivolatiles

Lot-Sample #...:	A0G090540-020	**Work Order #...:**	L31T71AF	**Matrix.....:**	WG
Date Sampled...:	07/08/10 10:30	**Date Received..:**	07/09/10		
Prep Date.....:	07/10/10	**Analysis Date..:**	07/22/10		
Prep Batch #...:	0191011				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	57	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GW

GC Semivolatiles

Lot-Sample #...: A0G090540-022 **Work Order #...:** L31VC1AF **Matrix.....:** WG
Date Sampled...: 07/08/10 12:40 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0191011
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	75	(50 - 150)
Decachlorobiphenyl	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GW

GC Semivolatiles

Lot-Sample #...:	A0G090540-024	**Work Order #...:**	L31VG1AF	**Matrix.....:**	WG
Date Sampled...:	07/08/10 14:14	**Date Received..:**	07/09/10		
Prep Date.....:	07/10/10	**Analysis Date..:**	07/22/10		
Prep Batch #...:	0191011				
Dilution Factor:	1	**Initial Wgt/Vol:**	1020 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	54	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GW

GC Semivolatiles

Lot-Sample #...:	A0G090540-026	**Work Order #...:**	L31VJ1AF	**Matrix.....:**	WG
Date Sampled...:	07/08/10 16:20	**Date Received..:**	07/09/10		
Prep Date.....:	07/10/10	**Analysis Date..:**	07/22/10		
Prep Batch #...:	0191011				
Dilution Factor:	1	**Initial Wgt/Vol:**	930 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	69	(50 - 150)
Decachlorobiphenyl	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GW

GC Semivolatiles

Lot-Sample #...:	A0G090540-028	**Work Order #...:**	L31VL1AF	**Matrix.....:**	WG
Date Sampled...:	07/09/10 09:10	**Date Received..:**	07/09/10		
Prep Date.....:	07/10/10	**Analysis Date..:**	07/22/10		
Prep Batch #...:	0191011				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	75	(50 - 150)
Decachlorobiphenyl	56	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GW

GC Semivolatiles

Lot-Sample #...:	A0G090540-030	**Work Order #...:**	L31VR1AF	**Matrix.....:**	WG
Date Sampled...:	07/09/10 10:20	**Date Received..:**	07/09/10		
Prep Date.....:	07/10/10	**Analysis Date..:**	07/22/10		
Prep Batch #...:	0191011				
Dilution Factor:	1	**Initial Wgt/Vol:**	1010 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L319V1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G100000-011

Prep Date.....: 07/10/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/22/10 **Prep Batch #...:** 0191011
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/L	SW846 8082
Aroclor 1221	ND	0.50	ug/L	SW846 8082
Aroclor 1232	ND	0.50	ug/L	SW846 8082
Aroclor 1242	ND	0.50	ug/L	SW846 8082
Aroclor 1248	ND	0.50	ug/L	SW846 8082
Aroclor 1254	ND	0.50	ug/L	SW846 8082
Aroclor 1260	ND	0.50	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	95	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L319V1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G100000-011
Prep Date.....: 07/10/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0191011
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**87**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**110**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G090540 **Work Order #...:** L31RW1AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G090540-004 L31RW1AR-MSD
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10
Prep Date.....: 07/10/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0191011
Dilution Factor: 2 **Initial Wgt/Vol:** 520 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**81**	**(50 - 150)**			**SW846 8082**
	103	**(50 - 150)**	**24**	**(0-50)**	**SW846 8082**
Aroclor 1260	**91**	**(50 - 150)**			**SW846 8082**
	116	**(50 - 150)**	**24**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	75	(50 - 150)
	98	(50 - 150)
Decachlorobiphenyl	97	(50 - 150)
	124	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

FORM 8
SEMIVOLATILE ANALYTICAL SEQUENCE

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A0G090540

GC Column: RESTEK PEST CLPI ID: 0.53 (mm) Init. Calib. Date(s): 07/20/10 07/21/10

Instrument ID: A2HP13

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION					
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		MRL	07/22/10	1236		
02		E156	07/22/10	1850		
03	FWGLL3MW-236	L31RG1AF	07/22/10	1905		
04	FWGLL3MW-232	L31RW1AF	07/22/10	1920		
05	FWGLL3MW-232	L31RW1AQ	07/22/10	1934		
06	FWGLL3MW-232	L31RW1AR	07/22/10	1949		
07	FWGLL4MW-197	L31R51AF	07/22/10	2004		
08	FWGLL2MW-059	L31TK1AF	07/22/10	2019		
09	FWGLL2MW-060	L31TM1AF	07/22/10	2033		
10	FWGLL2MW-262	L31TP1AF	07/22/10	2048		
11	L319VBLK	L319V1AA	07/22/10	2103		
12		E156	07/22/10	2118		
13	FWGLL2MW-263	L31TR1AF	07/22/10	2132		
14	FWGEQUIPRINS	L31TV1AF	07/22/10	2147		
15	FWGLL3MW-234	L31T11AF	07/22/10	2202		
16	FWGLL3MW-DUP	L31T71AF	07/22/10	2217		
17	FWGLL3MW-239	L31VC1AF	07/22/10	2232		
18	FWGLL4MW-196	L31VG1AF	07/22/10	2247		
19	FWGSCFMW-006	L31VJ1AF	07/22/10	2301		
20	FWGLL2MW-267	L31VL1AF	07/22/10	2316		
21	FWGLL2MW-266	L31VR1AF	07/22/10	2331		
22	L319VCHK	L319V1AC	07/22/10	2346		
23		E156	07/23/10	0000		
24		MRL	07/23/10	0527		
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August18, 2010

SDG: A0G090540 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.3. – 5.9 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			ICP- 5/17/10 ICPMS-7/16/2010	LCG Table 7 R
11. Was a MRL Level Verification performed at the beginning of the daily sequence? Were results 70-130%?	✓				LCG Table 7 >130%=J; 65-70%=J/UJ; <65%=J/R
12. Was the ICV (second source verification) analyzed after the ICAL?	✓				LCG Table 7
13. Were all analytes within 90-110% in the ICV?	✓				LCG Table 7 J>110%=J; 90-85%=J/UJ; <85%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August18, 2010

SDG: A0G090540 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		ICP The ICB analyzed 7/15/10 had detected potassium at 152ug/L. The potassium results for FWGLL2mw-060c-1532-GF, FWGLL2mw-267c-1565-GF and FWGLL4mw-196c-1544-GF were qualified, "U", as the detected concentrations were <5x blank contamination. ICPMS The ICB analyzed 7/29/10 had thallium detected at 0.18ug/L and antimony at 0.092 ug/L. The thallium results for samples FWGLL3mw-236c-1542-GF, FWGLL4mw-197c-1545-GF and FWGLL2mw-060c-1532-GF were <5x the ICB contamination and were qualified, "U". As there were no detected antimony concentrations no qualifications were made. The ICB analyzed 7/30/10 had thallium detected at 0.23ug/L. As there were no detected thallium concentrations associated with this ICB, no qualifications were made. No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U
15. Were CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 7
16. Were CCV results within 90 to 110%?		✓		The CCVs analyzed 7/30/2010 at 1522 and 1624 had recoveries above control limits for beryllium. No qualifications were made as there were no detected beryllium concentrations reported for the bracketed samples.	LCG Table 7 >110%=J 90-85%=J/UJ; <85%=J/R
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICP The CCBs analyzed 7/15/10 had detected potassium from 151ug/L to 164ug/L. In addition to the potassium qualifications made for the ICB contamination, the potassium result for FWGLL2mw-263c-1535-GF was qualified "U", as the detected concentration was <5x blank contamination. ICPMS The CCBs analyzed 7/29/2010 had detected antimony from 0.068 to 0.091ug/L, beryllium from 0.012 to 0.026ug/L, cadmium at 0.039-0.048ug/L, iron from 3.2ug/L to 22.7ug/L and thallium from 0.15ug/L to 0.2ug/L. No additional antimony qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all detected contaminants were >5x the blank contamination. The CCBs analyzed 7/30/2010 had detected cadmium at 0.0083-0.017ug/L, iron from 3.5ug/L to 4ug/L and thallium from 0.22ug/L to 0.27ug/L. Contaminants in the calibration blanks did not require qualification of the data as all detected sample results >5x the blank contamination.	LCG Table 7 <5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August18, 2010

SDG: A0G090540 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
18. Was an Interelement Check Standard run at the beginning of the analytical sequence?	✓				LCG Table 7
19. Was the ICS recovery within 80 to 120% of true value for each element of interest?	✓				LCG Table 7 >120%=J; 50-79%=J/UJ; <50%=Pj/R
21. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 7
22. Were target analytes <1/2 the MRL in the method blank?		✓		ADR checked section; ICPMS- Zinc was detected in the method blank at 6.5ug/L. The zinc results for samples FWGLL2mw-059c-1531-GF, FWGLL2mw-266c-1537-GF, FWGLL3mw-232c-1540-GF, FWGLL3mw-236c-1542-GF and FWGLL3mw-239c-1543-GF were qualified, "B", as the sample results were <5x contamination.	LCG Table 7 <5x = B
23. Was a field blank collected and analyzed?	✓				
24. Were target analytes reported in the field blank analyses >1/2 the MRL?		✓		ADR checked section;	<5x=B
25. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 7
26. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 60%-LL= J/UJ; <60%=J/R
27. Was a MS prepared with each batch?	✓				LCG Table 7
28. Was the MS and Lab Duplicate parent a Ravenna sample?	✓				
29. Were the MS recoveries within 75-125%?	✓			Checked by ADR.	LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤20%?	✓			Checked by ADR. Only detected results above RL were evaluated.	LCG Table 7 >20% = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August18, 2010

SDG: A0G090540 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	Not evaluated as the MS/MSD results were acceptable.	LCG Table 7 >125%=J; 30-75%=J/UJ; <30%=R
32. Was a serial dilution performed as needed?	✓				
33. Was the 4 fold dilution within ± 10% of the original result?	✓				LCG Table 7 >10%=J
34. Was a field duplicate analyzed? Were the RPDs ± 30%?		✓		Checked by ADR. Only results where both sample results were detected above the RL were evaluated. For the field duplicate pair analyzed on FWGLL3mw-234c-1541-GF and FWGLL3mw-DUP3-1568-GF, the duplicate RPD was above control limits for barium at 62%, calcium at 100%, cobalt at 165%, magnesium at 78.4%, manganese at 53.2% and nickel at 83%. The barium, calcium, cobalt, magnesium, manganese and nickel results for FWGLL3mw-234c-1541-GF and FWGLL3mw-DUP3-1568-GF were qualified as estimated, "J".	QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				
36. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
37. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 7 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 18, 2010

SDG: A0G090540 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.3 – 5.9 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 18, 2010

SDG: A0G090540 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Were the CCBs analyzed every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?	✓			No qualifications were made for due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
16. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 9
17. Were target analytes detected in the method blank <1/2 the MRL?	✓				LCG Table 9 <5x = B
18. Was a field blank collected and analyzed?	✓				
19. Were target analytes reported in the field blank analyses at <1/2 the MRL?	✓				<5x=B
20. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 9
21. Were the LCS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 J>120%=J; 50-79%=J/UJ; <50%=R
22. Was a MS prepared with each batch?	✓				LCG Table 9
23. Was the MS and Lab Duplicate parent sample a Ravenna sample?	✓				
24. Were the MS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 >125% = J 30% - 75% = J/UJ <30% = J/R
25. Was the Matrix Duplicate RPD ± 20%?	✓				LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR.	QAPP Table 3-2
27. Were sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 18, 2010

SDG: A0G090540 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 9 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GF

TOTAL Metals

Lot-Sample #...: A0G090540-003 **Matrix.....:** WG
Date Sampled...: 07/08/10 09:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31RQ1AM
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31RQ1AA
		Dilution Factor: 1		Analysis Time..: 21:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31RQ1AJ
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31RQ1AN
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31RQ1AC
		Dilution Factor: 1		Analysis Time..: 21:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**22200**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31RQ1AP**
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31RQ1AD
		Dilution Factor: 1		Analysis Time..: 21:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31RQ1AQ
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31RQ1AR
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31RQ1AT
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GF

TOTAL Metals

Lot-Sample #...: A0G090540-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31RQ1AE
		Dilution Factor: 1		Analysis Time..: 21:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31RQ1A2
		Dilution Factor: 1		Analysis Time..: 16:05	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1330**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31RQ1AU**
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**13700**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31RQ1AV**
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**235**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31RQ1AW**
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**3620**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31RQ1AX**
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**7.9 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31RQ1A0**
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31RQ1AK
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.15 B**	**2.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31RQ1AF**
		Dilution Factor: 1		Analysis Time..: 21:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31RQ1AL
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GF

TOTAL Metals

Lot-Sample #...: A0G090540-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31RQ1AH
		Dilution Factor: 1		Analysis Time..: 21:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31RQ1A1
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**15.9 J**	**10.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31RQ1AG**
		Dilution Factor: 1		Analysis Time..: 21:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GF

TOTAL Metals

Lot-Sample #...: A0G090540-005 **Matrix.....:** WG
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31R31AQ
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31R31AE
		Dilution Factor: 1		Analysis Time..: 21:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**3.5 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31R31AM**
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**26.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31R31AR**
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31R31AF
		Dilution Factor: 1		Analysis Time..: 21:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**60300**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31R31AT**
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31R31AG
		Dilution Factor: 1		Analysis Time..: 21:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31R31AU
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31R31AV
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31R31AW
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GF

TOTAL Metals

Lot-Sample #...: A0G090540-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31R31AH
		Dilution Factor: 1		Analysis Time..: 21:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31R31AD
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**3650**	1000	ug/L	SW846 6010B	07/13-07/15/10	L31R31AX
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**39800**	1000	ug/L	SW846 6010B	07/13-07/15/10	L31R31A0
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**308**	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31R31A1
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**8570**	1000	ug/L	SW846 6010B	07/13-07/15/10	L31R31A2
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**7.8 B**	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31R31AA
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31R31AN
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/29/10	L31R31AJ
		Dilution Factor: 1		Analysis Time..: 21:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31R31AP
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GF

TOTAL Metals

Lot-Sample #...: A0G090540-005 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31R31AL
		Dilution Factor: 1		Analysis Time..: 21:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31R31AC
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**7.8 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31R31AK**
		Dilution Factor: 1		Analysis Time..: 21:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GF

TOTAL Metals

Lot-Sample #...: A0G090540-007 **Matrix.....:** WG
Date Sampled...: 07/08/10 14:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TH1AQ
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31TH1AE
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TH1AM
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**15.1**	10.0	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TH1AR**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TH1AF
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**139000**	1000	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TH1AT**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31TH1AG
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TH1AU
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TH1AV
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TH1AW
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GF

TOTAL Metals

Lot-Sample #...: A0G090540-007 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31TH1AH
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31TH1AD
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1250**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TH1AX**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**21400**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TH1A0**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TH1A1
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1130**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TH1A2**
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TH1AA
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31TH1AN
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.16 B**	**2.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31TH1AJ**
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TH1AP
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GF

TOTAL Metals

Lot-Sample #...: A0G090540-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TH1AL
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TH1AC
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/13-07/29/10	L31TH1AK
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GF

TOTAL Metals

Lot-Sample #...: A0G090540-009 **Matrix.....:** WG
Date Sampled...: 07/08/10 16:05 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TL1AQ
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**21.5 B**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31TL1AE**
		Dilution Factor: 1		Analysis Time..: 22:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**6.4**	**5.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TL1AM**
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**208**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TL1AR**
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TL1AF
		Dilution Factor: 1		Analysis Time..: 22:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**30000**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TL1AT**
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31TL1AG
		Dilution Factor: 1		Analysis Time..: 22:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**29.1**	**5.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TL1AU**
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TL1AV
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TL1AW
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GF

TOTAL Metals

Lot-Sample #...: A0G090540-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**7090**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31TL1AH**
		Dilution Factor: 1		Analysis Time..: 22:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31TL1AD
		Dilution Factor: 1		Analysis Time..: 16:12	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**883 B**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TL1AX**
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**8290**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TL1A0**
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**5530**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TL1A1**
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**5170**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TL1A2**
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**22.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TL1AA**
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31TL1AN
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/29/10	L31TL1AJ
		Dilution Factor: 1		Analysis Time..: 22:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TL1AP
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GF

TOTAL Metals

Lot-Sample #...: A0G090540-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TL1AL
		Dilution Factor: 1		Analysis Time..: 22:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TL1AC
		Dilution Factor: 1		Analysis Time..: 13:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**4.0 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31TL1AK**
		Dilution Factor: 1		Analysis Time..: 22:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GF

TOTAL Metals

Lot-Sample #...: A0G090540-011 **Matrix.....:** WG
Date Sampled...: 07/08/10 17:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TN1AQ
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31TN1AE
		Dilution Factor: 1		Analysis Time..: 22:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TN1AM
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**23.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TN1AR**
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TN1AF
		Dilution Factor: 1		Analysis Time..: 22:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**45200**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TN1AT**
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31TN1AG
		Dilution Factor: 1		Analysis Time..: 22:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TN1AU
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TN1AV
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TN1AW
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GF

TOTAL Metals

Lot-Sample #...: A0G090540-011 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31TN1AH
		Dilution Factor: 1		Analysis Time..: 22:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31TN1AD
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**519 B**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TN1AX**
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**8470**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TN1A0**
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**25.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TN1A1**
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2400**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TN1A2**
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TN1AA
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31TN1AN
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.17 B**	**2.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31TN1AJ**
		Dilution Factor: 1		Analysis Time..: 22:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TN1AP
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GF

TOTAL Metals

Lot-Sample #...: A0G090540-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TN1AL
		Dilution Factor: 1		Analysis Time..: 22:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TN1AC
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/13-07/29/10	L31TN1AK
		Dilution Factor: 1		Analysis Time..: 22:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GF

TOTAL Metals

Lot-Sample #...: A0G090540-013 **Matrix.....:** WG
Date Sampled...: 07/09/10 09:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1AQ
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**24.9 B**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31TQ1AE**
		Dilution Factor: 1		Analysis Time..: 22:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1AM
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**16.2**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TQ1AR**
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TQ1AF
		Dilution Factor: 1		Analysis Time..: 22:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**47100**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TQ1AT**
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31TQ1AG
		Dilution Factor: 1		Analysis Time..: 22:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1AU
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1AV
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1AW
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GF

TOTAL Metals

Lot-Sample #...: A0G090540-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31TQ1AH
		Dilution Factor: 1		Analysis Time..: 22:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31TQ1AD
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1770**	1000	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1AX
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**34200**	1000	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1A0
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**77.4**	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1A1
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**7430**	1000	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1A2
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**10.7**	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1AA
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1AN
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/29/10	L31TQ1AJ
		Dilution Factor: 1		Analysis Time..: 22:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1AP
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GF

TOTAL Metals

Lot-Sample #...: A0G090540-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TQ1AL
		Dilution Factor: 1		Analysis Time..: 22:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TQ1AC
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/13-07/29/10	L31TQ1AK
		Dilution Factor: 1		Analysis Time..: 22:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GF

TOTAL Metals

Lot-Sample #...: A0G090540-015 **Matrix.....:** WG
Date Sampled...: 07/09/10 10:35 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TT1AQ
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31TT1AE
		Dilution Factor: 1		Analysis Time..: 22:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**15.4**	5.0	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TT1AM**
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**21.5**	10.0	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TT1AR**
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TT1AF
		Dilution Factor: 1		Analysis Time..: 22:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**30900**	1000	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TT1AT**
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31TT1AG
		Dilution Factor: 1		Analysis Time..: 22:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**3.2 B**	5.0	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TT1AU**
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TT1AV
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TT1AW
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GF

TOTAL Metals

Lot-Sample #...: A0G090540-015 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**4670**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31TT1AH**
		Dilution Factor: 1		Analysis Time..: 22:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31TT1AD
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**814 B**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TT1AX**
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**13800**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TT1A0**
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1450**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TT1A1**
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**3930**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TT1A2**
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**5.6 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31TT1AA**
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31TT1AN
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/29/10	L31TT1AJ
		Dilution Factor: 1		Analysis Time..: 22:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TT1AP
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GF

TOTAL Metals

Lot-Sample #...: A0G090540-015 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TT1AL
		Dilution Factor: 1		Analysis Time..: 22:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TT1AC
		Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/13-07/29/10	L31TT1AK
		Dilution Factor: 1		Analysis Time..: 22:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

TOTAL Metals

Lot-Sample #...: A0G090540-016 **Matrix.....:** WQ
Date Sampled...: 07/09/10 11:45 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TV1AT
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31TV1AG
		Dilution Factor: 1		Analysis Time..: 22:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TV1AP
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TV1AU
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TV1AH
		Dilution Factor: 1		Analysis Time..: 22:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	07/13-07/15/10	L31TV1AV
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31TV1AJ
		Dilution Factor: 1		Analysis Time..: 22:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TV1AW
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TV1AX
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TV1A0
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

TOTAL Metals

Lot-Sample #...: A0G090540-016 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31TV1AK
		Dilution Factor: 1		Analysis Time..: 22:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31TV1A7
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	07/13-07/15/10	L31TV1A1
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	07/13-07/15/10	L31TV1A2
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TV1A3
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6010B	07/13-07/15/10	L31TV1A4
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TV1A5
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31TV1AQ
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/29/10	L31TV1AL
		Dilution Factor: 1		Analysis Time..: 22:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31TV1AR
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

TOTAL Metals

Lot-Sample #...: A0G090540-016 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31TV1AN
		Dilution Factor: 1		Analysis Time..: 22:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31TV1A6
		Dilution Factor: 1		Analysis Time..: 14:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/13-07/29/10	L31TV1AM
		Dilution Factor: 1		Analysis Time..: 22:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GF

TOTAL Metals

Lot-Sample #...: A0G090540-019 **Matrix.....:** WG
Date Sampled...: 07/08/10 09:10 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31T61AQ
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31T61AE
		Dilution Factor: 1		Analysis Time..: 22:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31T61AM
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**9.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T61AR**
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31T61AF
		Dilution Factor: 1		Analysis Time..: 22:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**51100**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T61AT**
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31T61AG
		Dilution Factor: 1		Analysis Time..: 22:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.5 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T61AU**
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31T61AV
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31T61AW
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GF

TOTAL Metals

Lot-Sample #...: A0G090540-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1210**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31T61AH**
		Dilution Factor: 1		Analysis Time..: 22:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31T61AD
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1750**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T61AX**
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**19800**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T61A0**
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**2190**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T61A1**
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**8990**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T61A2**
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**7.0 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T61AA**
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31T61AN
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/29/10	L31T61AJ
		Dilution Factor: 1		Analysis Time..: 22:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31T61AP
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GF

TOTAL Metals

Lot-Sample #...: A0G090540-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31T61AL
		Dilution Factor: 1		Analysis Time..: 22:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31T61AC
		Dilution Factor: 1		Analysis Time..: 14:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/13-07/29/10	L31T61AK
		Dilution Factor: 1		Analysis Time..: 22:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GF

TOTAL Metals

Lot-Sample #...: A0G090540-021 **Matrix.....:** WG
Date Sampled...: 07/08/10 10:30 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31T81AQ
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31T81AE
		Dilution Factor: 1		Analysis Time..: 22:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31T81AM
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**18.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T81AR**
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31T81AF
		Dilution Factor: 1		Analysis Time..: 22:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**17000**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T81AT**
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31T81AG
		Dilution Factor: 1		Analysis Time..: 22:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**15.5**	**5.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T81AU**
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31T81AV
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31T81AW
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GF

TOTAL Metals

Lot-Sample #...: A0G090540-021 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1240**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31T81AH**
		Dilution Factor: 1		Analysis Time..: 22:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31T81AD
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1320**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T81AX**
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**8650**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T81A0**
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1270**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T81A1**
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**8910**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T81A2**
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**16.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31T81AA**
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31T81AN
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/29/10	L31T81AJ
		Dilution Factor: 1		Analysis Time..: 22:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31T81AP
		Dilution Factor: 1		Analysis Time..: 21:06	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GF

TOTAL Metals

Lot-Sample #...: A0G090540-021 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31T81AL
		Dilution Factor: 1		Analysis Time..: 22:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31T81AC
		Dilution Factor: 1		Analysis Time..: 14:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/13-07/29/10	L31T81AK
		Dilution Factor: 1		Analysis Time..: 22:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GF

TOTAL Metals

Lot-Sample #...: A0G090540-023 **Matrix.....:** WG
Date Sampled...: 07/08/10 12:40 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VE1AQ
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**46.6 B**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31VE1AE**
		Dilution Factor: 1		Analysis Time..: 23:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VE1AM
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**10.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VE1AR**
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31VE1AF
		Dilution Factor: 1		Analysis Time..: 23:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**9730**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VE1AT**
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31VE1AG
		Dilution Factor: 1		Analysis Time..: 23:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VE1AU
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VE1AV
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VE1AW
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GF

TOTAL Metals

Lot-Sample #...: A0G090540-023 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**218**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31VE1AH**
		Dilution Factor: 1		Analysis Time..: 23:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31VE1AD
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1280**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VE1AX**
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**5160**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VE1A0**
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**101**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VE1A1**
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**18700**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VE1A2**
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**6.1 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VE1AA**
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31VE1AN
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/29/10	L31VE1AJ
		Dilution Factor: 1		Analysis Time..: 23:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VE1AP
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GF

TOTAL Metals

Lot-Sample #...: A0G090540-023 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31VE1AL
		Dilution Factor: 1		Analysis Time..: 23:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31VE1AC
		Dilution Factor: 1		Analysis Time..: 15:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**6.0 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31VE1AK**
		Dilution Factor: 1		Analysis Time..: 23:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GF

TOTAL Metals

Lot-Sample #...: A0G090540-025 **Matrix.....:** WG
Date Sampled...: 07/08/10 14:14 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VH1AQ
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**22.8 B**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31VH1AE**
		Dilution Factor: 1		Analysis Time..: 23:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VH1AM
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**33.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VH1AR**
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31VH1AF
		Dilution Factor: 1		Analysis Time..: 23:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**57700**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VH1AT**
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31VH1AG
		Dilution Factor: 1		Analysis Time..: 23:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VH1AU
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VH1AV
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VH1AW
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GF

TOTAL Metals

Lot-Sample #...: A0G090540-025 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**393**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31VH1AH**
		Dilution Factor: 1		Analysis Time..: 23:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31VH1AD
		Dilution Factor: 1		Analysis Time..: 16:06	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**642 B**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VH1AX**
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**18100**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VH1A0**
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**183**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VH1A1**
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1460**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VH1A2**
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31VH1AA
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31VH1AN
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/29/10	L31VH1AJ
		Dilution Factor: 1		Analysis Time..: 23:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VH1AP
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GF

TOTAL Metals

Lot-Sample #...: A0G090540-025 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31VH1AL
		Dilution Factor: 1		Analysis Time..: 23:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31VH1AC
		Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/13-07/29/10	L31VH1AK
		Dilution Factor: 1		Analysis Time..: 23:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GF

TOTAL Metals

Lot-Sample #...: A0G090540-027 Matrix.....: WG
Date Sampled...: 07/08/10 16:20 Date Received..: 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VK1AQ
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L31VK1AE
		Dilution Factor: 1		Analysis Time..: 23:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**12.8**	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VK1AM
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**107**	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31VK1AR
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31VK1AF
		Dilution Factor: 1		Analysis Time..: 23:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**58300**	1000	ug/L	SW846 6010B	07/13-07/15/10	L31VK1AT
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L31VK1AG
		Dilution Factor: 1		Analysis Time..: 23:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VK1AU
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VK1AV
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VK1AW
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GF

TOTAL Metals

Lot-Sample #...: A0G090540-027 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**332**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	**L31VK1AH**
		Dilution Factor: 1		Analysis Time..: 23:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31VK1AD
		Dilution Factor: 1		Analysis Time..: 16:17	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**5740**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VK1AX**
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**16300**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VK1A0**
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**153**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VK1A1**
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**10900**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VK1A2**
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31VK1AA
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31VK1AN
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/29/10	L31VK1AJ
		Dilution Factor: 1		Analysis Time..: 23:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VK1AP
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GF

TOTAL Metals

Lot-Sample #...: A0G090540-027 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L31VK1AL
		Dilution Factor: 1		Analysis Time..: 23:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31VK1AC
		Dilution Factor: 1		Analysis Time..: 15:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/13-07/29/10	L31VK1AK
		Dilution Factor: 1		Analysis Time..: 23:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GF

TOTAL Metals

Lot-Sample #...: A0G090540-029 **Matrix.....:** WG
Date Sampled...: 07/09/10 09:10 **Date Received..:** 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VQ1AQ
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/13-07/30/10	L31VQ1AE
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VQ1AM
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**14.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VQ1AR**
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/30/10	L31VQ1AF
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**37900**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VQ1AT**
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/30/10	L31VQ1AG
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**4.5 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VQ1AU**
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VQ1AV
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VQ1AW
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GF

TOTAL Metals

Lot-Sample #...: A0G090540-029 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1240**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/30/10**	**L31VQ1AH**
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31VQ1AD
		Dilution Factor: 1		Analysis Time..: 16:16	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**711 B**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VQ1AX**
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**18900**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VQ1A0**
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**622**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VQ1A1**
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**16500**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VQ1A2**
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**3.6 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VQ1AA**
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31VQ1AN
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/30/10	L31VQ1AJ
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VQ1AP
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GF

TOTAL Metals

Lot-Sample #...: A0G090540-029 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/30/10	L31VQ1AL
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31VQ1AC
		Dilution Factor: 1		Analysis Time..: 15:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/13-07/30/10	L31VQ1AK
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GF

TOTAL Metals

Lot-Sample #...: A0G090540-031 Matrix.....: WG
Date Sampled...: 07/09/10 10:20 Date Received..: 07/09/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0194019						
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VT1AQ
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**1060**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/30/10**	**L31VT1AE**
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**5.6**	**5.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VT1AM**
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**19.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VT1AR**
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/30/10	L31VT1AF
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**18400**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VT1AT**
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	**0.24 B**	**0.50**	**ug/L**	**SW846 6020**	**07/13-07/30/10**	**L31VT1AG**
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**17.0**	**5.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VT1AU**
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VT1AV
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VT1AW
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GF

TOTAL Metals

Lot-Sample #...: A0G090540-031 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**5080**	**50.0**	**ug/L**	**SW846 6020**	**07/13-07/30/10**	**L31VT1AH**
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L31VT1AD
		Dilution Factor: 1		Analysis Time..: 16:11	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1270**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VT1AX**
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**9620**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VT1A0**
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1390**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VT1A1**
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**9520**	**1000**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VT1A2**
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**16.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/13-07/15/10**	**L31VT1AA**
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L31VT1AN
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/30/10	L31VT1AJ
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L31VT1AP
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GF

TOTAL Metals

Lot-Sample #...: A0G090540-031 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/30/10	L31VT1AL
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L31VT1AC
		Dilution Factor: 1		Analysis Time..: 15:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**10.6 J**	**10.0**	**ug/L**	**SW846 6020**	**07/13-07/30/10**	**L31VT1AK**
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G090540 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A0G130000-019 **Prep Batch #...:** 0194019						
Aluminum	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L331X1AE
		Dilution Factor: 1				
		Analysis Time..: 21:34		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	07/13-07/29/10	L331X1AJ
		Dilution Factor: 1				
		Analysis Time..: 21:34		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L331X1AM
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L331X1AR
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L331X1AF
		Dilution Factor: 1				
		Analysis Time..: 21:34		Analyst ID.....: 000079	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	07/13-07/29/10	L331X1AG
		Dilution Factor: 1				
		Analysis Time..: 21:34		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	07/13-07/15/10	L331X1AT
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L331X1AV
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L331X1AU
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L331X1AW
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	07/13-07/29/10	L331X1AH
		Dilution Factor: 1				
		Analysis Time..: 21:34		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G090540 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	07/13-07/15/10	L331X1AN
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	07/13-07/15/10	L331X1A0
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L331X1A1
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	07/13-07/15/10	L331X1AD
		Dilution Factor: 1				
		Analysis Time..: 15:49		Analyst ID.....: 001576	Instrument ID..: H1	
Nickel	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L331X1AA
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	07/13-07/15/10	L331X1AX
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L331X1AP
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	07/13-07/15/10	L331X1AQ
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6010B	07/13-07/15/10	L331X1A2
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Thallium	ND	1.0	ug/L	SW846 6020	07/13-07/29/10	L331X1AL
		Dilution Factor: 1				
		Analysis Time..: 21:34		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	07/13-07/15/10	L331X1AC
		Dilution Factor: 1				
		Analysis Time..: 12:58		Analyst ID.....: 001637	Instrument ID..: I5	
Zinc	**6.5 B**	**10.0**	**ug/L**	**SW846 6020**	**07/13-07/29/10**	L331X1AK
		Dilution Factor: 1				
		Analysis Time..: 21:34		Analyst ID.....: 000079	Instrument ID..: I8	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G090540 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G090540 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A0G130000-019 **Prep Batch #...:** 0194019					
Nickel	93	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1A3
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Vanadium	94	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1A4
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Mercury	108	(80 - 120)	SW846 7470A	07/13-07/15/10	L331X1A5
		Dilution Factor: 1	Analysis Time..: 15:50	Analyst ID.....: 001576	
		Instrument ID..: H1			
Aluminum	96	(80 - 120)	SW846 6020	07/13-07/29/10	L331X1A6
		Dilution Factor: 1	Analysis Time..: 21:39	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	87	(80 - 120)	SW846 6020	07/13-07/29/10	L331X1A7
		Dilution Factor: 1	Analysis Time..: 21:39	Analyst ID.....: 000079	
		Instrument ID..: I8			
Cadmium	99	(80 - 120)	SW846 6020	07/13-07/29/10	L331X1A8
		Dilution Factor: 1	Analysis Time..: 21:39	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	83	(80 - 120)	SW846 6020	07/13-07/29/10	L331X1A9
		Dilution Factor: 1	Analysis Time..: 21:39	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	97	(80 - 120)	SW846 6020	07/13-07/29/10	L331X1CA
		Dilution Factor: 1	Analysis Time..: 21:39	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	102	(80 - 120)	SW846 6020	07/13-07/29/10	L331X1CC
		Dilution Factor: 1	Analysis Time..: 21:39	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	84	(80 - 120)	SW846 6020	07/13-07/29/10	L331X1CD
		Dilution Factor: 1	Analysis Time..: 21:39	Analyst ID.....: 000079	
		Instrument ID..: I8			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G090540 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic	97	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CE
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Lead	98	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CF
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Selenium	98	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CG
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Silver	87	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CH
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Barium	93	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CJ
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Calcium	98	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CK
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Cobalt	93	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CL
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Chromium	94	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CM
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Copper	94	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CN
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Potassium	92	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CP
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Magnesium	99	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CQ
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G090540 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Manganese	97	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CR
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			
Sodium	95	(80 - 120)	SW846 6010B	07/13-07/15/10	L331X1CT
		Dilution Factor: 1	Analysis Time..: 13:03	Analyst ID.....: 001637	
		Instrument ID..: I5			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G090540 **Matrix.....:** WG
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A0G090540-005 **Prep Batch #...:** 0194019					
Aluminum	101	(75 - 125)	SW846 6020	07/13-07/29/10	L31R31A9
		Dilution Factor: 1	Analysis Time..: 21:50	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	105	(75 - 125)	SW846 6020	07/13-07/29/10	L31R31CE
		Dilution Factor: 1	Analysis Time..: 21:50	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	104	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31CH
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Barium	104	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31CM
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Beryllium	91	(75 - 125)	SW846 6020	07/13-07/29/10	L31R31CA
		Dilution Factor: 1	Analysis Time..: 21:50	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	106	(75 - 125)	SW846 6020	07/13-07/29/10	L31R31CC
		Dilution Factor: 1	Analysis Time..: 21:50	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	92	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31CN
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Chromium	99	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31CQ
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Cobalt	97	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31CP
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Copper	104	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31CR
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G090540 **Matrix.....:** WG
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	87	(75 - 125)	SW846 6020	07/13-07/29/10	L31R31CD
		Dilution Factor: 1	Analysis Time..: 21:50	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	101	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31CJ
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Magnesium	96	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31A3
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Manganese	98	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31A4
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Mercury	108	(80 - 120)	SW846 7470A	07/13-07/15/10	L31R31A8
		Dilution Factor: 1	Analysis Time..: 15:52	Instrument ID..: H1	
		Analyst ID.....: 001576			
Nickel	96	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31A6
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Potassium	107	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31CT
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Selenium	103	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31CK
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Silver	94	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31CL
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Sodium	104	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31A5
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Thallium	93	(75 - 125)	SW846 6020	07/13-07/29/10	L31R31CG
		Dilution Factor: 1	Analysis Time..: 21:50	Instrument ID..: I8	
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G090540 **Matrix.....:** WG
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	100	(75 - 125)	SW846 6010B	07/13-07/15/10	L31R31A7
		Dilution Factor: 1	Analysis Time..: 13:27	Instrument ID..: I5	
		Analyst ID.....: 001637			
Zinc	100	(75 - 125)	SW846 6020	07/13-07/29/10	L31R31CF
		Dilution Factor: 1	Analysis Time..: 21:50	Instrument ID..: I8	
		Analyst ID.....: 000079			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A0G090540 **Work Order #...:** L31R3-SMP L31R3-DUP **Matrix.....:** WG

Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/13-07/29/10	0194019
		Dilution Factor: 1				Analysis Time..: 21:50	Analyst ID.....: 000079	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #: A0G090540-005		
	3.5 B	ND	ug/L	200	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						
Barium						SD Lot-Sample #: A0G090540-005		
	26.1	26.0	ug/L	0.27	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/13-07/29/10	0194019
		Dilution Factor: 1				Analysis Time..: 21:50	Analyst ID.....: 000079	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #: A0G090540-005		
	60300	60400	ug/L	0.19	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/13-07/29/10	0194019
		Dilution Factor: 1				Analysis Time..: 21:50	Analyst ID.....: 000079	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G090540-000 **Work Order #...:** L31R3-SMP L31R3-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/13-07/29/10	0194019
		Dilution Factor: 1				Analysis Time..: 21:50	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 15:52	Analyst ID.....: 001576	
		Instrument ID..: H1						
Potassium						SD Lot-Sample #: A0G090540-005		
	3650	3590	ug/L	1.4	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A0G090540-005		
	39800	39800	ug/L	0.13	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A0G090540-005		
	308	308	ug/L	0.064	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A0G090540-005		
	8570	7880	ug/L	8.4	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						
Nickel						SD Lot-Sample #: A0G090540-005		
	7.8 B	8.5 B	ug/L	8.4	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/13-07/15/10	0194019
		Dilution Factor: 1				Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G090540-000 **Work Order #...:** L31R3-SMP L31R3-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/13-07/29/10	0194019
			Dilution Factor: 1			Analysis Time..: 21:50	Analyst ID.....: 000079	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/13-07/15/10	0194019
			Dilution Factor: 1			Analysis Time..: 13:27	Analyst ID.....: 001637	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/13-07/29/10	0194019
			Dilution Factor: 1			Analysis Time..: 21:50	Analyst ID.....: 000079	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #: A0G090540-005		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/13-07/15/10	0194019
			Dilution Factor: 1			Analysis Time..: 13:27	Analyst ID.....: 001637	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #: A0G090540-005		
	7.8 B,J	8.3 B	ug/L	5.5	(0-20)	SW846 6020	07/13-07/29/10	0194019
			Dilution Factor: 1			Analysis Time..: 21:50	Analyst ID.....: 000079	
			Instrument ID..: I8					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80729A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 7/29/2010 11:32 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	4.2	U								
Antimony	121	2	**0.092**	**B**								
Beryllium	9	1	0.0076	U								
Cadmium	111	0.5	0.0074	U								
Iron	56	50	3.2	U								
Thallium	205	1	**0.18**	**B**								
Zinc	66	10	8	U								

Thallium = 0.9 ug/L

No Qual

SDC 0.46 ug/L

LL3-236-1542 ✓

LL4-197-1545 ✓

LL2-060-1532 ✓

5.04.5

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 7/30/2010 10:47 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	4.2	U								
Antimony	121	2	0.038	U								
Beryllium	9	1	0.0076	U								
Cadmium	111	0.5	0.0074	U								
Iron	56	50	3.2	U								
Thallium	205	1	**0.23**	**B**								
Zinc	66	10	8	U								

No Qual.

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST **Units:** ug/L

Chart Number: I50715A.ARC **Acceptable Range:** 90% - 110%

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	True Conc	CCV 7/15/2010 6:14 PM Found	% Rec	CCV 7/15/2010 7:25 PM Found	% Rec	CCV 7/15/2010 8:36 PM Found	% Rec	CCV 7/15/2010 9:12 PM Found	% Rec	Found	% Rec
Arsenic	189.042	500.0	510.33	**102.1**	494.03	**98.8**	499.08	**99.8**	491.12	**98.2**		
Barium	493.409	2000.0	1941.23	**97.1**	1987.08	**99.4**	1922.69	**96.1**	1899.26	**95.0**		
Calcium	317.933	50000.0	50736.20	**101.5**	49044.68	**98.1**	50301.53	**100.6**	49758.54	**99.5**		
Chromium	267.716	2000.0	1938.41	**96.9**	1884.58	**94.2**	1917.58	**95.9**	1897.71	**94.9**		
Cobalt	228.616	2000.0	1912.13	**95.6**	1841.97	**92.1**	1890.64	**94.5**	1874.64	**93.7**		
Copper	324.753	2000.0	1978.78	**98.9**	2010.08	**100.5**	1971.35	**98.6**	1955.59	**97.8**		
Lead	220.353	500.0	508.75	**101.8**	487.65	**97.5**	505.48	**101.1**	500.62	**100.1**		
Magnesium	279.078	50000.0	51241.99	**102.5**	48626.61	**97.3**	50747.85	**101.5**	50011.56	**100.0**		
Manganese	257.61	2000.0	1968.55	**98.4**	1911.86	**95.6**	1918.19	**95.9**	1898.02	**94.9**		
Nickel	231.604	2000.0	2029.81	**101.5**	1967.31	**98.4**	2073.34	**103.7**	2094.30	**104.7**		
Potassium	766.491	50000.0	49525.23	**99.1**	52142.45	**104.3**	50186.44	**100.4**	50161.15	**100.3**		
Selenium	196.026	500.0	502.07	**100.4**	487.74	**97.5**	496.24	**99.2**	493.27	**98.7**		
Silver	328.068	1000.0	954.76	**95.5**	967.47	**96.7**	969.39	**96.9**	967.23	**96.7**		
Sodium	330.232	50000.0	46588.55	**93.2**	47091.89	**94.2**	45977.17	**92.0**	45335.55	**90.7**		
Vanadium	292.402	2000.0	1889.47	**94.5**	1846.52	**92.3**	1825.28	**91.3**	1787.42	**89.4**		

Not bracketing reported samples

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50715A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 7/15/2010 6:20 PM Found	Q	CCB 7/15/2010 7:31 PM Found	Q	CCB 7/15/2010 8:42 PM Found	Q	CCB 7/15/2010 9:18 PM Found	Q	Found	Q
Arsenic	189.042	5	4.4	U	4.4	U	4.4	U	4.4	U		
Barium	493.409	10	0.3	U	0.3	U	0.3	U	0.3	U		
Calcium	317.933	1000	**-17.0**	**B**	**-19.0**	**B**	**-19.0**	**B**	**-23.0**	**B**		
Chromium	267.716	5	1.4	U	1.4	U	1.4	U	1.4	U		
Cobalt	228.616	5	1.3	U	1.3	U	1.3	U	1.3	U		
Copper	324.753	5	**-2.5**	**B**	**-3.2**	**B**	**-3.7**	**B**	**-4.1**	**B**		
Lead	220.353	3	1.5	U	1.5	U	1.5	U	1.5	U		
Magnesium	279.078	1000	14.8	U	14.8	U	14.8	U	14.8	U		
Manganese	257.61	10	0.3	U	0.3	U	0.3	U	0.3	U		
Nickel	231.604	10	2.3	U	2.3	U	2.3	U	2.3	U		
Potassium	766.491	1000	**161.0**	**B**	**164.0**	**B**	**159.0**	**B**	**161.0**	**B**		
Selenium	196.026	5	3.4	U	3.4	U	3.4	U	3.4	U		
Silver	328.068	5	1.3	U	1.3	U	1.3	U	1.3	U		
Sodium	330.232	1000	750.0	U	750.0	U	750.0	U	750.0	U		
Vanadium	292.402	10	2.0	U	2.0	U	2.0	U	2.0	U		

U Result is less than the IDL

B Result is between IDL and RL

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50715A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 7/15/2010 11:54 AM Found	Q	CCB 7/15/2010 1:21 PM Found	Q	CCB 7/15/2010 2:45 PM Found	Q	CCB 7/15/2010 3:58 PM Found	Q	CCB 7/15/2010 5:09 PM Found	Q
Arsenic	189.042	5	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
Barium	493.409	10	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Calcium	317.933	1000	8.2	U	8.2	U	8.2	U	8.2	U	**-9.7**	**B**
Chromium	267.716	5	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Cobalt	228.616	5	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
Copper	324.753	5	2.1	U	2.1	U	2.1	U	2.1	U	**-2.9**	**B**
Lead	220.353	3	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Magnesium	279.078	1000	14.8	U	14.8	U	14.8	U	14.8	U	14.8	U
Manganese	257.61	10	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Nickel	231.604	10	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U
Potassium	766.491	1000	**160.0**	**B**	**160.0**	**B**	**151.0**	**B**	**164.0**	**B**	**162.0**	**B**
Selenium	196.026	5	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U
Silver	328.068	5	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
Sodium	330.232	1000	750.0	U	750.0	U	750.0	U	750.0	U	750.0	U
Vanadium	292.402	10	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U

U Result is less than the IDL

B Result is between IDL and RL

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50715A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 7/15/2010 10:59 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	4.4	U								
Barium	493.409	10	0.3	U								
Calcium	317.933	1000	8.2	U								
Chromium	267.716	5	1.4	U								
Cobalt	228.616	5	1.3	U								
Copper	324.753	5	2.1	U								
Lead	220.353	3	1.5	U								
Magnesium	279.078	1000	14.8	U								
Manganese	257.61	10	0.3	U								
Nickel	231.604	10	2.3	U								
Potassium	766.491	1000	**152.0**	**B**								
Selenium	196.026	5	3.4	U								
Silver	328.068	5	1.3	U								
Sodium	330.232	1000	750.0	U								
Vanadium	292.402	10	2.0	U								

K L 760.

LL2 · 060c - 1532

LL4 - 196 - 1544.

LL2 - 267c - 1565

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv **Acceptable Range:** 90% - 110%

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	True Conc	CCV 7/30/2010 11:09 AM Found	% Rec	CCV 4 7/30/2010 3:22 PM Found	% Rec	CCV 5 7/30/2010 4:24 PM Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	27	500.0	515.27	**103.1**	505.73	**101.1**	510.40	**102.1**				
Antimony	121	100.0	99.55	**99.6**	101.40	**101.4**	99.52	**99.5**				
Beryllium	9	100.0	106.80	**106.8**	113.07	**113.1**	112.50	**112.5**				
Cadmium	111	100.0	101.93	**101.9**	104.07	**104.1**	103.47	**103.5**				
Iron	56	25000.0	25176.67	**100.7**	25356.67	**101.4**	24996.67	**100.0**				
Thallium	205	100.0	92.10	**92.1**	95.84	**95.8**	96.61	**96.6**				
Zinc	66	100.0	101.73	**101.7**	104.57	**104.6**	102.43	**102.4**				

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 7/30/2010 11:16 AM Found	Q	CCB 4 7/30/2010 3:29 PM Found	Q	CCB 5 7/30/2010 4:31 PM Found	Q	Found	Q	Found	Q
Aluminum	27	50	4.2	U	4.2	U	4.2	U				
Antimony	121	2	0.038	U	0.038	U	0.038	U				
Beryllium	9	1	0.0076	U	0.0076	U	0.0076	U				
Cadmium	111	0.5	**0.012**	**B**	**0.0083**	**B**	**0.017**	**B**				
Iron	56	50	3.2	U	**4**	**B**	**3.5**	**B**				
Thallium	205	1	**0.27**	**B**	**0.22**	**B**	**0.25**	**B**				
Zinc	66	10	8	U	8	U	8	U				

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80729A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 7/29/2010 12:01 PM Found	Q	CCB 9 7/29/2010 9:20 PM Found	Q	CCB 10 7/29/2010 10:24 PM Found	Q	CCB 11 7/29/2010 11:24 PM Found	Q	Found	Q
Aluminum	27	50	4.2	U	4.2	U	4.2	U	**4.4**	**B**		
Antimony	121	2	0.038	U	**0.085**	**B**	**0.091**	**B**	**0.068**	**B**		
Beryllium	9	1	**0.014**	**B**	**0.012**	**B**	**0.015**	**B**	**0.026**	**B**		
Cadmium	111	0.5	0.0074	U	**0.039**	**B**	**0.048**	**B**	**0.042**	**B**		
Iron	56	50	**3.2**	**B**	**20.9**	**B**	**20.9**	**B**	**22.7**	**B**		
Thallium	205	1	**0.2**	**B**	**0.15**	**B**	**0.19**	**B**	**0.16**	**B**		
Zinc	66	10	8	U	8	U	8	U	8	U		

Sb < 0.455 ug/L ND ~~all samples NQ~~ No additional qual. than FCB

Be < 0.13 ug/L NQ all sample ND

Cd < 0.24 ug/L NQ

Fe < 113.5 ug/L NQ

TIC

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

EXECUTIVE SUMMARY - Detection Highlights

A0G090540

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGTEAM1-TRIP 07/08/10 08:00 001				
Acetone	1.8 J	10	ug/L	SW846 8260B
FWGLL3mw-236C-1542-GF 07/08/10 09:15 003				
Antimony U	0.15 B	2.0	ug/L	SW846 6020
Zinc	15.9 J	10.0	ug/L	SW846 6020
Calcium	22200	1000	ug/L	SW846 6010B
Potassium	1330	1000	ug/L	SW846 6010B
Magnesium	13700	1000	ug/L	SW846 6010B
Manganese	235	10.0	ug/L	SW846 6010B
Sodium	3620	1000	ug/L	SW846 6010B
Nickel	7.9 B	10.0	ug/L	SW846 6010B
FWGLL3mw-232C-1540-GW 07/08/10 11:15 004				
bis(2-Ethylhexyl) phthalate	1.5 J,B	10	ug/L	SW846 8270C
FWGLL3mw-232C-1540-GF 07/08/10 11:15 005				
Zinc	7.8 B,J	10.0	ug/L	SW846 6020
Arsenic	3.5 B	5.0	ug/L	SW846 6010B
Barium	26.1	10.0	ug/L	SW846 6010B
Calcium	60300	1000	ug/L	SW846 6010B
Potassium	3650	1000	ug/L	SW846 6010B
Magnesium	39800	1000	ug/L	SW846 6010B
Manganese	308	10.0	ug/L	SW846 6010B
Sodium	8570	1000	ug/L	SW846 6010B
Nickel	7.8 B	10.0	ug/L	SW846 6010B
FWGLL4mw-197C-1545-GW 07/08/10 14:15 006				
bis(2-Ethylhexyl) phthalate	1.1 J,B	10	ug/L	SW846 8270C
FWGLL4mw-197C-1545-GF 07/08/10 14:15 007				
Antimony U	0.16 B	2.0	ug/L	SW846 6020
Barium	15.1	10.0	ug/L	SW846 6010B
Calcium	139000	1000	ug/L	SW846 6010B
Potassium	1250	1000	ug/L	SW846 6010B
Magnesium	21400	1000	ug/L	SW846 6010B
Sodium	1130	1000	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G090540

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL2mw-059C-1531-GW 07/08/10 16:05	**008**			
Cyanide, Total	0.0058 B	0.010	mg/L	SW846 9012A
FWGLL2mw-059C-1531-GF 07/08/10 16:05	**009**			
Aluminum	21.5 B	50.0	ug/L	SW846 6020
Iron	7090	50.0	ug/L	SW846 6020
Zinc	4.0 B,J	10.0	ug/L	SW846 6020
Arsenic	6.4	5.0	ug/L	SW846 6010B
Barium	208	10.0	ug/L	SW846 6010B
Calcium	30000	1000	ug/L	SW846 6010B
Cobalt	29.1	5.0	ug/L	SW846 6010B
Potassium	883 B	1000	ug/L	SW846 6010B
Magnesium	8290	1000	ug/L	SW846 6010B
Manganese	5530	10.0	ug/L	SW846 6010B
Sodium	5170	1000	ug/L	SW846 6010B
Nickel	22.4	10.0	ug/L	SW846 6010B
FWGLL2mw-060C-1532-GF 07/08/10 17:15	**011**			
Antimony U	0.17 B	2.0	ug/L	SW846 6020
Barium	23.9	10.0	ug/L	SW846 6010B
Calcium	45200	1000	ug/L	SW846 6010B
Potassium U	519 B	1000	ug/L	SW846 6010B
Magnesium	8470	1000	ug/L	SW846 6010B
Manganese	25.7	10.0	ug/L	SW846 6010B
Sodium	2400	1000	ug/L	SW846 6010B
FWGLL2mw-262C-1534-GW 07/09/10 09:15	**012**			
bis(2-Ethylhexyl) phthalate	1.1 J,B	10	ug/L	SW846 8270C
FWGLL2mw-262C-1534-GF 07/09/10 09:15	**013**			
Aluminum	24.9 B	50.0	ug/L	SW846 6020
Barium	16.2	10.0	ug/L	SW846 6010B
Calcium	47100	1000	ug/L	SW846 6010B
Potassium	1770	1000	ug/L	SW846 6010B
Magnesium	34200	1000	ug/L	SW846 6010B
Manganese	77.4	10.0	ug/L	SW846 6010B
Sodium	7430	1000	ug/L	SW846 6010B
Nickel	10.7	10.0	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0G090540

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL2mw-263C-1535-GF 07/09/10 10:35 015				
Iron	4670	50.0	ug/L	SW846 6020
Arsenic	15.4	5.0	ug/L	SW846 6010B
Barium	21.5	10.0	ug/L	SW846 6010B
Calcium	30900	1000	ug/L	SW846 6010B
Cobalt	3.2 B	5.0	ug/L	SW846 6010B
Potassium	814 B	1000	ug/L	SW846 6010B
Magnesium	13800	1000	ug/L	SW846 6010B
Manganese	1450	10.0	ug/L	SW846 6010B
Sodium	3930	1000	ug/L	SW846 6010B
Nickel	5.6 B	10.0	ug/L	SW846 6010B
FWGEQUIPRINSE1-1578-GW 07/09/10 11:45 016				
Benzyl alcohol	0.41 J	5.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	1.3 J,B	10	ug/L	SW846 8270C
Diethyl phthalate	0.60 J	1.0	ug/L	SW846 8270C
o-Xylene	0.14 J	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	0.35 J	2.0	ug/L	SW846 8260B
Methylene chloride	1.0 J,B	2.0	ug/L	SW846 8260B
Acetone	36	10	ug/L	SW846 8260B
2-Butanone	24	10	ug/L	SW846 8260B
Toluene	0.87 J	1.0	ug/L	SW846 8260B
Xylenes (total)	0.49 J	2.0	ug/L	SW846 8260B
FWGTEAM2-TRIP 07/08/10 08:00 017				
Acetone	1.6 J	10	ug/L	SW846 8260B
FWGLL3mw-234C-1541-GW 07/08/10 09:10 018				
Benzyl alcohol	0.84 J	5.0	ug/L	SW846 8270C
Butyl benzyl phthalate	2.0	1.0	ug/L	SW846 8270C
FWGLL3mw-234C-1541-GF 07/08/10 09:10 019				
Iron	1210	50.0	ug/L	SW846 6020
Barium	9.8 B	10.0	ug/L	SW846 6010B
Calcium	51100	1000	ug/L	SW846 6010B
Cobalt	1.5 B	5.0	ug/L	SW846 6010B
Potassium	1750	1000	ug/L	SW846 6010B
Magnesium	19800	1000	ug/L	SW846 6010B
Manganese	2190	10.0	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G090540

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL3mw-234C-1541-GF 07/08/10 09:10	**019**			
Sodium	8990	1000	ug/L	SW846 6010B
Nickel	7.0 B	10.0	ug/L	SW846 6010B
FWGLL3mw-DUP3-1568-GW 07/08/10 10:30	**020**			
beta-BHC	0.015 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.9 J,B	10	ug/L	SW846 8270C
Di-n-butyl phthalate	0.72 J	1.0	ug/L	SW846 8270C
FWGLL3mw-DUP3-1568-GF 07/08/10 10:30	**021**			
Iron	1240	50.0	ug/L	SW846 6020
Barium	18.6	10.0	ug/L	SW846 6010B
Calcium	17000	1000	ug/L	SW846 6010B
Cobalt	15.5	5.0	ug/L	SW846 6010B
Potassium	1320	1000	ug/L	SW846 6010B
Magnesium	8650	1000	ug/L	SW846 6010B
Manganese	1270	10.0	ug/L	SW846 6010B
Sodium	8910	1000	ug/L	SW846 6010B
Nickel	16.9	10.0	ug/L	SW846 6010B
FWGLL3mw-239C-1543-GW 07/08/10 12:40	**022**			
bis(2-Ethylhexyl) phthalate	8.7 J,B	10	ug/L	SW846 8270C
Chloroform	0.52 J	1.0	ug/L	SW846 8260B
Carbon tetrachloride	0.37 J	1.0	ug/L	SW846 8260B
FWGLL3mw-239C-1543-GF 07/08/10 12:40	**023**			
Aluminum	46.6 B	50.0	ug/L	SW846 6020
Iron	218	50.0	ug/L	SW846 6020
Zinc	6.0 B,J	10.0	ug/L	SW846 6020
Barium	10.4	10.0	ug/L	SW846 6010B
Calcium	9730	1000	ug/L	SW846 6010B
Potassium	1280	1000	ug/L	SW846 6010B
Magnesium	5160	1000	ug/L	SW846 6010B
Manganese	101	10.0	ug/L	SW846 6010B
Sodium	18700	1000	ug/L	SW846 6010B
Nickel	6.1 B	10.0	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0G090540

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL4mw-196C-1544-GW 07/08/10 14:14	**024**			
bis(2-Ethylhexyl) phthalate	8.2 J,B	10	ug/L	SW846 8270C
FWGLL4mw-196C-1544-GF 07/08/10 14:14	**025**			
Aluminum	22.8 B	50.0	ug/L	SW846 6020
Iron	393	50.0	ug/L	SW846 6020
Barium	33.4	10.0	ug/L	SW846 6010B
Calcium	57700	1000	ug/L	SW846 6010B
Potassium	642 B	1000	ug/L	SW846 6010B
Magnesium	18100	1000	ug/L	SW846 6010B
Manganese	183	10.0	ug/L	SW846 6010B
Sodium	1460	1000	ug/L	SW846 6010B
FWGSCFmw-006-1520-GW 07/08/10 16:20	**026**			
beta-BHC	0.020 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	3.7 J,B	10	ug/L	SW846 8270C
Acetone	4.9 J	10	ug/L	SW846 8260B
FWGSCFmw-006-1520-GF 07/08/10 16:20	**027**			
Iron	332	50.0	ug/L	SW846 6020
Arsenic	12.8	5.0	ug/L	SW846 6010B
Barium	107	10.0	ug/L	SW846 6010B
Calcium	58300	1000	ug/L	SW846 6010B
Potassium	5740	1000	ug/L	SW846 6010B
Magnesium	16300	1000	ug/L	SW846 6010B
Manganese	153	10.0	ug/L	SW846 6010B
Sodium	10900	1000	ug/L	SW846 6010B
FWGLL2mw-267C-1565-GW 07/09/10 09:10	**028**			
bis(2-Ethylhexyl) phthalate	2.3 J,B	10	ug/L	SW846 8270C
FWGLL2mw-267C-1565-GF 07/09/10 09:10	**029**			
Iron	1240	50.0	ug/L	SW846 6020
Barium	14.9	10.0	ug/L	SW846 6010B
Calcium	37900	1000	ug/L	SW846 6010B
Cobalt	4.5 B	5.0	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0G090540

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL2mw-267C-1565-GF 07/09/10 09:10	**029**			
Potassium	711 B	1000	ug/L	SW846 6010B
Magnesium	18900	1000	ug/L	SW846 6010B
Manganese	622	10.0	ug/L	SW846 6010B
Sodium	16500	1000	ug/L	SW846 6010B
Nickel	3.6 B	10.0	ug/L	SW846 6010B
FWGLL2mw-266C-1537-GW 07/09/10 10:20	**030**			
beta-BHC	0.029 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	5.8 J,B	10	ug/L	SW846 8270C
Acetone	2.5 J	10	ug/L	SW846 8260B
FWGLL2mw-266C-1537-GF 07/09/10 10:20	**031**			
Aluminum	1060	50.0	ug/L	SW846 6020
Cadmium	0.24 B	0.50	ug/L	SW846 6020
Iron	5080	50.0	ug/L	SW846 6020
Zinc	10.6 J	10.0	ug/L	SW846 6020
Arsenic	5.6	5.0	ug/L	SW846 6010B
Barium	19.1	10.0	ug/L	SW846 6010B
Calcium	18400	1000	ug/L	SW846 6010B
Cobalt	17.0	5.0	ug/L	SW846 6010B
Potassium	1270	1000	ug/L	SW846 6010B
Magnesium	9620	1000	ug/L	SW846 6010B
Manganese	1390	10.0	ug/L	SW846 6010B
Sodium	9520	1000	ug/L	SW846 6010B
Nickel	16.5	10.0	ug/L	SW846 6010B

A0G090540	021	L31T8	TOTAL	I5	07/15/10	14:58
	VX					
A0G090540	023	L31VE	TOTAL	I5	07/15/10	15:04
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	025	L31VH	TOTAL	I5	07/15/10	15:10
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	027	L31VK	TOTAL	I5	07/15/10	15:16
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	029	L31VQ	TOTAL	I5	07/15/10	15:22
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	031	L31VT	TOTAL	I5	07/15/10	15:29
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	021	L31T8	TOTAL	I5	07/15/10	21:06
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE					
A0G130000 MB	019	L331X	TOTAL	I8	07/29/10	21:34
	AL BE CD FE SB TL ZN					
A0G130000 LCS	019	L331X	TOTAL	I8	07/29/10	21:39
	AL BE CD FE SB TL ZN					
A0G090540	003	L31RQ	TOTAL	I8	07/29/10	21:46
	AL BE CD FE SB TL ZN					
	u					
A0G090540	005	L31R3	TOTAL	I8	07/29/10	21:50
	AL BE CD FE SB TL ZN					
A0G090540 DUP	005	L31R3	TOTAL	I8	07/29/10	22:00
	AL BE CD FE SB TL ZN					
A0G090540 MS	005	L31R3	TOTAL	I8	07/29/10	22:05
	AL BE CD FE SB TL ZN					
A0G090540	007	L31TH	TOTAL	I8	07/29/10	22:12
	AL BE CD FE SB TL ZN					
	u					
A0G090540	009	L31TL	TOTAL	I8	07/29/10	22:28
	AL BE CD FE SB TL ZN					
A0G090540	011	L31TN	TOTAL	I8	07/29/10	22:33
	AL BE CD FE SB TL ZN					
	u					

Metals Run Log
Additional Information

A0G090540	013	L31TQ	TOTAL	I8	07/29/10	22:38
		AL BE CD FE SB TL ZN				
A0G090540	015	L31TT	TOTAL	I8	07/29/10	22:43
		AL BE CD FE SB TL ZN				
A0G090540	016	L31TV	TOTAL	I8	07/29/10	22:48
		AL BE CD FE SB TL ZN				
A0G090540	019	L31T6	TOTAL	I8	07/29/10	22:53
		AL BE CD FE SB TL ZN				
A0G090540	021	L31T8	TOTAL	I8	07/29/10	22:57
		AL BE CD FE SB TL ZN				
A0G090540	023	L31VE	TOTAL	I8	07/29/10	23:02
		AL BE CD FE SB TL ZN				
A0G090540	025	L31VH	TOTAL	I8	07/29/10	23:07
		AL BE CD FE SB TL ZN				
A0G090540	027	L31VK	TOTAL	I8	07/29/10	23:12
		AL BE CD FE SB TL ZN				
A0G090540	029	L31VQ	TOTAL	I8	07/30/10	15:57
		AL BE CD FE SB TL ZN				
A0G090540	031	L31VT	TOTAL	I8	07/30/10	16:02
		AL BE CD FE SB TL ZN				

Metals Run Log
Additional Information

A0G090540	029	L31VQ	TOTAL	H1	07/15/10	16:16
	HG					
A0G090540	027	L31VK	TOTAL	H1	07/15/10	16:17
	HG					
A0G090540	007	L31TH	TOTAL	H1	07/15/10	16:18
	HG					
A0G130000	019	L331X	TOTAL	I5	07/15/10	12:58
MB	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					
A0G130000	019	L331X	TOTAL	I5	07/15/10	13:03
LCS	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					
A0G090540	003	L31RQ	TOTAL	I5	07/15/10	13:09
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	005	L31R3	TOTAL	I5	07/15/10	13:27
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	005	L31R3	TOTAL	I5	07/15/10	13:39
DUP	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					
A0G090540	005	L31R3	TOTAL	I5	07/15/10	13:45
MS	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					
A0G090540	007	L31TH	TOTAL	I5	07/15/10	13:51
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	009	L31TL	TOTAL	I5	07/15/10	13:57
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	011	L31TN	TOTAL	I5	07/15/10	14:03
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	013	L31TQ	TOTAL	I5	07/15/10	14:08
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	015	L31TT	TOTAL	I5	07/15/10	14:14
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
	u					
A0G090540	016	L31TV	TOTAL	I5	07/15/10	14:25
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G090540	019	L31T6	TOTAL	I5	07/15/10	14:53
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 18, 2010

SDG: A0G090540 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
1. Did Chain-of-Custody information agree with laboratory report?	X				
2. Were samples preserved properly and received in good condition?	X			The coolers were received between 2.3. – 5.9 °C.	QAPP Table 4-2
3. Were holding times met?	X				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	X				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	X				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	X				QAPP Table 3-9
7. Was the Linear Calibration Range verified using 3 standards and 1 blank? Was the ICV within 10% of the initial values?	X				Method EPA 353.2 Section 9.2.2 J
8. Were the calibration standards verified by preparation and analysis of a Quality Control Sample? Were results within 10% of the stated values?					Method EPA 353.2 Section 9.2.3 Pj
9. Was an Instrument Performance Check Solution (CCV) analyzed immediately following daily calibration, after every 10th sample, and at the end of the analytical sequence?	X				Method EPA 353.2 Section 9.3.4
10. Was the CCV a mid-level standard from the initial calibration curve?	X				Method EPA 353.2 Section 9.3.4
11. Were the CCVs 90-110%?	X				Method EPA 353.2 Section 9.3.4 >110%=J; 85-90%=J/UJ; <85%=J/R
12. Was a method blank and a calibration blank prepared and analyzed with each batch?	X				Method EPA 353.2 Section 9.3.1, 9.3.4

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 18, 2010

SDG: A0G090540 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
13. Were target analytes detected in the method blank or calibration blank >1/2 the MRL?		X		*ADR checked section;*	LCG Attachment A Section 11 <5x = B
14. Was a field blank (trip or equipment) collected and analyzed?	X				
15. Were target analytes reported in the field blank analyses (trip or equipment) >1/2 the MRL?		X		*ADR checked section;*	*<5x=U*
16. Was a field duplicate analyzed? Were the RPDs acceptable?	X				
17. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within 90-110%?	X				Method EPA 353.2 Section 9.3.3 J/UJ; <50%= R
18. Was a MS/MSD pair prepared with each batch?	X				*Method EPA 353.2 Section 9.4.1*
19. Was the MS/MSD parent sample a Ravenna sample?	X				
20. Were MS/MSD recoveries and RPD within acceptance criteria?	X			*ADR checked section*	*Method EPA 353.2 Section 9.4.2 Pj*
21. Were sample concentrations within calibration range?	X				
22. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		X			
23. Were lab comments included in report? If yes, summarize contents.	X				

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 18, 2010

SDG: A0G090540 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.3. – 5.9 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-9
7. Does the initial calibration curve consist of at least 6 standards and one blank?	✓				LCG Table 10 R
8. Was the correlation coefficient R ≥ 0.995?	✓				LCG Table 10 R<0.995=-J/R
9. Were % RSDs ≤ 10% in all standards and ICV/CCVs?	✓				LCG Table 10 RSD%>10=J
10. Were a high and low standard distilled and compared to the undistilled standard? Were the results within ± 10%?			✓		LCG Table 10 R
11. Was an MDL Level Verification performed at least once per quarter with all target analytes detected?	✓				LCG Table 10 R
12. Was a MRL Level Verification performed at the beginning of every daily sequence? Were results within 70-130%?	✓				LCG Table 10 >130%=J; 65-70%=J/UJ; <65%=J/R
13. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓				LCG Table 10 >115%=J; 80-85%=J/UJ; <80%=J/R
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				LCG Table 7 < 5x = U
15. Was a CCV run at the beginning and end of the analytical sequence?	✓				LCG Table 10

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 18, 2010

SDG: A0G090540 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
16. Were the CCV results 80-120%?	✓				LCG Table 10 >120%=J; 75-80%=J/UJ; <75%=J/R
17. Was a method blank prepared and analyzed with each batch?	✓				
18. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR.	LCG Table 10 <5x=B
19. Was a field blank collected and analyzed?	✓				
20. Were target analytes in the field blank analyses <1/2 the MRL?	✓				<5x=B
21. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Checked by ADR.	QAPP Table 3-2 >30% = J
22. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 10
23. Were the LCS recoveries 80-120%?	✓			Checked by ADR.	LCG Table 10 >120%=J; 50-79%=J/UJ; <50%=R
24. Was a MS prepared once per every 10 samples?	✓				LCG Table 10
25. Was the MS parent a Ravenna sample?	✓				
26. Were MS recoveries 80-120%?	✓				QAPP Table 3-2 >120%=J; 30-79%=J/UJ; <30%=J/R
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 18, 2010

SDG: A0G090540 R0
Analysis: SW846 9012

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 10 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1542-GW

General Chemistry

Lot-Sample #...: A0G090540-002 Work Order #...: L31RG Matrix.....: WG
Date Sampled...: 07/08/10 09:15 Date Received..: 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/21/10	0202437

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-232C-1540-GW

General Chemistry

Lot-Sample #...: A0G090540-004 **Work Order #...:** L31RW **Matrix.....:** WG
Date Sampled...: 07/08/10 11:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/21/10	0202437

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1545-GW

General Chemistry

Lot-Sample #...: A0G090540-006 Work Order #...: L31R5 Matrix.....: WG
Date Sampled...: 07/08/10 14:15 Date Received..: 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/21/10	0202437

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-059C-1531-GW

General Chemistry

Lot-Sample #...: A0G090540-008 Work Order #...: L31TK Matrix.....: WG
Date Sampled...: 07/08/10 16:05 Date Received..: 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	0.0058 B	0.010	mg/L	SW846 9012A	07/21/10	0202437

Dilution Factor: 1 MDL.....: 0.0050

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-060C-1532-GW

General Chemistry

Lot-Sample #...: A0G090540-010 **Work Order #...:** L31TM **Matrix.....:** WG
Date Sampled...: 07/08/10 17:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-262C-1534-GW

General Chemistry

Lot-Sample #...: A0G090540-012 **Work Order #...:** L31TP **Matrix.....:** WG
Date Sampled...: 07/09/10 09:15 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-263C-1535-GW

General Chemistry

Lot-Sample #...: A0G090540-014 **Work Order #...:** L31TR **Matrix.....:** WG
Date Sampled...: 07/09/10 10:35 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1578-GW

General Chemistry

Lot-Sample #...: A0G090540-016 **Work Order #...:** L31TV **Matrix.....:** WQ
Date Sampled...: 07/09/10 11:45 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346
	Dilution Factor: 1			MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/13/10	0194260
	Dilution Factor: 1			MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-234C-1541-GW

General Chemistry

Lot-Sample #...: A0G090540-018 **Work Order #...:** L31T1 **Matrix.....:** WG
Date Sampled...: 07/08/10 09:10 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-DUP3-1568-GW

General Chemistry

Lot-Sample #...: A0G090540-020 **Work Order #...:** L31T7 **Matrix.....:** WG
Date Sampled...: 07/08/10 10:30 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1543-GW

General Chemistry

Lot-Sample #...: A0G090540-022 **Work Order #...:** L31VC **Matrix.....:** WG
Date Sampled...: 07/08/10 12:40 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1544-GW

General Chemistry

Lot-Sample #...: A0G090540-024 **Work Order #...:** L31VG **Matrix.....:** WG
Date Sampled...: 07/08/10 14:14 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1520-GW

General Chemistry

Lot-Sample #...: A0G090540-026 **Work Order #...:** L31VJ **Matrix.....:** WG
Date Sampled...: 07/08/10 16:20 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346
	Dilution Factor: 1			MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/13/10	0194260
	Dilution Factor: 1			MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1565-GW

General Chemistry

Lot-Sample #...: A0G090540-028 **Work Order #...:** L31VL **Matrix.....:** WG
Date Sampled...: 07/09/10 09:10 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1537-GW

General Chemistry

Lot-Sample #...: A0G090540-030 **Work Order #...:** L31VR **Matrix.....:** WG
Date Sampled...: 07/09/10 10:20 **Date Received..:** 07/09/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346

Dilution Factor: 1 MDL.....: 0.0050

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0G090540 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: L4HLF1AA		MB Lot-Sample #:	A0G210000-437	
	ND	0.010	mg/L	SW846 9012A	07/21/10	0202437
		Dilution Factor: 1				
Cyanide, Total		Work Order #: L4J841AA		MB Lot-Sample #:	A0G220000-346	
	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346
		Dilution Factor: 1				
Nitrate-Nitrite		Work Order #: L34R21AA		MB Lot-Sample #:	A0G130000-260	
	ND	0.1	mg/L	MCAWW 353.2	07/13/10	0194260
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G090540 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: L4HLF1AC	LCS Lot-Sample#: A0G210000-437		
	81	(80 - 120)	SW846 9012A	07/21/10	0202437
		Dilution Factor: 1			
Cyanide, Total		Work Order #: L4J841AC	LCS Lot-Sample#: A0G220000-346		
	108	(80 - 120)	SW846 9012A	07/22/10	0203346
		Dilution Factor: 1			
Nitrate-Nitrite		Work Order #: L34R21AC	LCS Lot-Sample#: A0G130000-260		
	105	(79 - 117)	MCAWW 353.2	07/13/10	0194260
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G090540 **Matrix.....:** WATER
Date Sampled...: 06/30/10 19:20 **Date Received..:** 07/03/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite		WO#: L3R501A9-MS/L3R501CA-MSD				MS Lot-Sample #: A0G030448-015	
	94	(34 - 125)			MCAWW 353.2	07/13/10	0194260
	87	(34 - 125)	7.0	(0-20)	MCAWW 353.2	07/13/10	0194260

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G090540 **Matrix.....:** WG
Date Sampled...: 07/09/10 09:15 **Date Received..:** 07/09/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: L31RW1AN-MS/L31RW1AP-MSD				MS Lot-Sample #: A0G090540-004	
	99	(80 - 120)			SW846 9012A	07/21/10	0202437
	104	(80 - 120)	4.4	(0-20)	SW846 9012A	07/21/10	0202437
		Dilution Factor: 1					
Cyanide, Total		WO#: L31TP1AG-MS/L31TP1AH-MSD				MS Lot-Sample #: A0G090540-012	
	87	(80 - 120)			SW846 9012A	07/22/10	0203346
	82	(80 - 120)	6.5	(0-20)	SW846 9012A	07/22/10	0203346
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G090540										
6010B	FWGLL2mw-059C-1531-GF	AQ	N							
				Potassium	1000	883B		J	ug/L	L
6010B	FWGLL2mw-060C-1532-GF	AQ	N							
				Potassium	1000	519B		UJ	ug/L	Cb,L
6010B	FWGLL2mw-263C-1535-GF	AQ	N							
				Cobalt	5.0	3.2B		J	ug/L	L
				Nickel	10.0	5.6B		J	ug/L	L
				Potassium	1000	814B		UJ	ug/L	Cb,L
6010B	FWGLL2mw-267C-1565-GF	AQ	N							
				Cobalt	5.0	4.5B		J	ug/L	L
				Nickel	10.0	3.6B		J	ug/L	L
				Potassium	1000	711B		UJ	ug/L	Cb,L
6010B	FWGLL3mw-232C-1540-GF	AQ	N							
				Arsenic	5.0	3.5B		J	ug/L	L
				Nickel	10.0	7.8B		J	ug/L	L
6010B	FWGLL3mw-234C-1541-GF	AQ	N							
				Barium	10.0	9.8B		J	ug/L	L,P
				Calcium	1000	51100		J	ug/L	Pj,P
				Cobalt	5.0	1.5B		J	ug/L	L,P
				Magnesium	1000	19800		J	ug/L	Pj,P
				Manganese	10.0	2190		J	ug/L	Pj,P
				Nickel	10.0	7.0B		J	ug/L	L,P
6010B	FWGLL3mw-236C-1542-GF	AQ	N							
				Nickel	10.0	7.9B		J	ug/L	L
6010B	FWGLL3mw-239C-1543-GF	AQ	N							
				Nickel	10.0	6.1B		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G090540										
6010B	FWGLL3mw-DUP3-1568-GF	AQ	FD							
				Barium	10.0	18.6		J	ug/L	Pj
				Calcium	1000	17000		J	ug/L	Pj
				Cobalt	5.0	15.5		J	ug/L	Pj
				Magnesium	1000	8650		J	ug/L	Pj
				Manganese	10.0	1270		J	ug/L	Pj
				Nickel	10.0	16.9		J	ug/L	Pj
6010B	FWGLL4mw-196C-1544-GF	AQ	N							
				Potassium	1000	642B		UJ	ug/L	Cb,L
6020	FWGLL2mw-059C-1531-GF	AQ	N							
				Aluminum	50.0	21.5B		J	ug/L	L
				Zinc	10.0	4.0B J		JB	ug/L	L,F
6020	FWGLL2mw-060C-1532-GF	AQ	N							
				Antimony	2.0	0.17B		J	ug/L	L
				Thallium	1.0	1.0U		U	ug/L	Cb
6020	FWGLL2mw-262C-1534-GF	AQ	N							
				Aluminum	50.0	24.9B		J	ug/L	L
6020	FWGLL2mw-266C-1537-GF	AQ	N							
				Cadmium	0.50	0.24B		J	ug/L	L
				Zinc	10.0	10.6J		B	ug/L	F
6020	FWGLL3mw-232C-1540-GF	AQ	N							
				Zinc	10.0	7.8B J		JB	ug/L	L,F
6020	FWGLL3mw-236C-1542-GF	AQ	N							
				Antimony	2.0	0.15B		J	ug/L	L
				Thallium	1.0	1.0U		U	ug/L	Cb
				Zinc	10.0	15.9J		B	ug/L	F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G090540										
6020	FWGLL3mw-239C-1543-GF	AQ	N							
				Aluminum	50.0	46.6B		J	ug/L	L
				Zinc	10.0	6.0B J		JB	ug/L	L,F
6020	FWGLL4mw-196C-1544-GF	AQ	N							
				Aluminum	50.0	22.8B		J	ug/L	L
6020	FWGLL4mw-197C-1545-GF	AQ	N							
				Antimony	2.0	0.16B		J	ug/L	L
				Thallium	1.0	1.0U		U	ug/L	Cb

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G090540										
8081A	FWGLL2mw-266C-1537-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.029J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8081A	FWGLL3mw-DUP3-1568-GW	AQ	FD							
				beta-BHC	0.030	0.015J		J	ug/L	L
8081A	FWGSCFmw-006-1520-GW	AQ	N							
				beta-BHC	0.030	0.020J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G090540										
8082	FWGLL2mw-266C-1537-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8260B	FWGEQUIPRINSE1-1578-GW	AQ	EB							
				M&P-XYLENES	2.0	0.35J		J	ug/L	L
				Methylene chloride	2.0	1.0J B		JB	ug/L	Pj,F,L
				o-Xylene	1.0	0.14J		J	ug/L	L
				Toluene	1.0	0.87J		J	ug/L	L
				TOTAL XYLENES	2.0	0.49J		J	ug/L	L
8260B	FWGLL2mw-266C-1537-GW	AQ	N							
				Acetone	10	2.5J		JB	ug/L	O,N,L
8260B	FWGLL3mw-239C-1543-GW	AQ	N							
				Carbon tetrachloride	1.0	0.37J		J	ug/L	L
				Chloroform	1.0	0.52J		J	ug/L	L
8260B	FWGSCFmw-006-1520-GW	AQ	N							
				Acetone	10	4.9J		JB	ug/L	O,N,L
8260B	FWGTEAM1-TRIP	AQ	TB							
				Acetone	10	1.8J		J	ug/L	L
8260B	FWGTEAM2-TRIP	AQ	TB							
				Acetone	10	1.6J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G090540										
8270C	FWGEQUIPRINSE1-1578-GW	AQ	EB							
				Benzoic acid	10	10U		UJ	ug/L	J
				Benzyl alcohol	5.0	0.41J		J	ug/L	L
				bis(2-Ethylhexyl) phthalate	10	1.3J B		JB	ug/L	L,F
				Diethyl phthalate	1.0	0.60J		J	ug/L	L
8270C	FWGLL2mw-059C-1531-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	J
8270C	FWGLL2mw-060C-1532-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	J
8270C	FWGLL2mw-262C-1534-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	1.1J B		JB	ug/L	L,N,F
8270C	FWGLL2mw-263C-1535-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	J
8270C	FWGLL2mw-266C-1537-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	5.8J B		JB	ug/L	L,N,F
8270C	FWGLL2mw-267C-1565-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	2.3J B		JB	ug/L	L,N,F
8270C	FWGLL3mw-232C-1540-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	1.5J B		JB	ug/L	L,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G090540										
8270C	FWGLL3mw-234C-1541-GW	AQ	N							
				2,4,5-Trichlorophenol	5.0	5.0U		UJ	ug/L	G
				2,4,6-Trichlorophenol	5.0	5.0U		UJ	ug/L	G
				2,4-Dichlorophenol	2.0	2.0U		UJ	ug/L	G
				2,4-Dimethylphenol	2.0	2.0U		UJ	ug/L	G
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	G
				2-Chlorophenol	1.0	1.0U		UJ	ug/L	G
				2-Methylphenol	1.0	1.0U		UJ	ug/L	G
				2-Nitrophenol	2.0	2.0U		UJ	ug/L	G
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	G
				4-Chloro-3-methylphenol	2.0	2.0U		UJ	ug/L	G
				4-Methylphenol	1.0	1.0U		UJ	ug/L	G
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	G
				Benzoic acid	10	10U		UJ	ug/L	G,J
				Benzyl alcohol	5.0	0.84J		JB	ug/L	G,N,P,L
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	G
				Phenol	1.0	1.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G090540										
8270C	FWGLL3mw-236C-1542-GW	AQ	N							
				2,4,5-Trichlorophenol	5.0	5.0U		UJ	ug/L	G
				2,4,6-Trichlorophenol	5.0	5.0U		UJ	ug/L	G
				2,4-Dichlorophenol	2.0	2.0U		UJ	ug/L	G
				2,4-Dimethylphenol	2.0	2.0U		UJ	ug/L	G
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	G
				2-Chlorophenol	1.0	1.0U		UJ	ug/L	G
				2-Methylphenol	1.0	1.0U		UJ	ug/L	G
				2-Nitrophenol	2.0	2.0U		UJ	ug/L	G
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	G
				4-Chloro-3-methylphenol	2.0	2.0U		UJ	ug/L	G
				4-Methylphenol	1.0	1.0U		UJ	ug/L	G
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	G
				Benzoic acid	10	10U		UJ	ug/L	G,J
				Benzyl alcohol	5.0	5.0U		UJ	ug/L	G
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	G
				Phenol	1.0	1.0U		UJ	ug/L	G
8270C	FWGLL3mw-239C-1543-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	8.7J B		JB	ug/L	L,N,F
8270C	FWGLL3mw-DUP3-1568-GW	AQ	FD							
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	1.9J B		JB	ug/L	Pj,N,F,L
				Di-n-butyl phthalate	1.0	0.72J		J	ug/L	Pj,L
8270C	FWGLL4mw-196C-1544-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	8.2J B		JB	ug/L	L,N,F

N = Normal Sample *TB = Trip Blank*
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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G090540										
8270C	FWGLL4mw-197C-1545-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	1.1J B		JB	ug/L	L,N,F
8270C	FWGSCFmw-006-1520-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	3.7J B		JB	ug/L	L,N,F
9012A	FWGLL2mw-059C-1531-GW	AQ	N							
				Cyanide	0.010	0.0058B		J	mg/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE1-1578-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540016

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
M&P-XYLENES	0.35		ug/L	J	YES	J								J							L
Methylene chloride	1.0		ug/L	J B	YES	~~UJ~~ JB			JB					J							Pj,F,L
o-Xylene	0.14		ug/L	J	YES	J								J							L
Toluene	0.87		ug/L	J	YES	J								J							L
TOTAL XYLENES	0.49		ug/L	J	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
Benzyl alcohol	0.41		ug/L	J	YES	J								J							L
bis(2-Ethylhexyl) phthalate	1.3		ug/L	J B	YES	~~UJ~~ JB			JB					J							L,F
Diethyl phthalate	0.60		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-059C-1531-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540009

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	883		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Aluminum	21.5		ug/L	B	YES	J								J							L
Zinc	4.0		ug/L	B J	YES	~~UJ~~ JB			~~U~~B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-059C-1531-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540008

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.0058		mg/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-060C-1532-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540011

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	519		ug/L	B	YES	UJ								J							Cb,L
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.17		ug/L	B	YES	J								J							L
Thallium	1.0		ug/L	U	YES	UJ U															Cb

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-060C-1532-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540010

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-262C-1534-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540013

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020							**Dilution: 1**														
Aluminum	24.9		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-262C-1534-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540012

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	1.1		ug/L	J B	YES	~~UJ~~ JB			ϕB					J		ϕB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-263C-1535-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540015

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	3.2		ug/L	B	YES	**J**								J							L
Nickel	5.6		ug/L	B	YES	**J**								J							L
Potassium	814		ug/L	B	YES	**UJ**								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-263C-1535-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540014

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	**UJ**				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-266C-1537-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540031

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Cadmium	0.24		ug/L	B	YES	J								J							L
Zinc	10.6		ug/L	J	YES	J B			J B												F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-266C-1537-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540030

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.029		ug/L	J	YES	**J**							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8260B						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-266C-1537-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540030

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B							**Dilution: 1**														
Acetone	2.5		ug/L	J	YES	UJ	JB							J		UJB					O,N,L
Analysis Method : 8270C							**Dilution: 1**														
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	5.8		ug/L	J B	YES	UJ	JB		UB					J		UJB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-267C-1565-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540029

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	4.5		ug/L	B	YES	J								J							L
Nickel	3.6		ug/L	B	YES	J								J							L
Potassium	711		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-267C-1565-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/09/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540028

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	2.3		ug/L	J B	YES	~~UJ~~ J B			J B					J		J B					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-232C-1540-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540005

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Arsenic	3.5		ug/L	B	YES	J								J							L
Nickel	7.8		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	7.8		ug/L	B J	YES	UJ JB			U					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-232C-1540-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540004

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	1.5		ug/L	J B	YES	~~UJ~~ JB			JB					J		JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-234C-1541-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540019

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	9.8		ug/L	B	YES	J								J							L,P
Calcium	51100		ug/L		YES	J															Pj,P
Cobalt	1.5		ug/L	B	YES	J								J							L,P
Magnesium	19800		ug/L		YES	J															Pj,P
Manganese	2190		ug/L		YES	J															Pj,P
Nickel	7.0		ug/L	B	YES	J								J							L,P

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-234C-1541-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540018

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4,5-Trichlorophenol	5.0		ug/L	U	YES	**UJ**							UJ								G
2,4,6-Trichlorophenol	5.0		ug/L	U	YES	**UJ**							UJ								G
2,4-Dichlorophenol	2.0		ug/L	U	YES	**UJ**							UJ								G
2,4-Dimethylphenol	2.0		ug/L	U	YES	**UJ**							UJ								G
2,4-Dinitrophenol	5.0		ug/L	U	YES	**UJ**							UJ								G
2-Chlorophenol	1.0		ug/L	U	YES	**UJ**							UJ								G
2-Methylphenol	1.0		ug/L	U	YES	**UJ**							UJ								G
2-Nitrophenol	2.0		ug/L	U	YES	**UJ**							UJ								G
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	**UJ**							UJ								G
4-Chloro-3-methylphenol	2.0		ug/L	U	YES	**UJ**							UJ								G
4-Methylphenol	1.0		ug/L	U	YES	**UJ**							UJ								G
4-Nitrophenol	5.0		ug/L	U	YES	**UJ**							UJ								G
Benzoic acid	10		ug/L	U	YES	**UJ**				UJ			UJ								G,J
Benzyl alcohol	0.84		ug/L	J	YES	~~UJ~~ JB							J	J		JB					G,N,P,L
Pentachlorophenol	5.0		ug/L	U	YES	**UJ**							UJ								G
Phenol	1.0		ug/L	U	YES	**UJ**							UJ								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-236C-1542-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540003

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	7.9		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.15		ug/L	B	YES	J								J							L
Thallium	1.0		ug/L	U	YES	UJ/U															Cb
Zinc	15.9		ug/L	J	YES	J/B			J/B												F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-236C-1542-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540002

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4,5-Trichlorophenol	5.0		ug/L	U	YES	UJ							UJ								G
2,4,6-Trichlorophenol	5.0		ug/L	U	YES	UJ							UJ								G
2,4-Dichlorophenol	2.0		ug/L	U	YES	UJ							UJ								G
2,4-Dimethylphenol	2.0		ug/L	U	YES	UJ							UJ								G
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ							UJ								G
2-Chlorophenol	1.0		ug/L	U	YES	UJ							UJ								G
2-Methylphenol	1.0		ug/L	U	YES	UJ							UJ								G
2-Nitrophenol	2.0		ug/L	U	YES	UJ							UJ								G
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ							UJ								G
4-Chloro-3-methylphenol	2.0		ug/L	U	YES	UJ							UJ								G
4-Methylphenol	1.0		ug/L	U	YES	UJ							UJ								G
4-Nitrophenol	5.0		ug/L	U	YES	UJ							UJ								G
Benzoic acid	10		ug/L	U	YES	UJ				UJ			UJ								G,J
Benzyl alcohol	5.0		ug/L	U	YES	UJ							UJ								G
Pentachlorophenol	5.0		ug/L	U	YES	UJ							UJ								G
Phenol	1.0		ug/L	U	YES	UJ							UJ								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-239C-1543-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540023

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	6.1		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Aluminum	46.6		ug/L	B	YES	J								J							L
Zinc	6.0		ug/L	B J	YES	UJ JB			JB					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-239C-1543-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540022

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Carbon tetrachloride	0.37		ug/L	J	YES	J								J							L
Chloroform	0.52		ug/L	J	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	8.7		ug/L	J B	YES	~~UJ~~ JB			JB					J		JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-DUP3-1568-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540021

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	18.6		ug/L		YES	J															Pj
Calcium	17000		ug/L		YES	J															Pj
Cobalt	15.5		ug/L		YES	J															Pj
Magnesium	8650		ug/L		YES	J															Pj
Manganese	1270		ug/L		YES	J															Pj
Nickel	16.9		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-DUP3-1568-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540020

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
beta-BHC	0.015		ug/L	J	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	1.9		ug/L	J B	YES	~~UJ~~ J B			J B					J		J B					Pj,N,F,L
Di-n-butyl phthalate	0.72		ug/L	J	YES	J								J							Pj,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL4mw-196C-1544-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540025

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	642		ug/L	B	YES	UJ								J							Cb,L
Analysis Method : 6020						**Dilution: 1**															
Aluminum	22.8		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL4mw-196C-1544-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540024

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	8.2		ug/L	J B	YES	~~UJ~~ JB			JB					J		JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL4mw-197C-1545-GF **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G090540007

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.16		ug/L	B	YES	J								J							L
Thallium	1.0		ug/L	U	YES	UJ U															Cb

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL4mw-197C-1545-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540006

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	1.1		ug/L	J B	YES	~~UJ~~ JB			JB					J		JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-006-1520-GW **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540026

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A																					
																				Dilution: 1	
beta-BHC	0.020		ug/L	J	YES	J								J							L
Analysis Method : 8260B																					
																				Dilution: 1	
Acetone	4.9		ug/L	J	YES	~~UJ~~	JB							J		JB					O,N,L
Analysis Method : 8270C																					
																				Dilution: 1	
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	3.7		ug/L	J B	YES	~~UJ~~	JB		JB					J		JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM1-TRIP **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540001

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.8		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM2-TRIP **Lab Report Batch :** A0G090540 **Lab ID :** TALCAN

Sample Date : 07/08/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G090540017

Reviewed By / Date : Angye Dragotta 8/18/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.6		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G090540 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE1-1578	A0G090540016	8260B	AQ	M&P-XYLENES	J	0.35	2.0	ug/L
				Methylene chloride	J B	1.0	2.0	ug/L
				o-Xylene	J	0.14	1.0	ug/L
				Toluene	J	0.87	1.0	ug/L
				TOTAL XYLENES	J	0.49	2.0	ug/L
		8270C		Benzyl alcohol	J	0.41	5.0	ug/L
				bis(2-Ethylhexyl) phthalate	J B	1.3	10	ug/L
				Diethyl phthalate	J	0.60	1.0	ug/L
FWGLL2mw-059C-1531-G	A0G090540009	6010B		Potassium	B	883	1000	ug/L
		6020		Aluminum	B	21.5	50.0	ug/L
				Zinc	B J	4.0	10.0	ug/L
FWGLL2mw-059C-1531-G	A0G090540008	9012A		Cyanide	B	0.0058	0.010	mg/L
FWGLL2mw-060C-1532-G	A0G090540011	6010B		Potassium	B	519	1000	ug/L
		6020		Antimony	B	0.17	2.0	ug/L
FWGLL2mw-262C-1534-G	A0G090540013			Aluminum	B	24.9	50.0	ug/L
FWGLL2mw-262C-1534-G	A0G090540012	8270C		bis(2-Ethylhexyl) phthalate	J B	1.1	10	ug/L
FWGLL2mw-263C-1535-G	A0G090540015	6010B		Cobalt	B	3.2	5.0	ug/L
				Nickel	B	5.6	10.0	ug/L
				Potassium	B	814	1000	ug/L
FWGLL2mw-266C-1537-G	A0G090540031	6020		Cadmium	B	0.24	0.50	ug/L
FWGLL2mw-266C-1537-G	A0G090540030	8081A		beta-BHC	J	0.029	0.030	ug/L
		8260B		Acetone	J	2.5	10	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	5.8	10	ug/L
FWGLL2mw-267C-1565-G	A0G090540029	6010B		Cobalt	B	4.5	5.0	ug/L
				Nickel	B	3.6	10.0	ug/L
				Potassium	B	711	1000	ug/L
FWGLL2mw-267C-1565-G	A0G090540028	8270C		bis(2-Ethylhexyl) phthalate	J B	2.3	10	ug/L
FWGLL3mw-232C-1540-G	A0G090540005	6010B		Arsenic	B	3.5	5.0	ug/L
				Nickel	B	7.8	10.0	ug/L
		6020		Zinc	B J	7.8	10.0	ug/L
FWGLL3mw-232C-1540-G	A0G090540004	8270C		bis(2-Ethylhexyl) phthalate	J B	1.5	10	ug/L
FWGLL3mw-234C-1541-G	A0G090540019	6010B		Barium	B	9.8	10.0	ug/L
				Cobalt	B	1.5	5.0	ug/L
				Nickel	B	7.0	10.0	ug/L
FWGLL3mw-234C-1541-G	A0G090540018	8270C		Benzyl alcohol	J	0.84	5.0	ug/L
FWGLL3mw-236C-1542-G	A0G090540003	6010B		Nickel	B	7.9	10.0	ug/L

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G090540 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL3mw-236C-1542-G	A0G090540003	6020	AQ	Antimony	B	0.15	2.0	ug/L
FWGLL3mw-239C-1543-G	A0G090540023	6010B		Nickel	B	6.1	10.0	ug/L
		6020		Aluminum	B	46.6	50.0	ug/L
				Zinc	B J	6.0	10.0	ug/L
FWGLL3mw-239C-1543-G	A0G090540022	8260B		Carbon tetrachloride	J	0.37	1.0	ug/L
				Chloroform	J	0.52	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	8.7	10	ug/L
FWGLL3mw-DUP3-1568-	A0G090540020	8081A		beta-BHC	J	0.015	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.9	10	ug/L
				Di-n-butyl phthalate	J	0.72	1.0	ug/L
FWGLL4mw-196C-1544-G	A0G090540025	6010B		Potassium	B	642	1000	ug/L
		6020		Aluminum	B	22.8	50.0	ug/L
FWGLL4mw-196C-1544-G	A0G090540024	8270C		bis(2-Ethylhexyl) phthalate	J B	8.2	10	ug/L
FWGLL4mw-197C-1545-G	A0G090540007	6020		Antimony	B	0.16	2.0	ug/L
FWGLL4mw-197C-1545-G	A0G090540006	8270C		bis(2-Ethylhexyl) phthalate	J B	1.1	10	ug/L
FWGSCFmw-006-1520-G	A0G090540026	8081A		beta-BHC	J	0.020	0.030	ug/L
		8260B		Acetone	J	4.9	10	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	3.7	10	ug/L
FWGTEAM1-TRIP	A0G090540001	8260B		Acetone	J	1.8	10	ug/L
FWGTEAM2-TRIP	A0G090540017			Acetone	J	1.6	10	ug/L

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G090540 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE1-1578	A0G090540016	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Potassium	U	1000	200.00	ug/L
				Sodium	U	1000	200.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0G090540 **Lab ID:** TALCAN
Method/Preparation Batch : 0202112 / 0202112 **Analysis Date :** 07/21/2010
Client Sample ID : FWGEQUIPRINSE1-1578-GW **Preparation Date :** 07/21/2010
Lab Sample ID : A0G090540016 **Preparation Type :** 5030B

Analysis Method : 8260B

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	24	10	ug/L		Common Contaminant

2-Butanone contamination found in the equipment blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	36	10	ug/L		Common Contaminant

Acetone was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL2mw-266C-1537-GW	A0G090540030	1	2.5	J	ug/L
FWGSCFmw-006-1520-GW	A0G090540026	1	4.9	J	ug/L

M&P-XYLENES	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.35	2.0	ug/L	J	

MP-XYLENES contamination found in the equipment blank did not qualify any samples.

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.0	2.0	ug/L	J B	Common Contaminant

Methylene chloride contamination found in the equipment blank did not qualify any samples.

o-Xylene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.14	1.0	ug/L	J	

o-Xylene contamination found in the equipment blank did not qualify any samples.

Toluene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.87	1.0	ug/L	J	Common Contaminant

Toluene contamination found in the equipment blank did not qualify any samples.

TOTAL XYLENES	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.49	2.0	ug/L	J	

TOTAL XYLENES contamination found in the equipment blank did not qualify any samples.

QC Outlier Report: Trip Blank

Lab Reporting Batch : A0G090540
Lab ID: TALCAN
Method/Preparation Batch : 0202112 / 0202112
Analysis Date : 07/21/2010
Client Sample ID : FWGTEAM1-TRIP
Preparation Date : 07/21/2010
Lab Sample ID : A0G090540001
Preparation Type : 5030B

Analysis Method : 8260B

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.8	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.6	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL2mw-266C-1537-GW	A0G090540030	1	2.5	J	ug/L
FWGSCFmw-006-1520-GW	A0G090540026	1	4.9	J	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A0G090540
Lab ID: TALCAN
Analysis Method : 8260B
Analysis Date : 07/21/2010
Preparation Type : 5030B
Preparation Date : 07/21/2010
Method Blank Lab Sample ID : A0G210000112B
Preparation Batch : 0202112

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.65	2.0	ug/L	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE1-1578-G	A0G090540016	1	1.0	J B	ug/L

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0191015 **Analysis Method :** 8270C **Analysis Date :** 07/14/2010

Preparation Batch : 0191015 **Preparation Type :** 3520C **Preparation Date :** 07/10/2010

Lab Reporting Batch : A0G090540 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL3mw-232C-1540-	A0G090540004S	AQ	1,2-Dichlorobenzene	44		0.00	45.00	135.00	20.00
			1,3-Dichlorobenzene	39		0.00	45.00	135.00	20.00
			✓3,3'-Dichlorobenzidine	12		0.00	45.00	135.00	20.00
			✓Hexachlorobutadiene	31		0.00	45.00	135.00	20.00
			Hexachlorocyclopentadiene	44		0.00	45.00	135.00	20.00
			Hexachloroethane	31		0.00	45.00	135.00	20.00
			✓N-Nitrosodiphenylamine	31		0.00	45.00	135.00	20.00
FWGLL3mw-232C-1540-	A0G090540004D		1,2-Dichlorobenzene		23	0.00	45.00	135.00	20.00
			1,3-Dichlorobenzene		28	0.00	45.00	135.00	20.00
			1,4-Dichlorobenzene		25	0.00	45.00	135.00	20.00
			✓3,3'-Dichlorobenzidine	12		0.00	45.00	135.00	20.00
			✓Hexachlorobutadiene	41	28	0.00	45.00	135.00	20.00
			Hexachloroethane		37	0.00	45.00	135.00	20.00
			✓N-Nitrosodiphenylamine	33		0.00	45.00	135.00	20.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL3mw-232C-1540-GW	A0G090540004

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.

** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0191015 **Analysis Method :** 8270C **Analysis Date :** 07/14/2010

Preparation Batch : 0191015 **Preparation Type :** 3520C **Preparation Date :** 07/10/2010

Lab Reporting Batch : A0G090540 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	Matrix	Analyte Name	Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0G100000015C	AQ	Benzoic acid	8.8		30.00	30.00	136.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE1-1578-GW	A0G090540016
FWGLL2mw-059C-1531-GW	A0G090540008
FWGLL2mw-060C-1532-GW	A0G090540010
FWGLL2mw-262C-1534-GW	A0G090540012
FWGLL2mw-263C-1535-GW	A0G090540014
FWGLL2mw-266C-1537-GW	A0G090540030
FWGLL2mw-267C-1565-GW	A0G090540028
FWGLL3mw-232C-1540-GW	A0G090540004
FWGLL3mw-234C-1541-GW	A0G090540018
FWGLL3mw-236C-1542-GW	A0G090540002
FWGLL3mw-239C-1543-GW	A0G090540022
FWGLL3mw-DUP3-1568-GW	A0G090540020
FWGLL4mw-196C-1544-GW	A0G090540024
FWGLL4mw-197C-1545-GW	A0G090540006
FWGSCFmw-006-1520-GW	A0G090540026

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

Method Blank Outlier Report

Lab Reporting Batch : A0G090540 **Lab ID:** TALCAN

Analysis Method : 8270C **Analysis Date :** 07/14/2010

Preparation Type : 3520C **Preparation Date :** 07/10/2010

Method Blank Lab Sample ID : A0G100000015B **Preparation Batch :** 0191015

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	2.3	10	ug/L	J	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE1-1578-G	A0G090540016	1	1.3	J B	ug/L
FWGLL2mw-262C-1534-GW	A0G090540012	1	1.1	J B	ug/L
FWGLL2mw-266C-1537-GW	A0G090540030	1	5.8	J B	ug/L
FWGLL2mw-267C-1565-GW	A0G090540028	1	2.3	J B	ug/L
FWGLL3mw-232C-1540-GW	A0G090540004	1	1.5	J B	ug/L
FWGLL3mw-239C-1543-GW	A0G090540022	1	8.7	J B	ug/L
FWGLL3mw-DUP3-1568-GW	A0G090540020	1	1.9	J B	ug/L
FWGLL4mw-196C-1544-GW	A0G090540024	1	8.2	J B	ug/L
FWGLL4mw-197C-1545-GW	A0G090540006	1	1.1	J B	ug/L
FWGSCFmw-006-1520-GW	A0G090540026	1	3.7	J B	ug/L

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0G090540
Lab ID: TALCAN
Method/Preparation Batch : 0191015 / 0191015
Analysis Date : 07/14/2010
Client Sample ID : FWGEQUIPRINSE1-1578-GW
Preparation Date : 07/10/2010
Lab Sample ID : A0G090540016
Preparation Type : 3520C

Analysis Method : 8270C

Benzyl alcohol	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.41	5.0	ug/L	J	

Benzyl alcohol was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL3mw-234C-1541-GW	A0G090540018	1	0.84	J	ug/L

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.3	10	ug/L	J B	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL2mw-262C-1534-GW	A0G090540012	1	1.1	J B	ug/L
FWGLL2mw-266C-1537-GW	A0G090540030	1	5.8	J B	ug/L
FWGLL2mw-267C-1565-GW	A0G090540028	1	2.3	J B	ug/L
FWGLL3mw-232C-1540-GW	A0G090540004	1	1.5	J B	ug/L
FWGLL3mw-239C-1543-GW	A0G090540022	1	8.7	J B	ug/L
FWGLL3mw-DUP3-1568-GW	A0G090540020	1	1.9	J B	ug/L
FWGLL4mw-196C-1544-GW	A0G090540024	1	8.2	J B	ug/L
FWGLL4mw-197C-1545-GW	A0G090540006	1	1.1	J B	ug/L
FWGSCFmw-006-1520-GW	A0G090540026	1	3.7	J B	ug/L

Diethyl phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.60	1.0	ug/L	J	Common Contaminant

Diethyl phthalate contamination found in the equipment blank did not qualify any samples.

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0191010 **Analysis Method :** 8081A **Analysis Date :** 07/21/2010

Preparation Batch : 0191010 **Preparation Type :** 3520C **Preparation Date :** 07/10/2010

Lab Reporting Batch : A0G090540 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL3mw-232C-1540-	A0G090540004D	AQ	alpha-BHC		22	0.00	40.00	140.00	20.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL3mw-232C-1540-GW	A0G090540004

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0191011 **Analysis Method :** 8082 **Analysis Date :** 07/22/2010

Preparation Batch : 0191011 **Preparation Type :** 3520C **Preparation Date :** 07/10/2010

Lab Reporting Batch : A0G090540 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL3mw-232C-1540-	A0G090540004D	AQ	Aroclor 1016		24	0.00	40.00	140.00	20.00
			Aroclor 1260		24	0.00	40.00	140.00	20.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL3mw-232C-1540-GW	A0G090540004

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Surrogate Recovery Outlier Report

Lab Report Batch: A0G090540 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGLL2mw-266C-1537-GW	A0G090540030	8081A	1	AQ	Decachlorobiphenyl	38	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
FWGLL3mw-234C-1541-GW	A0G090540018	8270C	1	AQ	2-Fluorophenol	20	50.0	150.0	10.0	Acid
					Phenol-d5	45	50.0	150.0	10.0	Acid
FWGLL3mw-236C-1542-GW	A0G090540002	8270C	1	AQ	2,4,6-Tribromophenol	35	50.0	150.0	10.0	Acid
					2-Fluorophenol	15	50.0	150.0	10.0	Acid
					Phenol-d5	32	50.0	150.0	10.0	Acid

Method Blank Outlier Report

Lab Reporting Batch : A0G090540
Lab ID: TALCAN
Analysis Method : 6020
Analysis Date : 07/29/2010
Preparation Type : 3005A
Preparation Date : 07/13/2010
Method Blank Lab Sample ID : A0G130000019B
Preparation Batch : 0194019

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	6.5	10.0	ug/L	B	

Zinc was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGLL2mw-059C-1531-GF	A0G090540009	1	4.0	B J	ug/L
FWGLL2mw-266C-1537-GF	A0G090540031	1	10.6	J	ug/L
FWGLL3mw-232C-1540-GF	A0G090540005	1	7.8	B J	ug/L
FWGLL3mw-236C-1542-GF	A0G090540003	1	15.9	J	ug/L
FWGLL3mw-239C-1543-GF	A0G090540023	1	6.0	B J	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A0G090540 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
6010B	AQ	Barium	FWGLL3mw-234C	ES/TO	9.8	B	FWGLL3mw-DUP	ES/TO	18.6		62.0	30	ug/L
	AQ	Calcium		ES/TO	51100			ES/TO	17000		100.1	30	ug/L
	AQ	Cobalt		ES/TO	1.5	B		ES/TO	15.5		164.7	30	ug/L
	AQ	Magnesium		ES/TO	19800			ES/TO	8650		78.4	30	ug/L
	AQ	Manganese		ES/TO	2190			ES/TO	1270		53.2	30	ug/L
	AQ	Nickel		ES/TO	7.0	B		ES/TO	16.9		82.8	30	ug/L
8081A	AQ	beta-BHC	FWGLL3mw-234C	RES	0.030	U	FWGLL3mw-DUP	RES	0.015	J	200.0	30	ug/L
8270C	AQ	Benzyl alcohol		RES	0.84	J		RES	5.0	U	200.0	30	ug/L
	AQ	bis(2-Ethylhexyl) phthalate		RES	10	U		RES	1.9	J B	200.0	30	ug/L
	AQ	Butylbenzyl Phthalate		RES	2.0			RES	1.0	U	200.0	30	ug/L
	AQ	Di-n-butyl phthalate		RES	1.0	U		RES	0.72	J	200.0	30	ug/L

Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 23, 2010
STL Sample Delivery Group: A0G130405 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 12, 2010 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0G130405.

Field Sample ID	Analytes	Method
FWGLL12mw-113c-1548-GW	VOCs SVOCs Pesticides PCBs Cyanide Nitrate/Nitrite	SW846 8260B SW846 8270C SW846 8081A SW846 8082 SW846 9012A 353.2
FWGLL12mw-188c-1558-GW		
FWGLL12mw-088c-1546-GW		
FWGLL12mw-183c-1553-GW		
FWGLL2mw-265c-1536-GW		
FWGLL2mw-DUP2-1567-GW		
FWGEQUIPRinse2-1579-GW		
FWGLL12mw-153c-1550-GW		
FWGLL12mw-154c-1551-GW		
FWGLL12mw-245c-1563-GW		
FWGLL12mw-DUP5-1570-GW		
FWGLL12mw-242c-1560-GW		
FWGEQUIPRinse2-1579-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL12mw-113c-1548-GW	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGLL12mw-188c-1558-GW		
FWGLL12mw-088c-1546-GW		
FWGLL12mw-183c-1553-GW		
FWGLL2mw-265c-1536-GW		
FWGLL2mw-DUP2-1567-GW		
FWGLL12mw-153c-1550-GW		
FWGLL12mw-154c-1551-GW		
FWGLL12mw-245c-1563-GW		
FWGLL12mw-DUP5-1570-GW		
FWGLL12mw-242c-1560-GW		
FWGTEAM1-Trip	VOCs	SW846 8260B
FWGTEAM2-Trip		
FWGTEAM3-Trip		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004*, Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The cooler temperatures were documented as being received from 2.6°C – 4.6°C.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 23, 2010
STL Sample Delivery Group: A0G130405 **Revision:** 0

VOAs - 8260B
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- CCV criteria
- Initial Calibration Criteria including SPCC and CCC compounds
- Internal standard area counts and retention times
- MDL verification criteria
- Surrogate recoveries
- Field duplicate RPD criteria
- LCS Recovery criteria
- Matrix Spike Recovery Criteria and RPD

QC/MRL

- The opening MRL check analyzed 7/22/10 at 1100 had methylene chloride recover above limits at 155%, acetone at 152%, 2-butanone at 140% and bromoform at 162%.
- The closing MRL check analyzed 7/22/10 at 2024 had methylene chloride recover above limits at 165%, chloroethane at 145% and bromoform at 154%.

The acetone results for the trip blanks and the methylene chloride, acetone and 2-butanone results for FWGEQUIPRINSE-2-1579-GW were qualified as estimated, "J".

Blanks
Methylene chloride was detected in the method blank at 0.54ug/L. Sample FWGEQUIPRinse2-1579-GW was qualified, "B".

- FWGEQUIPRinse2-1579-GW had 2-butanone detected at 10ug/L, acetone at 5.3ug/L and methylene chloride at 2.0ug/L.
- The trip blanks had acetone contamination detected from 1.5- 1.8ug/L.

The acetone results for sample FWGEQUIPRinse2-1579-GW was qualified, "B" as the results were <10x trip blank contamination. As there were no detected concentrations of the other blank contaminants, no additional qualifications were made.

SVOCs- 8270C
The following QC criteria were reviewed with acceptable results:

- Preservation, holding time and sample handling
- Tuning criteria
- Initial Calibration criteria including CCC and SPCC compounds
- ICV/ CCV criteria
- MDL Level Verification
- Internal standard area counts and retention times

MRL Recovery Criteria
Hexachlorocyclopentadiene recovered below control limits at 40.2% in the MRL analyzed 7/22/10 at 1802. An MDL check was analyzed with acceptable results hexachlorocyclopentadiene results were qualified as estimated, "J/UJ".

Blanks
bis(2-Ethylhexyl) phthalate was detected in the method blank at 1.4ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate <5x contamination were qualified, "B". See Appendix 1 for list of impacted samples.

Field Duplicate RPD
Sample FWGLL12mw-DUP5-1570-GW was the field duplicate for sample FWGLL12mw-245c-1563-GW and FWGLL2mw-DUP2-1567-GW was the field duplicate for sample FWGLL2mw-265c-1536-GW.
The duplicate RPD was above control limits for bis(2-ethylhexyl)phthalate for the field duplicate pair FWGLL12mw-DUP5-1570-GW and FWGLL12mw-245c-1563-GW at 48.3% and at 70% for the field duplicate pair FWGLL2mw-DUP2-1567-GW and FWGLL2mw-265c-1536-GW. The bis (2-ethylhexyl) phthalate, results for these samples were qualified as estimated, "J".

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 23, 2010
STL Sample Delivery Group: A0G130405 **Revision:** 0

Matrix Spike Recovery
Sample FWGLL12mw-088c-1546-GW was the parent MS/MSD sample from this SDG. The MS and MSD recovered below control limits for 3,3'-dichorobenzidine at 40 and 39%. No qualifications were made for these outliers as the associated LCS recovered within limits.

Surrogate Recovery
- 2,4,6-Tribromophenol did not recover in sample FWGEQUIPRinse2-1579-GW, while 2-Fluorophenol recovered at 44%, phenol-5 at 41% and at 40% for 2-fluorobiphenyl. No qualification was made as the surrogate was diluted out of the sample.
- 2-Fluorophenol recovered below limits at 46%, however since LCG allows for one surrogate to be below control limits from each fraction without qualification, no qualification was made.

Pesticides- 8081A
The following QC criteria were reviewed with acceptable results:
- Preservation, holding time and sample handling
- Initial Calibration criteria
- DDT and Endrin breakdown criteria
- Retention time criteria
- ICV criteria
- CCV Criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS Recoveries
- Field Duplicate Criteria
- MDL verification criteria
- MRL verification criteria

Matrix Spike Recovery
Sample FWGLL12mw-088c-1546-GW was the parent MS/MSD sample from this SDG. The spike analyses performed on sample FWGLL12mw-088c-1546-GW had a MS/MSD RPD of 23% for 4,4'-DDD 21% for endosulfan II. No qualifications were made as the LCS recovered within limits.

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in sample FWGLL12mw-113c-1548-GW at 38%, FWGLL12mw-153c-1550-GW at 46%, FWGLL12mw-154c-1551-GW at 43%, FWGLL12mw-183c-1553-GW at 34%, FWGLL12mw-188c-1558-GW at 15%, FWGLL12mw-242c-1560-GW at 45%, FWGLL12mw-245c-1563-GW at 41% and FWGLL12mw-DUP5-1570-GW at 48%. The associated results were qualified as estimated, "J/UJ".

PCBs- 8082
The following QC criteria were reviewed with acceptable results:
- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MDL and MRL verification criteria
- ICV/ CCV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS/ LCSD percent recoveries and RPD value criteria
- Matrix Spike Criteria
- Second Column confirmation criteria
- Field Duplicate RPD criteria

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in sample FWGLL12mw-113c-1548-GW at 38%, FWGLL12mw-154c-1551-GW at 48%, FWGLL12mw-183c-1553-GW at 34%, FWGLL12mw-188c-1558-GW at 15%, FWGLL12mw-242c-1560-GW at 45%, FWGLL12mw-245c-1563-GW at 41% and FWGLL12mw-DUP5-1570-GW at 47%. The associated results were qualified as estimated, "J/UJ".

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 23, 2010
STL Sample Delivery Group: A0G130405 **Revision:** 0

Metals - 6010B
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV criteria
- Interference Check Sample (ICSA/ICSAB) criteria
- LCS recovery criteria
- MS/MSD recovery criteria
- MDL Verification criteria
- MRL verification criteria
- Field Duplicate RPD

Blanks

- The ICB analyzed 7/15/10 had detected potassium at 152ug/L. The potassium results for FWGLL2mw-265c-1536-GF and FWGLL2mw-DUP2-1567-GF were qualified, "U", as the detected concentrations were <5x blank contamination.
- The CCBs analyzed 7/15/10 had detected potassium from 151ug/L to 164ug/L. No additional qualifications were made to the potassium results other than qualifications made for the ICB contamination.

No qualifications were made for ICP results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

Serial Dilution
The serial dilution %D for potassium analyzed on sample FWGLL12mw-088C-1546-GF was above control limits at 10.6%. All detected potassium results were qualified as estimated, "J".

Metals - 6020
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Internal standard and tune criteria
- Initial Calibration criteria
- ICV criteria
- MDL Verification Data
- MRL verification criteria
- Interference Check Sample (ICSA/ICSAB) criteria
- LCS Recovery Criteria
- MS recovery criteria
- Lab Duplicate RPD
- Field Duplicate RPD

Blanks

- The ICB analyzed 7/30/10 had thallium detected at 0.23ug/L. The thallium results for samples FWGLL12mw-188c-1558-GF, FWGLL12mw-183c-1553-GF, FWGLL12mw-154c-1551-GF and FWGLL12mw-245c-1563-GF were <5x the ICB contamination and were qualified, "U".
- The CCBs analyzed 7/30/2010 had aluminum detected at 8ug/L, antimony from 0.038 to 0.053ug/L, beryllium from 0.014 to 0.024ug/L, cadmium at 0.012-0.043ug/L, iron from 5.2ug/L to 19ug/L and thallium from 0.24ug/L to 0.33ug/L. The aluminum result for sample FWGLL12mw-245c-1563-GF was qualified, "U". No additional thallium qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all bracketed detected contaminants were >5x the blank contamination.
- The CCBs analyzed 8/2/2010 had detected iron from 3.2 to 3.5ug/L. Contaminants in the calibration blanks did not require qualification of the data as all detected sample results >5x the blank contamination.

No qualifications were made for ICPMS results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

CCV Recovery
The CCVs analyzed 7/30/2010 at 1831 and at 2141 had recoveries above control limits for beryllium at 111%. No qualifications were made as there were no detected beryllium concentrations reported for the bracketed samples.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010
STL Sample Delivery Group: A0G130405

Date: August 23, 2010
Revision: 0

Mercury - 7470A
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- ICB /CCBs were free from contamination
- The method blank was free from contamination
- The equipment blank was free from contamination
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

No QC outliers were noted.

Cyanide- 9012
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Nitrate/Nitrite- 353.2
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria

The closing CCB had a detected nitrate nitrite concentration of 0.0207mg/L. The nitrate/nitrite result for sample FWGLL12mw-242c-1560-GW was qualified, "B".

Data Reviewer: Angie Dragt
Date: 8/30/10

2nd Level Data Reviewer: Eric Corbin
Date: 9/9/10

CASE NARRATIVE

A0G130405

The following report contains the analytical results for twenty-three water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 13, 2010, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 03, 2010. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.6 to 4.6°C.

See TestAmerica's Cooler Receipt Form for additional information.

GC/MS VOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

GC/MS SEMIVOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL12mw-088C-1546-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

Sample(s) FWGEQUIPRINSE2-1579-GW had elevated reporting limits due to matrix interferences.

CASE NARRATIVE (continued)

GC/MS SEMIVOLATILES (continued)

The LCS associated with batch(es) 0195050 had a recovery of Benzoic acid below acceptance criteria. Also, sample FWGLL2mw-DUP2-1567-GW had one surrogate recovery below 50%, but greater than 10%.

Hexachlorocyclopentadiene was recovered below acceptance criteria in the QC/MRL closer. However, it was detected in the subsequent MDL checks.

PESTICIDES-8081

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

For sample(s) FWGLL12mw-113C-1548-GW, FWGLL12mw-188C-1558-GW, FWGLL12mw-183C-1553-GW, FWGLL12mw-153C-1550-GW, FWGLL12mw-154C-1551-GW, FWGLL12mw-245C-1563-GW, FWGLL12mw-DUP5-1570-GW, and FWGLL12mw-242C-1560-GW the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

Beta-BHC is reported from the confirmation column for sample(s) FWGLL2mw-DUP2-1567-GW. The opening CCV failed beta-BHC biased high, but since this sample result is below the reporting limit for beta-BHC, no corrective action was necessary.

The opening CCV passed average, but failed alpha-BHC, delta-BHC, alpha Chlordane and DDE biased high. Since sample(s) FWGLL12mw-113C-1548-GW, FWGLL12mw-188C-1558-GW, FWGLL12mw-088C-1546-GW, FWGLL12mw-183C-1553-GW, FWGLL2mw-265C-1536-GW, FWGLL2mw-DUP2-1567-GW, FWGEQUIPRINSE2-1579-GW, FWGLL12mw-153C-1550-GW, FWGLL12mw-154C-1551-GW, FWGLL12mw-245C-1563-GW, FWGLL12mw-DUP5-1570-GW, and FWGLL12mw-242C-1560-GW are non-detect or J-flag hits for these compounds, no corrective action was necessary.

CASE NARRATIVE (continued)

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGLL12mw-113C-1548-GW, FWGLL12mw-188C-1558-GW, FWGLL12mw-183C-1553-GW, FWGLL12mw-154C-1551-GW, FWGLL12mw-245C-1563-GW, FWGLL12mw-DUP5-1570-GW, FWGLL12mw-242C-1560-GW, and the LCS associated with batch(es) 0195037, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

Serial dilution of a sample in this lot indicates that physical and chemical interferences were present. Refer to the sample report pages for the affected analytes flagged with "E".

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analyte(s).

The sample duplicate RPD was outside the acceptance limits for some analytes. The result is less than five times the reporting limit; therefore, no corrective action is required. Refer to the sample duplicate report for RPDs that exceed 20%.

GENERAL CHEMISTRY

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.
California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

MANUAL INTEGRATION SUMMARY

Lot A0G130405

Client ID: FWGLL12mw-088C-1546
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: L33811AE.D
Inj. Date and Time: 22-JUL-2010 13:12
Manual Integration Reason: Unknown

Client ID: FWGLL2mw-DUP2-1567-
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: L339F1AC.D
Inj. Date and Time: 22-JUL-2010 14:48
Manual Integration Reason: Poor Chromatography

Client ID: FWGEQUIPRINSE2-1579
Compound Name: Acenaphthene-d10
Instrument ID: a4hp9.i
File Name: L339H1AC.D
Inj. Date and Time: 22-JUL-2010 16:45
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL12mw-153C-1550
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: L339J1AC.D
Inj. Date and Time: 22-JUL-2010 15:08
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL12mw-245C-1563
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: L339Q1AC.D
Inj. Date and Time: 22-JUL-2010 15:46
Manual Integration Reason: Poor Chromatography

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 037F3701.D
Inj. Date and Time: 23-JUL-2010 18:17
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 037F3701.D
Inj. Date and Time: 23-JUL-2010 18:17
Manual Integration Reason: Analyte not Identified by the Data System

MANUAL INTEGRATION SUMMARY

Lot A0G130405 (Continued)

Client ID: FWGLL12mw-088C-1546
Compound Name: Decachlorobiphenyl
Instrument ID: a2hp3.i
File Name: 020F2001.D
Inj. Date and Time: 27-JUL-2010 23:08
Manual Integration Reason: Baseline Event

Client ID: FWGLL12mw-088C-1546
Compound Name: Decachlorobiphenyl
Instrument ID: a2hp3.i
File Name: 020F2001.D
Inj. Date and Time: 27-JUL-2010 23:08
Manual Integration Reason: Baseline Event

Client ID: FWGLL12mw-088C-1546
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 024F2401.D
Inj. Date and Time: 23-JUL-2010 15:05
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGLL12mw-088C-1546
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 025F2501.D
Inj. Date and Time: 23-JUL-2010 15:19
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGLL12mw-183C-1553
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: L33841AC.D
Inj. Date and Time: 22-JUL-2010 14:10
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL12mw-113C-1548
Compound Name: Decachlorobiphenyl
Instrument ID: a2hp3.i
File Name: 018F1801.D
Inj. Date and Time: 27-JUL-2010 22:18
Manual Integration Reason: Baseline Event

Client ID: FWGLL12mw-188C-1558
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: L338X1AC.D
Inj. Date and Time: 22-JUL-2010 12:52
Manual Integration Reason: Poor Chromatography

MANUAL INTEGRATION SUMMARY

Lot A0G130405 (Continued)

Client ID: FWGLL12mw-242C-1560
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: L33901AC.D
Inj. Date and Time: 22-JUL-2010 16:25
Manual Integration Reason: Poor Chromatography

SAMPLE SUMMARY

A0G130405

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L338R	001	FWGTEAM1-TRIP	07/12/10	10:00
L338T	002	FWGLL12mw-113C-1548-GW	07/12/10	12:07
L338V	003	FWGLL12mw-113C-1548-GF	07/12/10	12:07
L338X	004	FWGLL12mw-188C-1558-GW	07/12/10	13:31
L3380	005	FWGLL12mw-188C-1558-GF	07/12/10	13:31
L3381	006	FWGLL12mw-088C-1546-GW	07/12/10	14:39
L3382	007	FWGLL12mw-088C-1546-GF	07/12/10	14:39
L3384	008	FWGLL12mw-183C-1553-GW	07/12/10	17:29
L3385	009	FWGLL12mw-183C-1553-GF	07/12/10	17:29
L3387	010	FWGTEAM2-TRIP	07/12/10	10:00
L3388	011	FWGLL2mw-265C-1536-GW	07/12/10	12:50
L339E	012	FWGLL2mw-265C-1536-GF	07/12/10	12:50
L339F	013	FWGLL2mw-DUP2-1567-GW	07/12/10	14:04
L339G	014	FWGLL2mw-DUP2-1567-GF	07/12/10	14:04
L339H	015	FWGEQUIPRINSE2-1579-GW	07/12/10	14:34
L339J	016	FWGLL12mw-153C-1550-GW	07/12/10	15:04
L339K	017	FWGLL12mw-153C-1550-GF	07/12/10	15:04
L339L	018	FWGLL12mw-154C-1551-GW	07/12/10	16:44
L339N	019	FWGLL12mw-154C-1551-GF	07/12/10	16:44
L339P	020	FWGTEAM3-TRIP	07/12/10	10:00
L339Q	021	FWGLL12mw-245C-1563-GW	07/12/10	12:10
L339T	022	FWGLL12mw-245C-1563-GF	07/12/10	12:10
L339W	023	FWGLL12mw-DUP5-1570-GW	07/12/10	13:00
L339X	024	FWGLL12mw-DUP5-1570-GF	07/12/10	13:00
L3390	025	FWGLL12mw-242C-1560-GW	07/12/10	17:00
L3394	026	FWGLL12mw-242C-1560-GF	07/12/10	17:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica 24
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Erik Carlson	Mark Loeb	
Address: 1800 Carillon Blvd	Telephone: 513-825-7500	Telephone: 513-825-7500	Telephone: 330-497-9396	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email:	Analysis Turnaround Time (CALENDAR DAYS or WORKING DAYS)		
Phone: 513-825-7500		TAT if different from below: Per SOW		
Project Name: CVAAP(OH)	Method of Shipment/Carrier: Lab pickup	☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 30240 0006	Shipping/Tracking No:			
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Cont. #s: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Analyses: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Expl 8330	Propellants	Cyanide 9012	Metals 6010/6020	NO3/NO2 353.2	Sample Specific Notes / Special Instructions: Cooler ID
FWG Team 1 - Trip	7/12/10	10:00		X						2					N	G	X									EC1
FWGLL12mw-113C-1548-GW	7/12/10	12:07		X				1	X	3	1		9		N	G	X	X	X	X	X	X	X		X	EC9
FWGLL12mw-113C-1548-GF	7/12/10	12:07		X					1						Y	G								X		EC9
FWGLL12mw-188C-1558-GW	7/12/10	13:31		X				1		3	1		9		N	G	X	X	X	X	X	X	X		X	A192
FWGLL12mw-188C-1558-GF	7/12/10	13:31		X					1						Y	G								X		A192
FWGLL12mw-088C-1546-GW	7/12/10	14:39		X				3		3	3		27		N	G	X	X	X	X	X	X	X		X	MS/MSD 33UW, M23, AS03
FWGLL12mw-088C-1546-GF	7/12/10	14:39		X					3						Y	G								X		MS/MSD 33UW, M23, AS03
FWGLL12mw-183C-1553-GW	7/12/10	17:29		X				1		3	1		9		N	G	X	X	X	X	X	X	X		X	EC1
FWGLL12mw-183C-1553-GF	7/12/10	17:29		X					1						Y	G								X		EC1
								EC		7/12/10																

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Temps may not meet requirements if sample collection is close to lab pickup times. Metals field filtered.
ALL VOAs in cooler EC1

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Carlson	EQ	7/12/10 18:30		TestAmerica	7/12/10 1830
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	7/12/10 19:15			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA NC	7/13/10 0730

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TAL-0018 (1008)

North Canton

Chain of Custody Record

SEVERN TRENT **STL** TestAmerica

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: EQM	Project Manager: JOHN MILLER	Date: 7-12-10	Chain of Custody Number: 336188
Address: 8800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (fax 7495)	Lab Number: 330 497 9396	Page 1 of 1
City: Cincinnati / State: OH / Zip Code: 45240	Site Contact: E CORBIN	Lab Contact: M WEB	
Project Name and Location (State): RVAAP Ravenna Ohio	Carrier/Waybill Number: LAB PICK UP (7-12-10)		
Contract/Purchase Order/Quote No.: PO 16726 PN 30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOC	SVOC	Pest	PCB	Explo	Propellants	Cyanide	Metals	NO2NO3	Special Instructions/ Conditions of Receipt
FWG Team 2 Trip	7-12-10	1000		X						2			X									STL-1
FWGU2mw-265C-1536-GW		1250		X			9			3	1		X	X	X	X	X	X	X			B111
FWGU2mw-265C-1536-GF				X					1											X		B111
FWGU2mw-DUP2-1567-GW		1404		X			9			3	1		X	X	X	X	X	X	X			E115
FWGU2mw-DUP2-1567-GF				X					1											X		E115
FWGEQUIPRinse2-1579-GW		1434 1504 QR		X			9	1		3	1		X	X	X	X	X	X	X	X	X	E-21
FWGU2mw-153C-1550-GW		1504		X			9	1		3	1		X	X	X	X	X	X	X		X	STL-1
FWGU2mw-153C-1550-GF				X					1											X		STL-1
FWGU2mw-154C-1551-GW		1644		X			9	1		3	1		X	X	X	X	X	X	X		X	A291
FWGU2mw-154C-1551-GF				X					1											X		A291

Entry error on time all are @ 1434

Cooler ID #

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals GF are field filtered except for Ferric Metals GW

1. Relinquished By: Erik Corbin EQ	Date 7/12/10	Time EC 7/12/10 1830	1. Received By:	Date 7/12/10	Time 1830
2. Relinquished By:	Date 7/12/10	Time 1915	2. Received By:	Date 7/13/10	Time 0730
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments: Temps may not meet requirements if sample collection is close to lab pick up time (entry error on cooler bottle one FWGEQUIPRinse2 time = 1434 per EC) All VOA in cooler

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Stanton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

26

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact
Company Name: EQM
Address: 1800 Carillon Blvd
City/State/Zip: Cincinnati OH 45240
Phone: 513 825 7500
Project Name: RVAAP OH
Project Number: 030240.0006
PO# 167226

Client Project Manager: John Miller
Telephone: 513 825 7500
Email: JMiller@eqm.com
Method of Shipment/Carrier: ~~Fed Ex~~ LAB PICKUP
Shipping/Tracking No:

Site Contact: E Corbin
Telephone:

Lab Contact: M. Loeb
Telephone: 330 497 9396

Analysis Turnaround Time
TAT if different from below _____
☒ 3 weeks
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Analyses
VOC 8260B; SVOC 8270; Nitrate 8081; PCB 8082; Sulfate 9056; Explosives 8330; Propellants 8095; Nitrocellulose 9012; Metals 6010/6020/7470/7471

COC No: _____ of _____ COCs

Sample Specific Notes / Special Instructions: Cooler #1

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered	VOC 8260B	SVOC 8270	Nitrate 8081	PCB 8082	Sulfate 9056	Explosives 8330	Propellants 8095	Nitrocellulose 9012	Metals 6010/6020/7470/7471		Sample Specific Notes
FWGTeam3-Trip	7-13-10	1000	X							2						X										
FWGLL12MW-245C-1563-GW		1210	X					1		3	1		9			X	X	X	X	X	X	X				A385
FWGLL12MW-245C-1563-GF		1210	X						1														X			A385
FWGLL12MW-DUP5-1570-GW		1300	X					1		3	1		9			X	X	X	X	X	X	X				1415
FWGLL12MW-DUP5-1570-GF		1800	X						1														X			1415
FWGLL12MW-242C-1560-GW		1700	X					1		3	1		9			X	X	X	X	X	X	X				1810
FWGLL12MW-242C-EQB-GF		1700	X						1														X			1810

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments: * ALL VOAS IN COOLER 1810 *
Temps may not meet requirements if collection time is close to lab pickup time

	Company	Date/Time
Relinquished by: Eric Corbin	EQ	7/12/10 18:30
Relinquished by:	TestAmerica	7/12/10 1945
Relinquished by:		

	Company	Date/Time
Received by:	TestAmerica	7/12/10 1830
Received by:		
Received in Laboratory by:	TA NC	7/13/10 0730

TAL-0018 (1008)

North Canton

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TestAmerica Cooler Receipt Form/Narrative Lot Number: A0G130405

North Canton Facility

Client EQM Project RVAAP By: (Signature)

Cooler Received on 7/13/10 Opened on 7/13/10

FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other

TestAmerica Cooler # Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 14 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? 7/13/10
2. Shippers' packing slip attached to the cooler(s)? ~~Yes~~ ☒ No ☐
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐

Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:

Received NO_2/NO_3 H_2SO_4 preserved bottles for samples 2456-1563, DUP5-1570, & 242C-1560 not marked on COC. Will log for NO_2NO_3 for volume received.

Received 1x250 with ID of EquipRinse1-1578-GW. Will log ID as FWGEquipRinse2-1579-GW per COC. Team 3 had 7/13/10

15. SAMPLE CONDITION OVER

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 051010-HNO_3; Sulfuric Acid Lot# 121709-H_2SO_4; Sodium Hydroxide Lot# 100108-NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-$(CH_3COO)_2ZN$/NaOH.* What time was preserved added to sample(s)?

Client ID	pH	Date	Initials
113C-1548	<2 <2 >12	7/13/10	
188C-1558	<2 <2 >12		
088C-1546	<2 <2 <2 <2 <2 <2 <2 >12 >12 >12		
183C-1553	<2 <2 >12		
245C-1536	<2 >12		
DUP2-1567	<2 >12		
EquipRinse2	<2 <2 >12		
153C-1550	<2 <2 >12		

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A06130405
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
L415	3.4	IR	Ice	
L810	2.7	I	I	

TestAmerica Cooler Receipt Form/Narrative

North Canton Facility

Client ID	pH	Date	Initials
154C-1551	<2 <2 >12	7/13/10	9
245C-1563	<2 >12 <2		
DUP5-1570	<2 >12 <2		
242C-1560	<2 <2 >12		

Cooler #	Temp. °C	Method	Coolant
EC1	2.7	IR	Ice
EC9	3.1		
A192	4.6		
33UW	4.5		
M23	4.4		
A5D3	3.1		
5TL-1	3.1		
B111	4.3		
E115	2.6		
E-21	3.2		
A291	4.4		
A385	3.1		

Discrepancies Cont'd:

as the collection date. Will use 7/12/10.

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 19, 2010

SDG: A0G130405 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.6 – 4.6 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3.3
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-3
7. Was the GC/MS system tuned with bromofluorobenzene (BFB)?	✓				LCG Table 1
8. Was the criteria met during each 12 hour shift (prior to ICAL and Cal Ver.)?	✓				SW846 8260B 7.3.1
9. Did the initial calibration curve consist of 5 concentration levels?	✓			Instrument A3UX11 – 6/17/10 stds – 5, 10, 25, 50, 100, 200 ng on column	LCG Table 1 R
10. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviations (%RSD) ≤ 30%?	✓				LCG Table 1 R
11. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 1
12. Were all other target analytes ≤ 15% RSD? OR Was the average RSD ≤ 15%? Was a different calibration option used?	✓			Acetone, trans-1,3-dichloropropene, dibromochloromethane and bromoform used weighted linear curves.	LCG Table 1 15% <RSD< 20% = J/UJ
13. If a linear regression curve was used, was the correlation coefficient r≥0.99?	✓			All correlation coefficients were ≥0.99. No qualifications were made since the correlation coefficients were acceptable.	LCG Table 1 R<0.99=-J/R
14. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/21/10 @1907	LCG Table 1 R
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 19, 2010

SDG: A0G130405 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Were the QC/MRL recoveries 70-130%?		✓		The opening MRL check analyzed 7/22/10 at 1100 had methylene chloride recover above limits at 155%, acetone at 152%, 2-butanone at 140% and bromoform at 162%. The closing MRL check analyzed 7/22/10 at 2024 had methylene chloride recover above limits at 165%, chloroethane at 145% and bromoform at 154%. The acetone results for the trip blanks and the methylene chloride, acetone and 2-butanone results for FWGEQUIPRINSE-2-1579-GW were qualified as estimated, "J".	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed after the ICAL? Were results 80-120%?	✓			6/17/10 @ 1442	LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
18. Was a CCV run every 12 hours?	✓			7/22/10 @ 1037	LCG Table 1
19. Did the CCCs have a %Difference < 20%?	✓				LCG Table 1
20. Were the minimum RFs for the SPCCs within limits?	✓				LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓				LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 19, 2010

SDG: A0G130405 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
26. Were target analytes detected in the method blank >1/2 the MRL?		✓		Checked by ADR. Methylene chloride was detected in the method blank at 0.54ug/L. Sample FWGEQUIPRinse2-1579-GW was qualified, "B".	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse2-1579-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGEQUIPRinse2-1579-GW had 2-butanone detected at 10ug/L, acetone at 5.3ug/L and methylene chloride at 2.0ug/L. • The trip blanks had acetone contamination detected from 1.5-1.8ug/L. The acetone results for sample FWGEQUIPRinse2-1579-GW was qualified, "B" as the results were <10x trip blank contamination. As there were no detected concentrations of the other blank contaminants, no additional qualifications were made.	<5/10X =B
29. Was a field duplicate analyzed?	✓				
30. Were the Field duplicates RPDs within ±30%?	✓			ADR checked section;	QAPP Table 3-2 RPD >30=J
31. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 1
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?	✓			ADR checked section;	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent sample a Ravenna sample?	✓				
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?	✓			ADR checked section.	LCG Table 1 Pj
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% -50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 19, 2010

SDG: A0G130405 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G130405-001 **Work Order #...:** L338R1AA **Matrix.....:** WQ
Date Sampled...: 07/12/10 10:00 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.6 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G130405-001 **Work Order #...:** L338R1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-002 **Work Order #...:** L338T1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 12:07 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-002 Work Order #...: L338T1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-004 **Work Order #...:** L338X1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 13:31 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-004 **Work Order #...:** L338X1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	98	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-006 **Work Order #...:** L33811AA **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-006 **Work Order #...:** L33811AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	101	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-008 Work Order #...: L33841AA Matrix.....: WG
Date Sampled...: 07/12/10 17:29 Date Received..: 07/13/10
Prep Date.....: 07/22/10 Analysis Date..: 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-008 **Work Order #...:** L33841AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G130405-010 **Work Order #...:** L33871AA **Matrix.....:** WQ
Date Sampled...: 07/12/10 10:00 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.5 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G130405-010 Work Order #...: L33871AA Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-011 **Work Order #...:** L33881AA **Matrix.....:** WG
Date Sampled...: 07/12/10 12:50 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-011 Work Order #...: L33881AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	100	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-013 **Work Order #...:** L339F1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 14:04 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-013 **Work Order #...:** L339F1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	100	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-015 **Work Order #...:** L339H1AA **Matrix.....:** WQ
Date Sampled...: 07/12/10 14:34 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	**2.0 B**	**2.0**	**ug/L**	**0.33**
Acetone	**5.3 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**10**	**10**	**ug/L**	**0.57**
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-015 **Work Order #...:** L339H1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	100	(50 - 150)
Toluene-d8	87	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

NOTE(S):

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-016 **Work Order #...:** L339J1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 15:04 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-016 Work Order #...: L339J1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	100	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-018 **Work Order #...:** L339L1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 16:44 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-018 **Work Order #...:** L339L1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(50 - 150)
1,2-Dichloroethane-d4	101	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G130405-020 **Work Order #...:** L339P1AA **Matrix.....:** WQ
Date Sampled...: 07/12/10 10:00 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.8 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G130405-020 Work Order #...: L339P1AA Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
Toluene-d8	87	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-021 **Work Order #...:** L339Q1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 12:10 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-021 Work Order #...: L339Q1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	101	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-023 **Work Order #...:** L339W1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 13:00 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-023 Work Order #...: L339W1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-025 **Work Order #...:** L33901AA **Matrix.....:** WG
Date Sampled...: 07/12/10 17:00 **Date Received..:** 07/13/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GW

GC/MS Volatiles

Lot-Sample #...: A0G130405-025 **Work Order #...:** L33901AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	103	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	80	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G130405 **Work Order #...:** L4H6J1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G220000-119

Prep Date.....: 07/22/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/22/10 **Prep Batch #...:** 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	**0.54 J**	**2.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G130405 **Work Order #...:** L4H6J1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G130405 Work Order #...: L4H6J1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G220000-119 L4H6J1AD-LCSD
Prep Date.....: 07/22/10 Analysis Date..: 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	106	(73 - 133)			SW846 8260B
	105	(73 - 133)	0.96	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	113	(75 - 134)			SW846 8260B
	111	(75 - 134)	1.8	(0-30)	SW846 8260B
1,2-Dibromoethane	102	(75 - 127)			SW846 8260B
	102	(75 - 127)	0.69	(0-30)	SW846 8260B
Bromochloromethane	108	(75 - 127)			SW846 8260B
	106	(75 - 127)	1.8	(0-30)	SW846 8260B
m-Xylene & p-Xylene	105	(75 - 122)			SW846 8260B
	103	(75 - 122)	1.6	(0-30)	SW846 8260B
o-Xylene	107	(75 - 118)			SW846 8260B
	104	(75 - 118)	2.6	(0-30)	SW846 8260B
Chloromethane	84	(58 - 135)			SW846 8260B
	81	(58 - 135)	4.1	(0-30)	SW846 8260B
Bromomethane	108	(35 - 153)			SW846 8260B
	105	(35 - 153)	2.7	(0-30)	SW846 8260B
Vinyl chloride	81	(73 - 134)			SW846 8260B
	77	(73 - 134)	5.4	(0-30)	SW846 8260B
Chloroethane	101	(72 - 129)			SW846 8260B
	102	(72 - 129)	0.90	(0-30)	SW846 8260B
Methylene chloride	112	(69 - 118)			SW846 8260B
	102	(69 - 118)	9.5	(0-30)	SW846 8260B
Acetone	101	(51 - 157)			SW846 8260B
	109	(51 - 157)	7.6	(0-30)	SW846 8260B
Carbon disulfide	128 a	(74 - 123)			SW846 8260B
	125 a	(74 - 123)	2.3	(0-30)	SW846 8260B
1,1-Dichloroethene	109	(75 - 125)			SW846 8260B
	107	(75 - 125)	1.8	(0-30)	SW846 8260B
1,1-Dichloroethane	117	(75 - 133)			SW846 8260B
	112	(75 - 133)	4.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	110	(85 - 111)			SW846 8260B
	108	(85 - 111)	1.4	(0-30)	SW846 8260B
Chloroform	112	(74 - 127)			SW846 8260B
	108	(74 - 127)	3.4	(0-30)	SW846 8260B
1,2-Dichloroethane	117	(67 - 132)			SW846 8260B
	111	(67 - 132)	4.8	(0-30)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G130405 Work Order #...: L4H6J1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G220000-119 L4H6J1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	102	(45 - 150)			SW846 8260B
	100	(45 - 150)	1.2	(0-30)	SW846 8260B
1,1,1-Trichloroethane	107	(70 - 127)			SW846 8260B
	103	(70 - 127)	3.8	(0-30)	SW846 8260B
Carbon tetrachloride	105	(71 - 132)			SW846 8260B
	104	(71 - 132)	0.92	(0-30)	SW846 8260B
Bromodichloromethane	119	(70 - 130)			SW846 8260B
	114	(70 - 130)	4.1	(0-30)	SW846 8260B
1,2-Dichloropropane	112	(75 - 127)			SW846 8260B
	110	(75 - 127)	1.6	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	114	(73 - 132)			SW846 8260B
	109	(73 - 132)	4.1	(0-30)	SW846 8260B
Trichloroethene	100	(67 - 128)			SW846 8260B
	100	(67 - 128)	0.10	(0-30)	SW846 8260B
Dibromochloromethane	114	(74 - 145)			SW846 8260B
	110	(74 - 145)	4.0	(0-30)	SW846 8260B
1,1,2-Trichloroethane	108	(75 - 136)			SW846 8260B
	105	(75 - 136)	2.7	(0-30)	SW846 8260B
Benzene	111	(75 - 126)			SW846 8260B
	108	(75 - 126)	2.8	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	109	(74 - 131)			SW846 8260B
	106	(74 - 131)	2.9	(0-30)	SW846 8260B
Bromoform	122	(72 - 136)			SW846 8260B
	117	(72 - 136)	3.8	(0-30)	SW846 8260B
4-Methyl-2-pentanone	107	(59 - 150)			SW846 8260B
	106	(59 - 150)	0.65	(0-30)	SW846 8260B
2-Hexanone	108	(53 - 139)			SW846 8260B
	106	(53 - 139)	2.0	(0-30)	SW846 8260B
Tetrachloroethene	100	(75 - 129)			SW846 8260B
	99	(75 - 129)	0.93	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	105	(68 - 129)			SW846 8260B
	99	(68 - 129)	5.7	(0-30)	SW846 8260B
Toluene	105	(75 - 125)			SW846 8260B
	103	(75 - 125)	2.0	(0-30)	SW846 8260B
Chlorobenzene	103	(75 - 127)			SW846 8260B
	101	(75 - 127)	2.7	(0-30)	SW846 8260B
Ethylbenzene	104	(75 - 120)			SW846 8260B
	102	(75 - 120)	1.4	(0-30)	SW846 8260B
Styrene	108	(75 - 130)			SW846 8260B
	106	(75 - 130)	1.6	(0-30)	SW846 8260B
Xylenes (total)	105	(90 - 114)			SW846 8260B
	103	(90 - 114)	1.9	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G130405 **Work Order #...:** L4H6J1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0G220000-119 L4H6J1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
	93	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
	97	(50 - 150)
Toluene-d8	94	(50 - 150)
	93	(50 - 150)
4-Bromofluorobenzene	98	(50 - 150)
	99	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G130405 Work Order #...: L33811AC-MS Matrix.....: WG
MS Lot-Sample #: A0G130405-006 L33811AD-MSD
Date Sampled...: 07/12/10 14:39 Date Received..: 07/13/10
Prep Date.....: 07/22/10 Analysis Date..: 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	100	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.1	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	107	(70 - 130)			SW846 8260B
	104	(70 - 130)	3.2	(0-30)	SW846 8260B
1,2-Dibromoethane	98	(70 - 130)			SW846 8260B
	94	(70 - 130)	4.4	(0-30)	SW846 8260B
Bromochloromethane	102	(70 - 130)			SW846 8260B
	96	(70 - 130)	6.6	(0-30)	SW846 8260B
m-Xylene & p-Xylene	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.0	(0-30)	SW846 8260B
o-Xylene	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.8	(0-30)	SW846 8260B
Chloromethane	77	(70 - 130)			SW846 8260B
	74	(70 - 130)	3.7	(0-30)	SW846 8260B
Bromomethane	87	(70 - 130)			SW846 8260B
	84	(70 - 130)	3.9	(0-30)	SW846 8260B
Vinyl chloride	79	(70 - 130)			SW846 8260B
	81	(70 - 130)	2.3	(0-30)	SW846 8260B
Chloroethane	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.1	(0-30)	SW846 8260B
Methylene chloride	94	(70 - 130)			SW846 8260B
	87	(70 - 130)	7.1	(0-30)	SW846 8260B
Acetone	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.65	(0-30)	SW846 8260B
Carbon disulfide	121	(70 - 130)			SW846 8260B
	119	(70 - 130)	1.1	(0-30)	SW846 8260B
1,1-Dichloroethene	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.59	(0-30)	SW846 8260B
1,1-Dichloroethane	111	(70 - 130)			SW846 8260B
	105	(70 - 130)	5.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	103	(70 - 130)			SW846 8260B
	100	(70 - 130)	3.2	(0-30)	SW846 8260B
Chloroform	105	(70 - 130)			SW846 8260B
	99	(70 - 130)	6.0	(0-30)	SW846 8260B
1,2-Dichloroethane	112	(70 - 130)			SW846 8260B
	103	(70 - 130)	8.2	(0-30)	SW846 8260B
2-Butanone	97	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.4	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G130405 Work Order #...: L33811AC-MS Matrix.....: WG
MS Lot-Sample #: A0G130405-006 L33811AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.79	(0-30)	SW846 8260B
Carbon tetrachloride	102	(70 - 130)			SW846 8260B
	103	(70 - 130)	1.0	(0-30)	SW846 8260B
Bromodichloromethane	111	(70 - 130)			SW846 8260B
	105	(70 - 130)	5.8	(0-30)	SW846 8260B
1,2-Dichloropropane	106	(70 - 130)			SW846 8260B
	100	(70 - 130)	5.7	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	97	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.7	(0-30)	SW846 8260B
Trichloroethene	95	(70 - 130)			SW846 8260B
	92	(70 - 130)	2.9	(0-30)	SW846 8260B
Dibromochloromethane	106	(70 - 130)			SW846 8260B
	100	(70 - 130)	5.8	(0-30)	SW846 8260B
1,1,2-Trichloroethane	103	(70 - 130)			SW846 8260B
	96	(70 - 130)	7.3	(0-30)	SW846 8260B
Benzene	106	(70 - 130)			SW846 8260B
	100	(70 - 130)	5.5	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	101	(70 - 130)			SW846 8260B
	95	(70 - 130)	6.7	(0-30)	SW846 8260B
Bromoform	112	(70 - 130)			SW846 8260B
	105	(70 - 130)	6.2	(0-30)	SW846 8260B
4-Methyl-2-pentanone	105	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.0	(0-30)	SW846 8260B
2-Hexanone	108	(70 - 130)			SW846 8260B
	103	(70 - 130)	4.3	(0-30)	SW846 8260B
Tetrachloroethene	97	(70 - 130)			SW846 8260B
	94	(70 - 130)	3.2	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	99	(70 - 130)			SW846 8260B
	93	(70 - 130)	6.2	(0-30)	SW846 8260B
Toluene	102	(70 - 130)			SW846 8260B
	96	(70 - 130)	6.0	(0-30)	SW846 8260B
Chlorobenzene	99	(70 - 130)			SW846 8260B
	93	(70 - 130)	6.2	(0-30)	SW846 8260B
Ethylbenzene	101	(70 - 130)			SW846 8260B
	94	(70 - 130)	6.6	(0-30)	SW846 8260B
Styrene	103	(70 - 130)			SW846 8260B
	94	(70 - 130)	8.8	(0-30)	SW846 8260B
Xylenes (total)	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.0	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G130405 **Work Order #...:** L33811AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G130405-006 L33811AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
	95	(50 - 150)
1,2-Dichloroethane-d4	101	(50 - 150)
	101	(50 - 150)
Toluene-d8	95	(50 - 150)
	94	(50 - 150)
4-Bromofluorobenzene	100	(50 - 150)
	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\UXJ0918.D
Report Date: 27-Jul-2010 22:40

TestAmerica North Canton

RECOVERY REPORT

7/22/10 @ 11:00

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 2-8260.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\8260LLUX11.m
Misc Info: J00722A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.135	113.47	70-130
	42	Trichloroethene	1.000	1.046	104.60	70-130
	59	Chlorobenzene	1.000	1.036	103.64	70-130
	50	Toluene	1.000	1.048	104.85	70-130
	41	Benzene	1.000	1.092	109.17	70-130
	16	Acetone	2.000	3.048	152.41*	70-130
	20	Carbon Disulfide	1.000	1.143	114.27	70-130
	9	Chloromethane	1.000	0.9279	92.79	70-130
	11	Bromomethane	1.000	1.267	126.74	70-130
	10	Vinyl Chloride	1.000	0.9069	90.69	70-130
	12	Chloroethane	1.000	1.240	124.03	70-130
	21	Methylene Chloride	1.000	1.546	154.59*	70-130
	28	1,1-Dichloroethane	1.000	1.149	114.86	70-130
M	31	1,2-Dichloroethene	2.000	2.155	107.75	70-130
	35	Chloroform	1.000	1.063	106.34	70-130
	40	1,2-Dichloroethane	1.000	1.183	118.29	70-130
	30	2-Butanone	2.000	2.792	139.58*	70-130
	37	1,1,1-Trichloroeth	1.000	1.032	103.26	70-130
	39	Carbon Tetrachlori	1.000	1.033	103.28	70-130
	46	Bromodichlorometha	1.000	1.016	101.56	70-130
	43	1,2-Dichloropropan	1.000	1.096	109.62	70-130
	48	cis-1,3-Dichloropr	1.000	0.9308	93.08	70-130
	54	1,3-Dichloropropan	1.000	1.054	105.40	70-130
	57	Dibromochlorometha	1.000	1.232	123.23	70-130
	53	1,1,2-Trichloroeth	1.000	1.082	108.25	70-130
	51	trans-1,3-Dichloro	1.000	1.194	119.44	70-130
	49	4-Methyl-2-pentano	2.000	2.076	103.80	70-130
	56	2-Hexanone	2.000	1.983	99.16	70-130
	55	Tetrachloroethene	1.000	1.052	105.15	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.099	109.89	70-130
	66	Bromoform	1.000	1.621	162.10*	70-130
	61	Ethylbenzene	1.000	0.8853	88.53	70-130
	65	Styrene	1.000	0.8264	82.64	70-130
M	63	Xylenes (total)	3.000	2.634	87.82	70-130
	32	cis-1,2-dichloroet	1.000	1.038	103.78	70-130
	25	trans-1,2-Dichloro	1.000	1.117	111.72	70-130
	8	Dichlorodifluorome	1.000	0.7572	75.72	70-130
	13	Trichlorofluoromet	1.000	1.106	110.56	70-130

70	1,2,3-Trichloropro	1.000	1.124	112.41	70-130
18	Freon-113	1.000	1.239	123.93	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\UXJ0918.D
Report Date: 27-Jul-2010 22:40

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.9957	99.57	70-130
58 1,2-Dibromoethane	1.000	0.9540	95.40	70-130
67 Isopropylbenzene	1.000	0.8188	81.88	70-130
80 1,3-Dichlorobenzen	1.000	0.9870	98.70	70-130
81 1,4-Dichlorobenzen	1.000	1.066	106.56	70-130
83 1,2-Dichlorobenzen	1.000	1.048	104.81	70-130
84 1,2-Dibromo-3-chlo	1.000	1.229	122.92	70-130
85 1,2,4-Trichloroben	1.000	1.296	129.57	70-130
98 Cyclohexane	1.000	0.9074	90.74	70-130
143 Methyl Acetate	2.000	2.568	128.41	70-130
144 Methylcyclohexane	1.000	0.8452	84.52	70-130
71 Bromobenzene	1.000	0.9892	98.92	70-130
34 Bromochloromethane	1.000	1.009	100.87	70-130
82 n-Butylbenzene	1.000	0.8419	84.19	70-130
78 sec-Butylbenzene	1.000	0.8618	86.18	70-130
76 tert-Butylbenzene	1.000	0.8005	80.05	70-130
73 2-Chlorotoluene	1.000	0.9385	93.85	70-130
75 4-Chlorotoluene	1.000	0.9533	95.33	70-130
45 Dibromomethane	1.000	1.056	105.58	70-130
33 2,2-Dichloropropan	1.000	0.9808	98.08	70-130
38 1,1-Dichloropropen	1.000	1.007	100.67	70-130
86 Hexachlorobutadien	1.000	2.023	202.29*	70-130
19 Iodomethane	1.000	0.8477	84.77	70-130
79 4-Isopropyltoluene	1.000	0.7973	79.73	70-130
87 Naphthalene	1.000	1.217	121.75	70-130
72 n-Propylbenzene	1.000	0.9152	91.52	70-130
60 1,1,1,2-Tetrachlor	1.000	1.003	100.30	70-130
88 1,2,3-Trichloroben	1.000	1.214	121.43	70-130
77 1,2,4-Trimethylben	1.000	0.8157	81.57	70-130
74 1,3,5-Trimethylben	1.000	0.8358	83.58	70-130
150 Vinyl Acetate-86	1.000	0.6922	69.22*	70-130
62 m + p-Xylene	2.000	1.814	90.71	70-130
64 Xylene-o	1.000	0.8204	82.04	70-130
49 4-Methyl-2-pentano	2.000	2.076	103.80	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.473	94.73	73-122
$ 5 1,2-Dichloroethane	10.000	9.475	94.75	61-128
$ 6 Toluene-d8	10.000	9.292	92.92	76-110
$ 7 Bromofluorobenzene	10.000	9.074	90.74	74-116

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\UXJ0943.D
Report Date: 23-Jul-2010 08:01

TestAmerica North Canton

RECOVERY REPORT

7/22/10
7/22/10
@ 2024

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 2-8260.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\8260LLUX11.m
Misc Info: J00722A,8260LLUX11,,43582,3

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	1.129	112.92	70-130
	42 Trichloroethene	1.000	0.9901	99.01	70-130
	59 Chlorobenzene	1.000	0.9843	98.43	70-130
	50 Toluene	1.000	1.005	100.55	70-130
	41 Benzene	1.000	1.046	104.59	70-130
	16 Acetone	2.000	2.457	122.87	70-130
	20 Carbon Disulfide	1.000	1.122	112.20	70-130
	9 Chloromethane	1.000	0.9627	96.27	70-130
	11 Bromomethane	1.000	1.301	OK 130.06*	70-130
	10 Vinyl Chloride	1.000	0.9762	97.62	70-130
	12 Chloroethane	1.000	1.454	145.45*	70-130
	21 Methylene Chloride	1.000	1.651	165.09*	70-130
	28 1,1-Dichloroethane	1.000	1.105	110.51	70-130
M	31 1,2-Dichloroethene	2.000	2.095	104.77	70-130
	35 Chloroform	1.000	1.090	108.96	70-130
	40 1,2-Dichloroethane	1.000	1.112	111.17	70-130
	30 2-Butanone	2.000	2.436	121.79	70-130
	37 1,1,1-Trichloroeth	1.000	0.9966	99.66	70-130
	39 Carbon Tetrachlori	1.000	0.9894	98.94	70-130
	46 Bromodichlorometha	1.000	1.046	104.55	70-130
	43 1,2-Dichloropropan	1.000	1.044	104.40	70-130
	48 cis-1,3-Dichloropr	1.000	0.9271	92.71	70-130
	54 1,3-Dichloropropan	1.000	1.009	100.94	70-130
	57 Dibromochlorometha	1.000	1.207	120.75	70-130
	53 1,1,2-Trichloroeth	1.000	1.059	105.92	70-130
	51 trans-1,3-Dichloro	1.000	1.179	117.93	70-130
	49 4-Methyl-2-pentano	2.000	1.826	91.32	70-130
	56 2-Hexanone	2.000	1.783	89.15	70-130
	55 Tetrachloroethene	1.000	0.9770	97.70	70-130
	68 1,1,2,2-Tetrachlor	1.000	1.118	111.83	70-130
	66 Bromoform	1.000	1.539	153.88*	70-130
	61 Ethylbenzene	1.000	0.8456	84.56	70-130
	65 Styrene	1.000	0.7460	74.60	70-130
M	63 Xylenes (total)	3.000	2.443	81.44	70-130
	32 cis-1,2-dichloroet	1.000	1.002	100.23	70-130
	25 trans-1,2-Dichloro	1.000	1.093	109.31	70-130
	8 Dichlorodifluorome	1.000	0.7496	74.96	70-130
	13 Trichlorofluoromet	1.000	1.018	101.78	70-130

70 1,2,3-Trichloropro	1.000	1.207	120.73	70-130
18 Freon-113	1.000	1.052	105.18	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\UXJ0943.D
Report Date: 23-Jul-2010 08:01

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	1.014	101.46	70-130
58 1,2-Dibromoethane	1.000	1.042	104.15	70-130
67 Isopropylbenzene	1.000	0.7380	73.80	70-130
80 1,3-Dichlorobenzen	1.000	0.9181	91.81	70-130
81 1,4-Dichlorobenzen	1.000	0.9722	97.22	70-130
83 1,2-Dichlorobenzen	1.000	0.9579	95.79	70-130
84 1,2-Dibromo-3-chlo	1.000	1.056	105.59	70-130
85 1,2,4-Trichloroben	1.000	1.251	125.06	70-130
98 Cyclohexane	1.000	0.7641	76.41	70-130
143 Methyl Acetate	2.000	2.398	119.90	70-130
144 Methylcyclohexane	1.000	0.7608	76.08	70-130
71 Bromobenzene	1.000	0.9916	99.16	70-130
34 Bromochloromethane	1.000	1.053	105.30	70-130
82 n-Butylbenzene	1.000	0.7910	79.10	70-130
78 sec-Butylbenzene	1.000	0.7488	74.88	70-130
76 tert-Butylbenzene	1.000	0.7113	71.13	70-130
73 2-Chlorotoluene	1.000	0.8302	83.02	70-130
75 4-Chlorotoluene	1.000	0.9353	93.53	70-130
45 Dibromomethane	1.000	1.042	104.16	70-130
33 2,2-Dichloropropan	1.000	0.8419	84.19	70-130
38 1,1-Dichloropropen	1.000	0.8995	89.95	70-130
86 Hexachlorobutadien	1.000	1.914	NT 191.45*	70-130
19 Iodomethane	1.000	0.9574	95.75	70-130
79 4-Isopropyltoluene	1.000	0.7008	70.08	70-130
87 Naphthalene	1.000	1.180	118.02	70-130
72 n-Propylbenzene	1.000	0.7850	78.50	70-130
60 1,1,1,2-Tetrachlor	1.000	0.9822	98.23	70-130
88 1,2,3-Trichloroben	1.000	1.152	115.20	70-130
77 1,2,4-Trimethylben	1.000	0.7443	74.43	70-130
74 1,3,5-Trimethylben	1.000	0.7787	77.87	70-130
150 Vinyl Acetate-86	1.000	0.6024	NT 60.25*	70-130
62 m + p-Xylene	2.000	1.664	83.18	70-130
64 Xylene-o	1.000	0.7795	77.95	70-130
49 4-Methyl-2-pentano	2.000	1.826	91.32	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.683	96.83	73-122
$ 5 1,2-Dichloroethane	10.000	9.874	98.74	61-128
$ 6 Toluene-d8	10.000	9.194	91.94	76-110
$ 7 Bromofluorobenzene	10.000	9.020	90.20	74-116

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 20, 2010

SDG: A0G130405 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.6-4.6 °C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP9-7/21/2010 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 2 R
12. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviation (%RSD) ≤ 30%?	✓				LCG Table 2 R
13. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 2 R
14. Was each target analyte <15 % RSD, or was the average RSD <15%?	✓				LCG Table 2 15% <RSD< 30% = J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 20, 2010

SDG: A0G130405 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			Benzoic acid, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol and pentachlorophenol used a quadratic fit. No qualifications were made as coefficients of determination (COD)(r) were≥0.99.	LCG Table 2 r<0.99=-J/R
16. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			6/8/10	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓			7/22/10 @0859, 1802	LCG Table 2
18. Were the QC/MRL recoveries 70-130%?		✓		Hexachlorocyclopentadiene recovered below control limits at 40.2% in the MRL analyzed 7/22/10 at 1802. An MDL check was analyzed with acceptable results hexachlorocyclopentadiene results were qualified as estimated, "J/UJ".	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			7/21/10 @ 1214	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?	✓			7/22/10 @ 0838	LCG Table 2
21. Was the percent difference (% D) for the CCCs ≤ 20%? (see Table 1) (% drift if regression fit model used)	✓				LCG Table 2
22. Were the minimum RFs for the SPCCs met? (see Table 2)	✓				LCG Table 2
23. Was the %Difference or %Drift ≤20% for all target analytes? OR was the average %D ≤20% with no individual analyte ≥30%D?	✓				LCG Table 2 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>30% (neg) = J/R D>30% (pos) = J
24. Were the internal standards added to every sample?	✓				LCG Table 2

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 20, 2010

SDG: A0G130405 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
25. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point ICAL std?	✓				LCG Table 2 R
26. Did the areas of all IS compounds vary by no more than -50% to +100% from the ICAL EICP area?	✓				LCG Table 2 R
27. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 2
28. Were all target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. bis(2-Ethylhexyl) phthalate was detected in the method blank at 1.4ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate <5x contamination were qualified, "B". See Appendix 1 for list of impacted samples.	LCG Table 2 <5/10x blank = B
29. Was a field blank collected and analyzed?	✓				
30. Were all target analytes in the field blank analysis <1/2 the MRL?	✓			Checked by ADR.	<5/10x blank = B
31. Was a field duplicate analyzed?	✓			Sample FWGLL12mw-DUP5-1570-GW was the field duplicate for sample FWGLL12mw-245c-1563-GW and FWGLL2mw-DUP2-1567-GW was the field duplicate for sample FWGLL2mw-265c-1536-GW.	
32. Were the field duplicate RPDs ≤30%?		✓		Checked by ADR. Only detected sample results were evaluated. The duplicate RPD was above control limits for bis(2-ethylhexyl)phthalate for the field duplicate pair FWGLL12mw-DUP5-1570-GW and FWGLL12mw-245c-1563-GW at 48.3% and at 70% for the field duplicate pair FWGLL2mw-DUP2-1567-GW and FWGLL2mw-265c-1536-GW. The bis (2-ethylhexyl) phthalate, results for these samples were qualified as estimated, "J".	QAPP Table 3-2 RPD >30=J
33. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 2
34. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
35. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 2
36. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL12mw-088c-1546-GW was the parent MS/MSD sample from this SDG.	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 20, 2010

SDG: A0G130405 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		The MS and MSD recovered below control limits for 3,3'-dichorobenzidine at 40 and 39%. No qualifications were made for these outliers as the associated LCS recovered within limits.	LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?		✓		2,4,6-Tribromophenol did not recover in sample FWGEQUIPRinse2-1579-GW, while 2-Fluorophenol recovered at 44%, phenol-5 at 41% and at 40% for 2-fluorobiphenyl. No qualification was made as the surrogate was diluted out of the sample. 2-Fluorophenol recovered below limits at 46%, however since LCG allows for one surrogate to be below control limits from each fraction without qualification, no qualification was made.	LCG Table 2 >150%=J; 10% -50%=J/UJ; <10%=J/R
39. Were reported sample concentrations within calibration range?	✓				
40. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
41. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding MS outliers and surrogate outliers.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 2 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Table 1: CCCs *(All analytes if CCCs not included in standard)*

Base / Neutral Compunds	Acid Compounds
Acenaphthalene	4-Chloro-3-methylphenol
1,4-Dichlorobenzene	2,4-Dichlorophenol
Hexachlorobutadiene	2-Nitrophenol
N-Nitrosodiphehylamine	Phenol
Di-n-octylphthalate	Pentachlorophenol
Fluoroanthene	2,4,6-Trichlorophenol

Benzo(a)pyrene	

Table 2: SPCCs

N-Nitroso-di-n-propylamine	0.050
Hexachlorocyclopentadiene	0.050
2,4-Dinitrophenol	0.050
4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-002 **Work Order #...:** L338T1AC **Matrix.....:** WG
Date Sampled...: 07/12/10 12:07 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 **Initial Wgt/Vol:** 980 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.9 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-002 Work Order #...: L338T1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	**0.83 J**	**1.0**	**ug/L**	**0.60**
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-002 **Work Order #...:** L338T1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	70	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-004 Work Order #...: L338X1AC Matrix.....: WG
Date Sampled...: 07/12/10 13:31 Date Received..: 07/13/10
Prep Date.....: 07/14/10 Analysis Date..: 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 Initial Wgt/Vol: 980 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.4 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-004 Work Order #...: L338X1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-004 Work Order #...: L338X1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	67	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	74	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-006 **Work Order #...:** L33811AE **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.4 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-006 Work Order #...: L33811AE Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-006 **Work Order #...:** L33811AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-008 **Work Order #...:** L33841AC **Matrix.....:** WG
Date Sampled...: 07/12/10 17:29 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.4 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-008 **Work Order #...:** L33841AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-008 **Work Order #...:** L33841AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	73	(50 - 150)
Phenol-d5	61	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-011 **Work Order #...:** L33881AC **Matrix.....:** WG
Date Sampled...: 07/12/10 12:50 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-011 Work Order #...: L33881AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-011 Work Order #...: L33881AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-013 **Work Order #...:** L339F1AC **Matrix.....:** WG
Date Sampled...: 07/12/10 14:04 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.2 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-013 Work Order #...: L339F1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-013 **Work Order #...:** L339F1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	54	(50 - 150)
2-Fluorobiphenyl	52	(50 - 150)
Terphenyl-d14	73	(50 - 150)
Phenol-d5	51	(50 - 150)
2-Fluorophenol	46 *	(50 - 150)
2,4,6-Tribromophenol	64	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-015 **Work Order #...:** L339H1AC **Matrix.....:** WQ
Date Sampled...: 07/12/10 14:34 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 20 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	4.0	ug/L	2.0
Acenaphthylene	ND	4.0	ug/L	2.0
Anthracene	ND	4.0	ug/L	2.0
Benzo(a)anthracene	ND	4.0	ug/L	2.0
Benzo(b)fluoranthene	ND	4.0	ug/L	2.0
Benzo(k)fluoranthene	ND	4.0	ug/L	2.0
Benzoic acid	ND	200	ug/L	200
Benzo(ghi)perylene	ND	4.0	ug/L	2.0
Benzo(a)pyrene	ND	4.0	ug/L	2.0
Benzyl alcohol	ND	100	ug/L	7.6
bis(2-Chloroethoxy) methane	ND	20	ug/L	6.4
bis(2-Chloroethyl)- ether	ND	20	ug/L	2.0
bis(2-Ethylhexyl) phthalate	ND	200	ug/L	16
4-Bromophenyl phenyl ether	ND	40	ug/L	16
Butyl benzyl phthalate	ND	20	ug/L	16
Carbazole	ND	20	ug/L	5.6
4-Chloroaniline	ND	40	ug/L	16
4-Chloro-3-methylphenol	ND	40	ug/L	16
2-Chloronaphthalene	ND	20	ug/L	2.0
2-Chlorophenol	ND	20	ug/L	5.8
4-Chlorophenyl phenyl ether	ND	40	ug/L	6.0
Chrysene	ND	4.0	ug/L	2.0
Dibenz(a,h)anthracene	ND	4.0	ug/L	2.0
Dibenzofuran	ND	20	ug/L	2.0
Di-n-butyl phthalate	ND	20	ug/L	13
1,2-Dichlorobenzene	ND	20	ug/L	5.8
1,3-Dichlorobenzene	ND	20	ug/L	16
1,4-Dichlorobenzene	ND	20	ug/L	6.8
3,3'-Dichlorobenzidine	ND	100	ug/L	7.4
2,4-Dichlorophenol	ND	40	ug/L	16
Diethyl phthalate	ND	20	ug/L	12
2,4-Dimethylphenol	ND	40	ug/L	16
Dimethyl phthalate	ND	20	ug/L	5.8

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-015 **Work Order #...:** L339H1AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	100	ug/L	48
2,4-Dinitrophenol	ND	100	ug/L	48
2,4-Dinitrotoluene	ND	100	ug/L	5.4
2,6-Dinitrotoluene	ND	100	ug/L	16
Di-n-octyl phthalate	ND	20	ug/L	16
Fluoranthene	ND	4.0	ug/L	2.0
Fluorene	ND	4.0	ug/L	2.0
Hexachlorobenzene	ND	4.0	ug/L	2.0
Hexachlorobutadiene	ND	20	ug/L	5.4
Hexachloroethane	ND	20	ug/L	16
Indeno(1,2,3-cd)pyrene	ND	4.0	ug/L	2.0
Isophorone	ND	20	ug/L	5.4
2-Methylnaphthalene	ND	4.0	ug/L	2.0
2-Methylphenol	ND	20	ug/L	16
4-Methylphenol	ND	20	ug/L	16
Naphthalene	ND	4.0	ug/L	2.0
2-Nitroaniline	ND	40	ug/L	16
3-Nitroaniline	ND	40	ug/L	5.6
4-Nitroaniline	ND	40	ug/L	16
Nitrobenzene	ND	20	ug/L	0.80
2-Nitrophenol	ND	40	ug/L	5.6
4-Nitrophenol	ND	100	ug/L	48
N-Nitrosodiphenylamine	ND	20	ug/L	6.2
N-Nitrosodi-n-propyl-amine	ND	20	ug/L	16
2,2'-oxybis (1-Chloropropane)	ND	20	ug/L	8.0
Pentachlorophenol	ND	100	ug/L	48
Phenanthrene	ND	4.0	ug/L	2.0
Phenol	ND	20	ug/L	12
Pyrene	ND	4.0	ug/L	2.0
1,2,4-Trichloro-benzene	ND	20	ug/L	5.6
2,4,5-Trichloro-phenol	ND	100	ug/L	6.0
2,4,6-Trichloro-phenol	ND	100	ug/L	16
Hexachlorocyclopenta-diene	ND	200	ug/L	16

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-015 **Work Order #...:** L339H1AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58 DIL	(50 - 150)
2-Fluorobiphenyl	40 DIL,*	(50 - 150)
Terphenyl-d14	67 DIL	(50 - 150)
Phenol-d5	41 DIL,*	(50 - 150)
2-Fluorophenol	44 DIL,*	(50 - 150)
2,4,6-Tribromophenol	0.0 DIL,*	(50 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-016 **Work Order #...:** L339J1AC **Matrix.....:** WG
Date Sampled...: 07/12/10 15:04 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.3 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-016 **Work Order #...:** L339J1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-016 Work Order #...: L339J1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	62	(50 - 150)
2-Fluorobiphenyl	56	(50 - 150)
Terphenyl-d14	73	(50 - 150)
Phenol-d5	54	(50 - 150)
2-Fluorophenol	52	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-018 **Work Order #...:** L339L1AC **Matrix.....:** WG
Date Sampled...: 07/12/10 16:44 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-018 **Work Order #...:** L339L1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-018 Work Order #...: L339L1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	60	(50 - 150)
2-Fluorophenol	58	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-021 **Work Order #...:** L339Q1AC **Matrix.....:** WG
Date Sampled...: 07/12/10 12:10 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-021 Work Order #...: L339Q1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-021 Work Order #...: L339Q1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	62	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	63	(50 - 150)
Phenol-d5	59	(50 - 150)
2-Fluorophenol	55	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-023 **Work Order #...:** L339W1AC **Matrix.....:** WG
Date Sampled...: 07/12/10 13:00 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-023 **Work Order #...:** L339W1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-023 Work Order #...: L339W1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	72	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	65	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-025 **Work Order #...:** L33901AC **Matrix.....:** WG
Date Sampled...: 07/12/10 17:00 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.7 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	**0.89 J**	**1.0**	**ug/L**	**0.80**
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-025 **Work Order #...:** L33901AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	**0.38 J**	**1.0**	**ug/L**	**0.27**
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G130405-025 **Work Order #...:** L33901AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
2-Fluorobiphenyl	56	(50 - 150)
Terphenyl-d14	61	(50 - 150)
Phenol-d5	54	(50 - 150)
2-Fluorophenol	54	(50 - 150)
2,4,6-Tribromophenol	61	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L35MF1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G140000-050

Prep Date.....: 07/14/10 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/22/10 **Prep Batch #...:** 0195050
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L35MF1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzoic acid	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**1.4 J**	**10**	**ug/L**	**SW846 8270C**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	61	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L35MF1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	57	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G130405 Work Order #...: L35MF1AC Matrix.....: WATER
LCS Lot-Sample#: A0G140000-050
Prep Date.....: 07/14/10 Analysis Date..: 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	72	(30 - 120)	SW846 8270C
Acenaphthene	81	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	95	(34 - 151)	SW846 8270C
Pyrene	81	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	78	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	74	(30 - 115)	SW846 8270C
Pentachlorophenol	50	(30 - 150)	SW846 8270C
Phenol	77	(30 - 115)	SW846 8270C
2-Chlorophenol	76	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	83	(31 - 121)	SW846 8270C
4-Nitrophenol	78	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	70	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	66	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	82	(36 - 135)	SW846 8270C
4-Methylphenol	71	(31 - 115)	SW846 8270C
4-Nitroaniline	89	(30 - 140)	SW846 8270C
Acenaphthylene	83	(37 - 115)	SW846 8270C
Anthracene	81	(45 - 118)	SW846 8270C
Benzo(a)anthracene	81	(43 - 138)	SW846 8270C
Benzo(a)pyrene	72	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	91	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	83	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	83	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	84	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	81	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	73	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	103	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G130405 Work Order #...: L35MF1AC Matrix.....: WATER
LCS Lot-Sample#: A0G140000-050

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	77	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	81	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	71	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	54	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	101	(43 - 122)	SW846 8270C
2-Chloronaphthalene	82	(35 - 115)	SW846 8270C
2-Methylnaphthalene	84	(32 - 115)	SW846 8270C
2-Methylphenol	82	(30 - 116)	SW846 8270C
2-Nitroaniline	83	(36 - 140)	SW846 8270C
2-Nitrophenol	82	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	64	(30 - 160)	SW846 8270C
3-Nitroaniline	84	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	75	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	88	(43 - 118)	SW846 8270C
4-Chloroaniline	74	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	88	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	87	(37 - 136)	SW846 8270C
Carbazole	83	(49 - 126)	SW846 8270C
Chrysene	81	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	82	(38 - 130)	SW846 8270C
Dibenzofuran	83	(40 - 115)	SW846 8270C
Diethyl phthalate	90	(43 - 132)	SW846 8270C
Dimethyl phthalate	88	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	86	(36 - 151)	SW846 8270C
Fluoranthene	86	(47 - 132)	SW846 8270C
Fluorene	85	(41 - 115)	SW846 8270C
Hexachlorobenzene	84	(42 - 123)	SW846 8270C
Hexachlorobutadiene	64	(30 - 120)	SW846 8270C
Hexachloroethane	59	(30 - 120)	SW846 8270C
Isophorone	83	(33 - 115)	SW846 8270C
Naphthalene	77	(30 - 119)	SW846 8270C
Nitrobenzene	84	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	82	(35 - 124)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L35MF1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G140000-050

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	81	(45 - 117)	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	81	(37 - 130)	**SW846 8270C**
Di-n-butyl phthalate	89	(46 - 123)	**SW846 8270C**
Hexachlorocyclopenta-diene	73	(30 - 115)	**SW846 8270C**
Benzoic acid	24 a	(30 - 136)	**SW846 8270C**
Benzyl alcohol	75	(29 - 115)	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G130405 Work Order #...: L33811AF-MS Matrix.....: WG
MS Lot-Sample #: A0G130405-006 L33811AG-MSD
Date Sampled...: 07/12/10 14:39 Date Received..: 07/13/10
Prep Date.....: 07/14/10 Analysis Date..: 07/22/10
Prep Batch #...: 0195050
Dilution Factor: 1 Initial Wgt/Vol: 520 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	69	(45 - 135)			SW846 8270C
	63	(45 - 135)	8.7	(0-40)	SW846 8270C
Acenaphthene	75	(45 - 135)			SW846 8270C
	72	(45 - 135)	4.2	(0-40)	SW846 8270C
2,4-Dinitrotoluene	90	(45 - 135)			SW846 8270C
	90	(45 - 135)	0.07	(0-40)	SW846 8270C
Pyrene	73	(45 - 135)			SW846 8270C
	74	(45 - 135)	1.5	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	76	(45 - 135)			SW846 8270C
	74	(45 - 135)	3.7	(0-40)	SW846 8270C
1,4-Dichlorobenzene	71	(45 - 135)			SW846 8270C
	66	(45 - 135)	6.5	(0-40)	SW846 8270C
Pentachlorophenol	64	(45 - 135)			SW846 8270C
	64	(45 - 135)	0.60	(0-40)	SW846 8270C
Phenol	75	(45 - 135)			SW846 8270C
	71	(45 - 135)	5.0	(0-40)	SW846 8270C
2-Chlorophenol	76	(45 - 135)			SW846 8270C
	73	(45 - 135)	4.2	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	81	(45 - 135)			SW846 8270C
	81	(45 - 135)	0.97	(0-40)	SW846 8270C
4-Nitrophenol	73	(45 - 135)			SW846 8270C
	74	(45 - 135)	1.2	(0-40)	SW846 8270C
Acenaphthylene	78	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.8	(0-40)	SW846 8270C
Anthracene	72	(45 - 135)			SW846 8270C
	72	(45 - 135)	0.65	(0-40)	SW846 8270C
Benzo(a)anthracene	73	(45 - 135)			SW846 8270C
	73	(45 - 135)	0.05	(0-40)	SW846 8270C
Benzo(b)fluoranthene	80	(45 - 135)			SW846 8270C
	81	(45 - 135)	1.5	(0-40)	SW846 8270C
Benzo(k)fluoranthene	76	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.65	(0-40)	SW846 8270C
Benzo(ghi)perylene	74	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.67	(0-40)	SW846 8270C
Benzo(a)pyrene	65	(45 - 135)			SW846 8270C
	64	(45 - 135)	0.49	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G130405 Work Order #...: L33811AF-MS Matrix.....: WG
MS Lot-Sample #: A0G130405-006 L33811AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	84	(45 - 135)			SW846 8270C
	80	(45 - 135)	4.2	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	82	(45 - 135)			SW846 8270C
	78	(45 - 135)	5.4	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	73	(45 - 135)			SW846 8270C
	69	(45 - 135)	5.3	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	84	(45 - 135)			SW846 8270C
	79	(45 - 135)	6.0	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	79	(45 - 135)			SW846 8270C
	78	(45 - 135)	0.60	(0-40)	SW846 8270C
Butyl benzyl phthalate	80	(45 - 135)			SW846 8270C
	81	(45 - 135)	0.22	(0-40)	SW846 8270C
Carbazole	79	(45 - 135)			SW846 8270C
	79	(45 - 135)	0.32	(0-40)	SW846 8270C
4-Chloroaniline	69	(45 - 135)			SW846 8270C
	67	(45 - 135)	2.2	(0-40)	SW846 8270C
2-Chloronaphthalene	76	(45 - 135)			SW846 8270C
	71	(45 - 135)	6.1	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	80	(45 - 135)			SW846 8270C
	79	(45 - 135)	1.6	(0-40)	SW846 8270C
Chrysene	71	(45 - 135)			SW846 8270C
	72	(45 - 135)	1.4	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	74	(45 - 135)			SW846 8270C
	74	(45 - 135)	0.13	(0-40)	SW846 8270C
Dibenzofuran	77	(45 - 135)			SW846 8270C
	74	(45 - 135)	3.1	(0-40)	SW846 8270C
Di-n-butyl phthalate	80	(45 - 135)			SW846 8270C
	80	(45 - 135)	0.09	(0-40)	SW846 8270C
1,2-Dichlorobenzene	68	(45 - 135)			SW846 8270C
	65	(45 - 135)	5.4	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L33811AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G130405-006 L33811AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	64	(45 - 135)			SW846 8270C
	59	(45 - 135)	7.3	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	40 a	(45 - 135)			SW846 8270C
	39 a	(45 - 135)	0.64	(0-40)	SW846 8270C
2,4-Dichlorophenol	82	(45 - 135)			SW846 8270C
	79	(45 - 135)	3.2	(0-40)	SW846 8270C
Diethyl phthalate	87	(45 - 135)			SW846 8270C
	85	(45 - 135)	2.8	(0-40)	SW846 8270C
2,4-Dimethylphenol	76	(45 - 135)			SW846 8270C
	73	(45 - 135)	4.4	(0-40)	SW846 8270C
Dimethyl phthalate	85	(45 - 135)			SW846 8270C
	84	(45 - 135)	1.5	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	72	(45 - 135)			SW846 8270C
	74	(45 - 135)	2.5	(0-40)	SW846 8270C
2,4-Dinitrophenol	63	(45 - 135)			SW846 8270C
	64	(45 - 135)	1.8	(0-40)	SW846 8270C
2,6-Dinitrotoluene	97	(45 - 135)			SW846 8270C
	93	(45 - 135)	4.0	(0-40)	SW846 8270C
Di-n-octyl phthalate	82	(45 - 135)			SW846 8270C
	80	(45 - 135)	1.8	(0-40)	SW846 8270C
Fluoranthene	77	(45 - 135)			SW846 8270C
	77	(45 - 135)	0.57	(0-40)	SW846 8270C
Fluorene	79	(45 - 135)			SW846 8270C
	76	(45 - 135)	2.9	(0-40)	SW846 8270C
Hexachlorobenzene	76	(45 - 135)			SW846 8270C
	78	(45 - 135)	2.7	(0-40)	SW846 8270C
Hexachlorobutadiene	53	(45 - 135)			SW846 8270C
	47	(45 - 135)	11	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	57	(45 - 135)			SW846 8270C
	51	(45 - 135)	12	(0-40)	SW846 8270C
Hexachloroethane	54	(45 - 135)			SW846 8270C
	49	(45 - 135)	9.1	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	73	(45 - 135)			SW846 8270C
	73	(45 - 135)	0.30	(0-40)	SW846 8270C
Isophorone	81	(45 - 135)			SW846 8270C
	79	(45 - 135)	3.6	(0-40)	SW846 8270C
2-Methylnaphthalene	80	(45 - 135)			SW846 8270C
	76	(45 - 135)	5.3	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L33811AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G130405-006 L33811AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	88	(45 - 135)			SW846 8270C
	83	(45 - 135)	5.9	(0-40)	SW846 8270C
4-Methylphenol	70	(45 - 135)			SW846 8270C
	67	(45 - 135)	4.7	(0-40)	SW846 8270C
Naphthalene	78	(45 - 135)			SW846 8270C
	73	(45 - 135)	6.3	(0-40)	SW846 8270C
2-Nitroaniline	81	(45 - 135)			SW846 8270C
	78	(45 - 135)	2.8	(0-40)	SW846 8270C
3-Nitroaniline	79	(45 - 135)			SW846 8270C
	77	(45 - 135)	1.7	(0-50)	SW846 8270C
4-Nitroaniline	84	(45 - 135)			SW846 8270C
	83	(45 - 135)	1.2	(0-40)	SW846 8270C
Nitrobenzene	87	(45 - 135)			SW846 8270C
	80	(45 - 135)	7.7	(0-40)	SW846 8270C
2-Nitrophenol	83	(45 - 135)			SW846 8270C
	80	(45 - 135)	4.7	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	72	(45 - 135)			SW846 8270C
	72	(45 - 135)	0.06	(0-40)	SW846 8270C
Phenanthrene	74	(45 - 135)			SW846 8270C
	73	(45 - 135)	1.2	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	82	(45 - 135)			SW846 8270C
	81	(45 - 135)	1.2	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	74	(45 - 135)			SW846 8270C
	70	(45 - 135)	5.2	(0-40)	SW846 8270C
Benzoic acid	61	(45 - 135)			SW846 8270C
	70	(45 - 135)	12	(0-40)	SW846 8270C
Benzyl alcohol	65	(45 - 135)			SW846 8270C
	61	(45 - 135)	6.3	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	85	(50 - 150)
	75	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
	62	(50 - 150)
Terphenyl-d14	80	(50 - 150)
	76	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L33811AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G130405-006 L33811AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	69	(50 - 150)
	63	(50 - 150)
2-Fluorophenol	68	(50 - 150)
	61	(50 - 150)
2,4,6-Tribromophenol	77	(50 - 150)
	68	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

Data File: \\cansvr11\dd\chem\MSS\a4hp9.i\00722a.b\9QCMRLCL.D Page 1
Report Date: 23-Jul-2010 11:17

TestAmerica North Canton

Fails: Hexachlorocyclopentadiene

RECOVERY REPORT

7/22/10 @1802

pg 23

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: qcmrl
Level: LOW
Data Type: MS DATA
SpikeList File: qcmrl.spk
Sublist File: qcmrl.sub
Method File: \\cansvr11\dd\chem\MSS\a4hp9.i\00722a.b\8270c-625.m
Misc Info:

Client SDG: SDGa00278
Fraction: SV
Operator: 001574
SampleType: MRL
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
82 Acenaphthene	10.000	10.028	100.29	70-130
79 Acenaphthylene	10.000	10.014	100.14	70-130
116 Anthracene	10.000	9.7064	97.06	70-130
136 Benzo(a)Anthracene	10.000	9.6094	96.09	70-130
141 Benzo(b)fluoranthe	10.000	9.1290	91.29	70-130
151 Benzo(g,h,i)peryle	10.000	10.312	103.12	70-130
146 Benzo(a)pyrene	10.000	10.098	100.98	70-130
29 Benzyl Alcohol	10.000	8.8871	88.87	70-130
44 bis(2-Chloroethoxy	10.000	9.6440	96.44	70-130
23 bis(2-Chloroethyl)	10.000	10.260	102.60	70-130
31 bis(2-Chloroisopro	10.000	9.0284	90.28	70-130
139 bis(2-ethylhexyl)P	10.000	11.646	116.47	70-130
106 4-Bromophenyl-phen	10.000	10.128	101.28	70-130
131 Butylbenzylphthala	10.000	10.686	106.87	70-130
52 4-Chloroaniline	10.000	10.220	102.20	70-130
70 2-Chloronaphthalen	10.000	9.9581	99.58	70-130
95 4-Chlorophenyl-phe	10.000	10.229	102.29	70-130
137 Chrysene	10.000	9.6017	96.02	70-130
150 Dibenz(a,h)anthrac	10.000	10.202	102.02	70-130
86 Dibenzofuran	10.000	9.9427	99.43	70-130
120 Di-n-Butylphthalat	10.000	10.472	104.72	70-130
28 1,2-Dichlorobenzen	10.000	10.310	103.10	70-130
26 1,3-Dichlorobenzen	10.000	10.264	102.64	70-130
27 1,4-Dichlorobenzen	10.000	9.9056	99.06	70-130
135 3,3'-Dichlorobenzi	10.000	10.368	103.68	70-130
93 Diethylphthalate	10.000	10.326	103.26	70-130
76 Dimethylphthalate	10.000	10.071	100.71	70-130
87 2,4-Dinitrotoluene	10.000	10.503	105.03	70-130
78 2,6-Dinitrotoluene	10.000	10.690	106.90	70-130
140 Di-n-octylphthalat	10.000	11.436	114.36	70-130
123 Fluoranthene	10.000	10.222	102.22	70-130
94 Fluorene	10.000	10.298	102.98	70-130
107 Hexachlorobenzene	10.000	9.9001	99.00	70-130
56 Hexachlorobutadien	10.000	10.447	104.47	70-130
64 Hexachlorocyclopen	10.000	4.0612	40.61*	70-130
34 Hexachloroethane	10.000	8.6671	86.67	70-130
149 Indeno(1,2,3-cd)py	10.000	10.184	101.84	70-130
41 Isophorone	10.000	9.3557	93.56	70-130
63 1-Methylnaphthalen	10.000	10.207	102.07	70-130
62 2-Methylnaphthalen	10.000	10.285	102.85	70-130

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
51	Naphthalene	10.000	9.7992	97.99	70-130
73	2-Nitroaniline	10.000	9.8615	98.61	70-130
81	3-Nitroaniline	10.000	9.9631	99.63	70-130
96	4-Nitroaniline	10.000	10.638	106.38	70-130
35	Nitrobenzene	10.000	9.6468	96.47	70-130
32	N-Nitroso-di-n-pro	10.000	9.4984	94.98	70-130
99	N-Nitrosodiphenyla	10.000	10.267	102.67	70-130
115	Phenanthrene	10.000	9.6751	96.75	70-130
125	Pyrene	10.000	9.7849	97.85	70-130
9	Pyridine	10.000	8.4490	84.49	70-130
50	1,2,4-Trichloroben	10.000	10.171	101.71	70-130
49	Benzoic Acid	20.000	20.590	102.95	70-130
59	4-Chloro-3-Methylp	10.000	10.004	100.04	70-130
24	2-Chlorophenol	10.000	10.149	101.49	70-130
48	2,4-Dichlorophenol	10.000	10.379	103.79	70-130
43	2,4-Dimethylphenol	10.000	10.077	100.77	70-130
98	4,6-Dinitro-2-meth	10.000	7.7166	77.17	70-130
83	2,4-Dinitrophenol	20.000	15.076	75.38	70-130
30	2-Methylphenol	10.000	10.548	105.48	70-130
192	4-Methylphenol	10.000	9.5148	95.15	70-130
42	2-Nitrophenol	10.000	10.292	102.92	70-130
85	4-Nitrophenol	10.000	9.8632	98.63	70-130
111	Pentachlorophenol	20.000	20.501	102.51	70-130
22	Phenol	10.000	8.8745	88.74	70-130
67	2,4,5-Trichlorophe	10.000	10.464	104.64	70-130
66	2,4,6-Trichlorophe	10.000	9.7860	97.86	70-130
119	Carbazole	10.000	10.027	100.27	70-130
142	Benzo(k)fluoranthe	10.000	11.033	110.33	70-130
198	1,4-Dioxane	10.000	8.3614	83.61	70-130
21	Aniline	10.000	9.4958	94.96	70-130
10	N-Nitrosodimethyla	10.000	9.0382	90.38	70-130

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270C-625

Data file : \\cansvr11\dd\chem\MSS\a4hp9.i\00722a.b\9QCMRLCL.D
Lab Smp Id: qcmrl
Inj Date : 22-JUL-2010 18:02
Operator : 001574 Inst ID: a4hp9.i
Smp Info : qcmrl,00722a.b,8270c-625,qcmrl.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp9.i\00722a.b\8270c-625.m
Meth Date : 22-Jul-2010 09:13 ulmanm Quant Type: ISTD
Cal Date : 21-JUL-2010 11:35 Cal File: 9SHH0721.D
Als bottle: 31 QC Sample: MRL
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

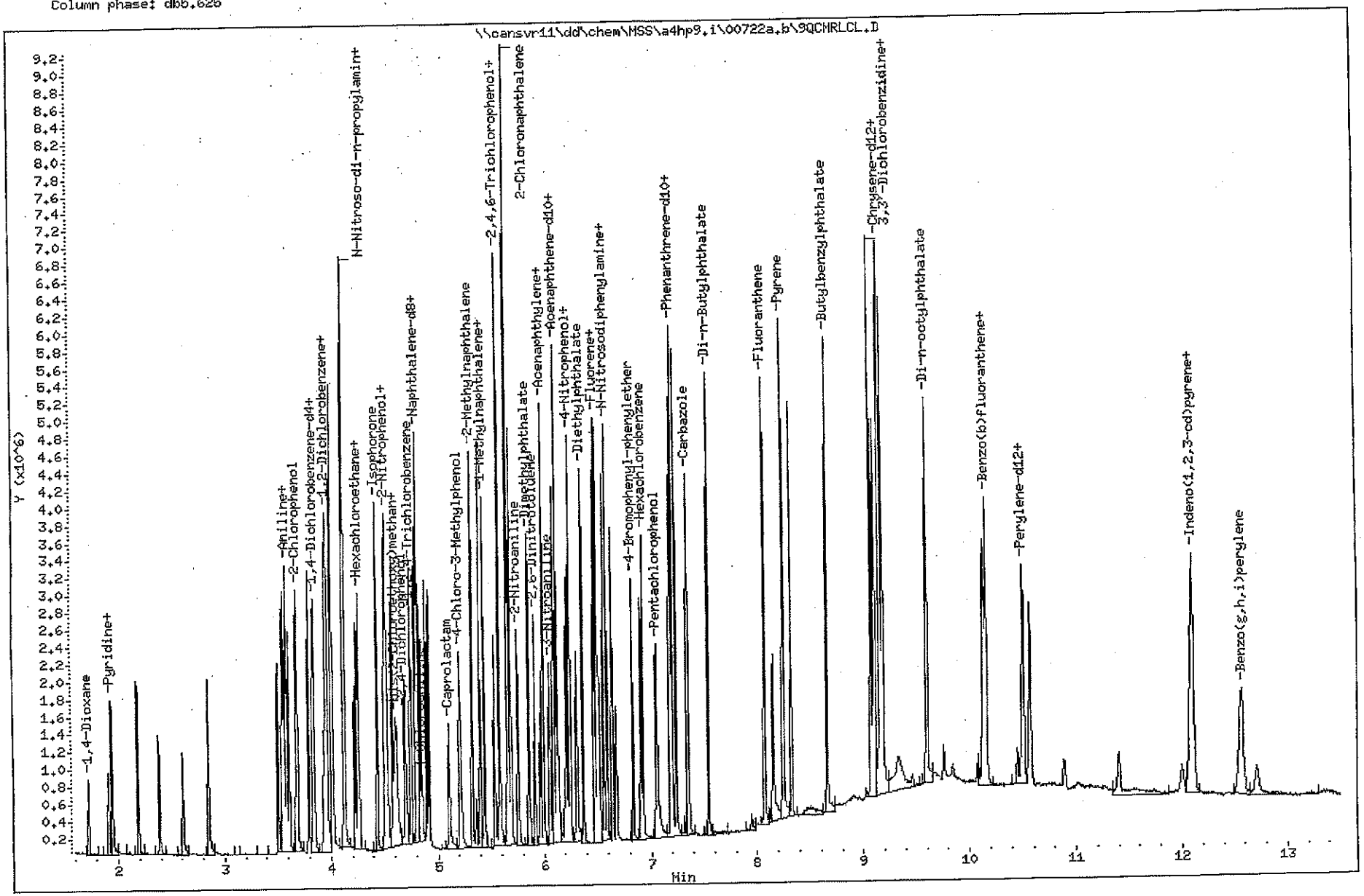
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	2000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	0.50000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	
*	1 1,4-Dichlorobenzene-d4	152	3.832	3.831	(1.000)	290799	2.00000		
*	2 Naphthalene-d8	136	4.799	4.792	(1.000)	1136512	2.00000		
*	3 Acenaphthene-d10	164	6.097	6.090	(1.000)	690060	2.00000		
*	4 Phenanthrene-d10	188	7.181	7.175	(1.000)	1197065	2.00000		
*	5 Chrysene-d12	240	9.163	9.157	(1.000)	1159882	2.00000		
*	6 Perylene-d12	264	10.574	10.546	(1.000)	1006999	2.00000		(H)
	9 Pyridine	79	1.941	1.950	(0.507)	694260	2.11225	8.4490	
	10 N-Nitrosodimethylamine	74	1.909	1.918	(0.498)	386114	2.25955	9.0382	
	21 Aniline	93	3.581	3.579	(0.934)	1072223	2.37394	9.4958	
	22 Phenol	94	3.554	3.542	(0.927)	825104	2.21862	8.8745	
	23 bis(2-Chloroethyl)ether	93	3.607	3.606	(0.941)	739788	2.56509	10.260	
	24 2-Chlorophenol	128	3.682	3.681	(0.961)	517609	2.53717	10.149	
	26 1,3-Dichlorobenzene	146	3.794	3.793	(0.990)	499132	2.56605	10.264	
	27 1,4-Dichlorobenzene	146	3.848	3.841	(1.004)	450935	2.47640	9.9056	
	28 1,2-Dichlorobenzene	146	3.965	3.964	(1.035)	484553	2.57755	10.310	
	29 Benzyl Alcohol	108	3.933	3.921	(1.026)	374854	2.22178	8.8871	
	30 2-Methylphenol	108	4.013	4.001	(1.047)	647295	2.63701	10.548	
	31 bis(2-Chloroisopropyl)ether	45	4.013	4.012	(1.047)	687082	2.25709	9.0284	
	32 N-Nitroso-di-n-propylamine	70	4.120	4.114	(1.075)	547219	2.37459	9.4984	
	192 4-Methylphenol	108	4.126	4.114	(1.077)	624096	2.37870	9.5148	

Data File: \\cansvr11\dd\chem\MSS\a4hp9.i\00722a.b\9QCMRLCL.D
Date : 22-JUL-2010 18:02
Client ID:
Sample Info: qcmrl,00722a.b,8270c-625,qcmrl.sub
Volume Injected (uL): 0.5
Column phase: db5.625

Instrument: a4hp9.i

Operator: 001574
Column diameter: 0.32



North Canton

Good for:
Hexachlorocyclopentadiene
2,4-Dinitrophenol

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270C-625

Data file : \\cansvr11\dd\chem\MSS\a4hp9.i\00722a.b\9QCMDLL3.D
Lab Smp Id: qcmrl
Inj Date : 22-JUL-2010 19:00
Operator : 001574 Inst ID: a4hp9.i
Smp Info : qcmrl,00722a.b,8270c-625,qcmrl.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp9.i\00722a.b\8270c-625.m
Meth Date : 23-Jul-2010 11:30 ulmanm Quant Type: ISTD
Cal Date : 21-JUL-2010 11:35 Cal File: 9SHH0721.D
Als bottle: 34 QC Sample: MRL
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (NG)	
* 1 1,4-Dichlorobenzene-d4	152	3.830	3.831	(1.000)	223843	2.00000		(Q)
* 2 Naphthalene-d8	136	4.797	4.792	(1.000)	853579	2.00000		
* 3 Acenaphthene-d10	164	6.095	6.090	(1.000)	506949	2.00000		
* 4 Phenanthrene-d10	188	7.180	7.175	(1.000)	878898	2.00000		
* 5 Chrysene-d12	240	9.151	9.157	(1.000)	914901	2.00000		
* 6 Perylene-d12	264	10.556	10.546	(1.000)	809655	2.00000		
9 Pyridine	79	1.945	1.950	(0.508)	110753	0.43775	0.43775	
10 N-Nitrosodimethylamine	74	1.907	1.918	(0.498)	62520	0.47531	0.47531	
21 Aniline	93	3.579	3.579	(0.934)	160429	0.46144	0.46144	
22 Phenol	94	3.553	3.542	(0.927)	118972	0.41559	0.41559	
23 bis(2-Chloroethyl)ether	93	3.606	3.606	(0.941)	111453	0.50204	0.50204	
24 2-Chlorophenol	128	3.681	3.681	(0.961)	73664	0.46909	0.46909	
26 1,3-Dichlorobenzene	146	3.793	3.793	(0.990)	76228	0.50911	0.50911	
27 1,4-Dichlorobenzene	146	3.846	3.841	(1.004)	70438	0.50253	0.50253	
28 1,2-Dichlorobenzene	146	3.964	3.964	(1.035)	73072	0.50497	0.50497	
29 Benzyl Alcohol	108	3.953	3.921	(1.032)	35416	0.27270	0.27270	(QM)
30 2-Methylphenol	108	4.007	4.001	(1.046)	93532	0.49502	0.49502	
31 bis(2-Chloroisopropyl)ether	45	4.012	4.012	(1.047)	106657	0.45518	0.45518	
32 N-Nitroso-di-n-propylamine	70	4.113	4.114	(1.074)	80975	0.45649	0.45649	
192 4-Methylphenol	108	4.124	4.114	(1.077)	78041	0.38642	0.38642	
34 Hexachloroethane	117	4.226	4.220	(1.103)	21809	0.32122	0.32122	
35 Nitrobenzene	77	4.263	4.258	(0.889)	112694	0.46041	0.46041	
41 Isophorone	82	4.434	4.434	(0.924)	209867	0.45982	0.45982	
42 2-Nitrophenol	139	4.503	4.498	(0.939)	34913	0.43498	0.43498	(Q)
43 2,4-Dimethylphenol	107	4.525	4.514	(0.943)	83141	0.41451	0.41451	
44 bis(2-Chloroethoxy)methane	93	4.578	4.573	(0.954)	114064	0.47100	0.47100	
48 2,4-Dichlorophenol	162	4.696	4.680	(0.979)	45923	0.38914	0.38914	
49 Benzoic Acid	122	4.584	4.610	(0.955)	34349	0.83592	0.83592	(Q)
50 1,2,4-Trichlorobenzene	180	4.749	4.744	(0.990)	61140	0.49953	0.49953	
51 Naphthalene	128	4.813	4.808	(1.003)	226149	0.49826	0.49826	
52 4-Chloroaniline	127	4.845	4.835	(1.010)	74320	0.38933	0.38933	
56 Hexachlorobutadiene	225	4.893	4.894	(1.020)	34510	0.50771	0.50771	
210 Caprolactam	113	5.080	5.097	(1.059)	25425	0.43452	0.43452	(Q)

Good for:
Hexachlorocyclopentadiene
2,4-Dinitrophenol

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270C-625

Data file : \\cansvr11\dd\chem\MSS\a4hp9.i\00722a.b\9QCMDLL3.D
Lab Smp Id: qcmrl
Inj Date : 22-JUL-2010 19:00
Operator : 001574 Inst ID: a4hp9.i
Smp Info : qcmrl,00722a.b,8270c-625,qcmrl.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp9.i\00722a.b\8270c-625.m
Meth Date : 23-Jul-2010 11:30 ulmanm Quant Type: ISTD
Cal Date : 21-JUL-2010 11:35 Cal File: 9SHH0721.D
Als bottle: 34 QC Sample: MRL
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

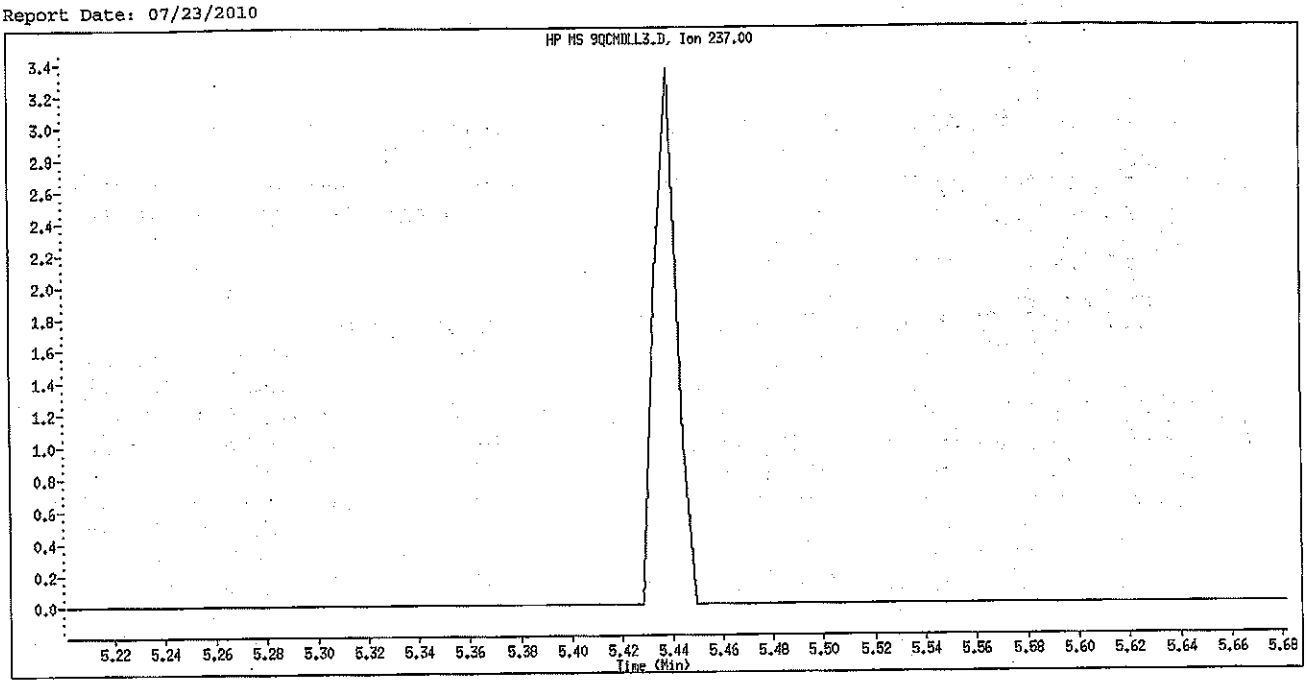
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)
* 1 1,4-Dichlorobenzene-d4	152	3.830	3.831	(1.000)	223843	2.00000	(Q)
* 2 Naphthalene-d8	136	4.797	4.792	(1.000)	853579	2.00000	
* 3 Acenaphthene-d10	164	6.095	6.090	(1.000)	506949	2.00000	
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* 6 Perylene-d12	264	10.556	10.546	(1.000)	809655	2.00000	
9 Pyridine	79	1.945	1.950	(0.508)	110753	0.43775	0.43775
10 N-Nitrosodimethylamine	74	1.907	1.918	(0.498)	62520	0.47531	0.47531
21 Aniline	93	3.579	3.579	(0.934)	160429	0.46144	0.46144
22 Phenol	94	3.553	3.542	(0.927)	118972	0.41559	0.41559
23 bis(2-Chloroethyl)ether	93	3.606	3.606	(0.941)	111453	0.50204	0.50204
24 2-Chlorophenol	128	3.681	3.681	(0.961)	73664	0.46909	0.46909
26 1,3-Dichlorobenzene	146	3.793	3.793	(0.990)	76228	0.50911	0.50911
27 1,4-Dichlorobenzene	146	3.846	3.841	(1.004)	70438	0.50253	0.50253
28 1,2-Dichlorobenzene	146	3.964	3.964	(1.035)	73072	0.50497	0.50497
29 Benzyl Alcohol	108	3.953	3.921	(1.032)	35416	0.27270	0.27270 (QM)
30 2-Methylphenol	108	4.007	4.001	(1.046)	93532	0.49502	0.49502
31 bis(2-Chloroisopropyl)ether	45	4.012	4.012	(1.047)	106657	0.45518	0.45518
32 N-Nitroso-di-n-propylamine	70	4.113	4.114	(1.074)	80975	0.45649	0.45649
192 4-Methylphenol	108	4.124	4.114	(1.077)	78041	0.38642	0.38642
34 Hexachloroethane	117	4.226	4.220	(1.103)	21809	0.32122	0.32122
35 Nitrobenzene	77	4.263	4.258	(0.889)	112694	0.46041	0.46041
41 Isophorone	82	4.434	4.434	(0.924)	209867	0.45982	0.45982
42 2-Nitrophenol	139	4.503	4.498	(0.939)	34913	0.43498	0.43498 (Q)
43 2,4-Dimethylphenol	107	4.525	4.514	(0.943)	83141	0.41451	0.41451
44 bis(2-Chloroethoxy)methane	93	4.578	4.573	(0.954)	114064	0.47100	0.47100
48 2,4-Dichlorophenol	162	4.696	4.680	(0.979)	45923	0.38914	0.38914
49 Benzoic Acid	122	4.584	4.610	(0.955)	34349	0.83592	0.83592 (Q)
50 1,2,4-Trichlorobenzene	180	4.749	4.744	(0.990)	61140	0.49953	0.49953
51 Naphthalene	128	4.813	4.808	(1.003)	226149	0.49826	0.49826
52 4-Chloroaniline	127	4.845	4.835	(1.010)	74320	0.38933	0.38933
56 Hexachlorobutadiene	225	4.893	4.894	(1.020)	34510	0.50771	0.50771
210 Caprolactam	113	5.080	5.097	(1.059)	25425	0.43452	0.43452 (Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (NG)
59	4-Chloro-3-Methylphenol	107	5.209	5.187	(1.086)	80924	0.47329	0.47329
62	2-Methylnaphthalene	142	5.321	5.316	(1.109)	135350	0.51516	0.51516
63	1-Methylnaphthalene	142	5.396	5.390	(1.125)	146928	0.54697	0.54697
64	Hexachlorocyclopentadiene	237	5.438	5.433	(0.892)	2066	0.02979	0.029786(M)
66	2,4,6-Trichlorophenol	196	5.534	5.524	(0.908)	38678	0.44580	0.44580
67	2,4,5-Trichlorophenol	196	5.577	5.556	(0.915)	50037	0.53197	0.53197
70	2-Chloronaphthalene	162	5.684	5.679	(0.933)	127980	0.49164	0.49164
73	2-Nitroaniline	65	5.753	5.743	(0.944)	50956	0.43170	0.43170
76	Dimethylphthalate	163	5.855	5.855	(0.961)	150165	0.50668	0.50668
78	2,6-Dinitrotoluene	165	5.914	5.909	(0.970)	27909	0.44320	0.44320
79	Acenaphthylene	152	5.994	5.989	(0.983)	228820	0.50183	0.50183
80	1,2-Dinitrobenzene	168	5.962	5.957	(0.978)	14284	0.41136	0.41136
81	3-Nitroaniline	138	6.058	6.042	(0.994)	33845	0.42984	0.42984
82	Acenaphthene	153	6.117	6.112	(1.004)	148693	0.53231	0.53231
83	2,4-Dinitrophenol	184	6.154	6.117	(1.010)	9480	0.39445	0.39445(Q)
85	4-Nitrophenol	109	6.218	6.160	(1.020)	19876	0.36053	0.36052(QM)
86	Dibenzofuran	168	6.240	6.234	(1.024)	203118	0.50792	0.50792
87	2,4-Dinitrotoluene	165	6.213	6.202	(1.019)	38133	0.43687	0.43687
93	Diethylphthalate	149	6.362	6.363	(1.044)	162526	0.53227	0.53227
94	Fluorene	166	6.491	6.486	(1.065)	155802	0.52030	0.52030
95	4-Chlorophenyl-phenylether	204	6.469	6.470	(1.061)	76480	0.53243	0.53242
96	4-Nitroaniline	138	6.507	6.486	(1.067)	38360	0.46451	0.46451
98	4,6-Dinitro-2-methylphenol	198	6.523	6.507	(0.908)	11821	0.37001	0.37001
99	N-Nitrosodiphenylamine	169	6.560	6.550	(0.914)	121436	0.50326	0.50326
100	1,2-Diphenylhydrazine	77	6.587	6.582	(0.917)	245970	0.45642	0.45642
106	4-Bromophenyl-phenylether	248	6.833	6.827	(0.952)	37297	0.51625	0.51624
107	Hexachlorobenzene	284	6.902	6.897	(0.961)	33560	0.50849	0.50849
111	Pentachlorophenol	266	7.057	7.036	(0.983)	23009	0.85368	0.85368
115	Phenanthrene	178	7.201	7.191	(1.003)	231249	0.49153	0.49153
116	Anthracene	178	7.239	7.228	(1.008)	239779	0.51011	0.51011
119	Carbazole	167	7.351	7.335	(1.024)	231540	0.51724	0.51724
120	Di-n-Butylphthalate	149	7.543	7.538	(1.051)	254463	0.50528	0.50528
123	Fluoranthene	202	8.072	8.067	(1.124)	240858	0.51635	0.51635
125	Pyrene	202	8.243	8.238	(0.901)	261601	0.46995	0.46995
131	Butylbenzylphthalate	149	8.654	8.654	(0.946)	115385	0.49380	0.49380
135	3,3'-Dichlorobenzidine	252	9.098	9.103	(0.994)	79638	0.46674	0.46674
136	Benzo(a)Anthracene	228	9.140	9.146	(0.999)	243818	0.47657	0.47657
137	Chrysene	228	9.172	9.178	(1.002)	251513	0.49744	0.49744
138	4,4'-Methylene bis(o-chloroan	231	9.087	9.093	(0.993)	39418	0.47497	0.47496
139	bis(2-ethylhexyl)Phthalate	149	9.066	9.076	(0.991)	166554	0.53799	0.53799
140	Di-n-octylphthalate	149	9.589	9.600	(0.908)	282815	0.52176	0.52176
141	Benzo(b)fluoranthene	252	10.118	10.118	(0.959)	210044	0.43596	0.43596
142	Benzo(k)fluoranthene	252	10.145	10.145	(0.961)	264459	0.55403	0.55403
146	Benzo(a)pyrene	252	10.487	10.487	(0.993)	216781	0.50101	0.50101
149	Indeno(1,2,3-cd)pyrene	276	12.068	12.057	(1.143)	228987	0.49492	0.49492
150	Dibenz(a,h)anthracene	278	12.073	12.057	(1.144)	178358	0.49224	0.49224
151	Benzo(g,h,i)perylene	276	12.538	12.511	(1.188)	184093	0.49214	0.49214
198	1,4-Dioxane	88	1.720	1.731	(0.449)	37836	0.44751	0.44751

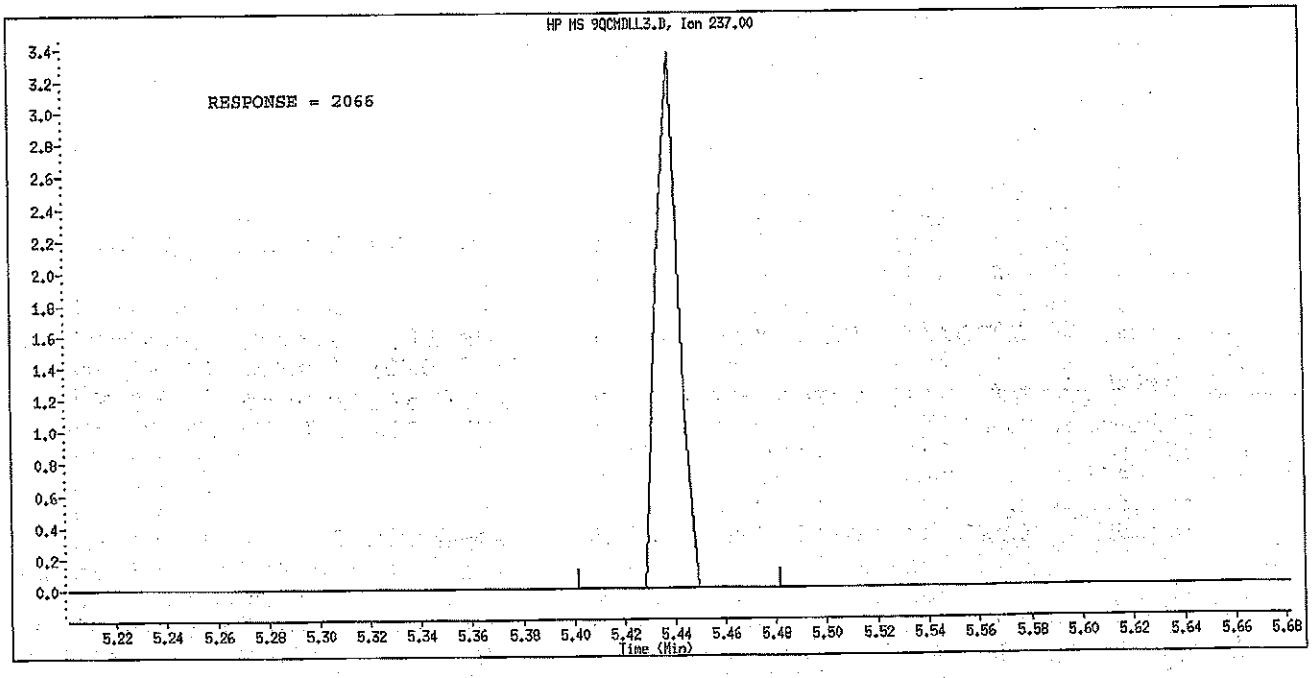
QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File Name: 9QCMDLL3.D
Inj. Date and Time: 22-JUL-2010 19:00
Instrument ID: a4hp9.i
Client ID:
Compound Name: Hexachlorocyclopentadiene
CAS #: 77-47-4
Report Date: 07/23/2010



Original Integration



Manual Integration

Manually Integrated By: ulmanm
Manual Integration Reason: Peak not found

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 20, 2010

SDG: A0G130405 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.6-4.6 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Was a DDT standard analyzed every 12 hours? Was the DDT %breakdown < 15%?	✓				LCG Table 4 >15%=J/R
8. Was an endrin standard analyzed every 12 hours? Was endrin %breakdown <15%?	✓				LCG Table 4 >15%=J/R
9. Does the initial calibration curve consist of 5 concentration levels?	✓			Instrument A2HP3 7/26/10 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 4 R
10. Were the %RSDs for each analyte ≤ 20%? OR was the average %RSD ≤ 20% with the r^2 >0.990?	✓				LCG Table 4 RSD>20% or r<0.99=J/R
11. Was a blank run prior to the initial calibration?			✓	No data provided to evaluate.	
12. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			4/14/10 @ 2010	LCG Table 4 R
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?	✓			7/27/10 @1858, 7/28/10 @ 0609	LCG Table 4 >130%=J; 65-70%%=J/UJ; <65%=J/R
14. Was a second source (ICV) verification analyzed after the ICAL? Were results 85-115%?	✓			7/26/10 @ 2007	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 20, 2010

SDG: A0G130405 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a CCV run every 12 hours?	✓			7/27/10 @1652, 7/28/10 @ 0520, 0544	LCG Table 4
16. Was the %D for all target analytes ≤5%? OR was the average %D ≤ 15% with no individual analyte >30%?	✓			For the CCV analyzed 7/27 @ 1632 (both front and back) targets had a %D >15%, but no qualification was made as the average %D was ≤15%.	LCG Table 4 D>30% (neg) =J/R D>30% (pos) = J
17. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 4
18. Were target analytes < ½ the MRL?	✓				LCG Table 4 <5x=B
19. Was a field blank collected and analyzed?	✓				
20. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓				<5x =B
21. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 4
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL12mw-088c-1546-GW was the parent MS/MSD sample from this SDG.	
25. Were MS/MSD recoveries 50-150% and RPD ≤20%?		✓		Checked by ADR. The spike analyses performed on sample FWGLL12mw-088c-1546-GW had a MS/MSD RPD of 23% for 4,4'-DDD 21% for endosulfan II. No qualifications were made as the LCS recovered within limits.	*Was QAPP Table 3-2*, Pj
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in sample FWGLL12mw-113c-1548-GW at 38%, FWGLL12mw-153c-1550-GW at 46%, FWGLL12mw-154c-1551-GW at 43%, FWGLL12mw-183c-1553-GW at 34%, FWGLL12mw-188c-1558-GW at 15%, FWGLL12mw-242c-1560-GW at 45%, FWGLL12mw-245c-1563-GW at 41% and FWGLL12mw-DUP5-1570-GW at 48%. The associated results were qualified as estimated, "J/UJ".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Sample FWGLL12mw-DUP5-1570-GW was the field duplicate for sample FWGLL12mw-245c-1563-GW and FWGLL2mw-DUP2-1567-GW was the field duplicate for sample FWGLL2mw-265c-1536-GW. Only sample results above the RL were evaluated.	QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 20, 2010

SDG: A0G130405 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
28. Were all positive results verified by a second column confirmation? Were the RPD's ≤ 40?	✓				LCG Table 4 >40 RPD=J
29. Were reported sample concentrations within calibration range?	✓				
30. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
31. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 4 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-002 **Work Order #...:** L338T1AD **Matrix.....:** WG
Date Sampled...: 07/12/10 12:07 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0195036
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	67	(50 - 150)
Decachlorobiphenyl	34 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-004 **Work Order #...:** L338X1AD **Matrix.....:** WG
Date Sampled...: 07/12/10 13:31 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0195036
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	**0.017 J**	**0.030**	**ug/L**	**0.0080**
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	15 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-006 **Work Order #...:** L33811AH **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0195036
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
Decachlorobiphenyl	56	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-008 **Work Order #...:** L33841AD **Matrix.....:** WG
Date Sampled...: 07/12/10 17:29 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0195036
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	**0.027 J**	**0.030**	**ug/L**	**0.0080**
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	34 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-011 **Work Order #...:** L33881AD **Matrix.....:** WG
Date Sampled...: 07/12/10 12:50 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0195036
Dilution Factor: 1 **Initial Wgt/Vol:** 980 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	68	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-013 Work Order #...: L339F1AD Matrix.....: WG
Date Sampled...: 07/12/10 14:04 Date Received..: 07/13/10
Prep Date.....: 07/14/10 Analysis Date..: 07/28/10
Prep Batch #...: 0195036
Dilution Factor: 1 Initial Wgt/Vol: 980 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.020 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(50 - 150)
Decachlorobiphenyl	73	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-015 **Work Order #...:** L339H1AD **Matrix.....:** WQ
Date Sampled...: 07/12/10 14:34 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0195036
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	71	(50 - 150)
Decachlorobiphenyl	100	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-016 Work Order #...: L339J1AD Matrix.....: WG
Date Sampled...: 07/12/10 15:04 Date Received..: 07/13/10
Prep Date.....: 07/14/10 Analysis Date..: 07/28/10
Prep Batch #...: 0195036
Dilution Factor: 1 Initial Wgt/Vol: 950 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.10**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	46 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-018 **Work Order #...:** L339L1AD **Matrix.....:** WG
Date Sampled...: 07/12/10 16:44 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0195036
Dilution Factor: 1 **Initial Wgt/Vol:** 980 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.011 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-021 **Work Order #...:** L339Q1AD **Matrix.....:** WG
Date Sampled...: 07/12/10 12:10 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0195036
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-023 **Work Order #...:** L339W1AD **Matrix.....:** WG
Date Sampled...: 07/12/10 13:00 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0195036
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	48 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-025 **Work Order #...:** L33901AD **Matrix.....:** WG
Date Sampled...: 07/12/10 17:00 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0195036
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	45 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L35L01AA **Matrix.....:** WATER
MB Lot-Sample #: A0G140000-036

Prep Date.....: 07/14/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/28/10 **Prep Batch #...:** 0195036
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
alpha-BHC	ND	0.030	ug/L	SW846 8081A
beta-BHC	ND	0.030	ug/L	SW846 8081A
delta-BHC	ND	0.030	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.030	ug/L	SW846 8081A
Heptachlor	ND	0.030	ug/L	SW846 8081A
Aldrin	ND	0.030	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.030	ug/L	SW846 8081A
Endosulfan I	ND	0.025	ug/L	SW846 8081A
Dieldrin	ND	0.030	ug/L	SW846 8081A
4,4'-DDE	ND	0.030	ug/L	SW846 8081A
Endrin	ND	0.030	ug/L	SW846 8081A
Endosulfan II	ND	0.025	ug/L	SW846 8081A
4,4'-DDD	ND	0.030	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.030	ug/L	SW846 8081A
4,4'-DDT	ND	0.030	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Endrin ketone	ND	0.030	ug/L	SW846 8081A
Endrin aldehyde	ND	0.030	ug/L	SW846 8081A
alpha-Chlordane	ND	0.030	ug/L	SW846 8081A
gamma-Chlordane	ND	0.030	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	84	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G130405 Work Order #...: L35L01AC Matrix.....: WATER
LCS Lot-Sample#: A0G140000-036
Prep Date.....: 07/14/10 Analysis Date..: 07/27/10
Prep Batch #...: 0195036
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	115	(44 - 137)	SW846 8081A
beta-BHC	110	(50 - 135)	SW846 8081A
delta-BHC	127	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	116	(58 - 127)	SW846 8081A
Heptachlor	101	(48 - 150)	SW846 8081A
Aldrin	109	(53 - 128)	SW846 8081A
Heptachlor epoxide	114	(50 - 127)	SW846 8081A
Endosulfan I	76	(50 - 160)	SW846 8081A
Dieldrin	106	(50 - 124)	SW846 8081A
4,4'-DDE	115	(50 - 130)	SW846 8081A
Endrin	114	(50 - 137)	SW846 8081A
Endosulfan II	87	(50 - 144)	SW846 8081A
4,4'-DDD	127	(50 - 137)	SW846 8081A
Endosulfan sulfate	111	(50 - 160)	SW846 8081A
4,4'-DDT	101	(50 - 145)	SW846 8081A
Methoxychlor	99	(50 - 160)	SW846 8081A
Endrin ketone	99	(50 - 150)	SW846 8081A
Endrin aldehyde	78	(30 - 160)	SW846 8081A
alpha-Chlordane	113	(50 - 122)	SW846 8081A
gamma-Chlordane	115	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	61	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G130405 Work Order #...: L33811AJ-MS Matrix.....: WG
MS Lot-Sample #: A0G130405-006 L33811AK-MSD
Date Sampled...: 07/12/10 14:39 Date Received..: 07/13/10
Prep Date.....: 07/14/10 Analysis Date..: 07/27/10
Prep Batch #...: 0195036
Dilution Factor: 2 Initial Wgt/Vol: 520 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	111	(50 - 150)			SW846 8081A
	108	(50 - 150)	3.2	(0-50)	SW846 8081A
beta-BHC	105	(50 - 150)			SW846 8081A
	105	(50 - 150)	0.54	(0-50)	SW846 8081A
delta-BHC	123	(50 - 150)			SW846 8081A
	117	(50 - 150)	5.3	(0-50)	SW846 8081A
gamma-BHC (Lindane)	112	(50 - 150)			SW846 8081A
	105	(50 - 150)	6.7	(0-50)	SW846 8081A
Heptachlor	96	(50 - 150)			SW846 8081A
	83	(50 - 150)	14	(0-50)	SW846 8081A
Aldrin	106	(50 - 150)			SW846 8081A
	103	(50 - 150)	3.3	(0-50)	SW846 8081A
Heptachlor epoxide	113	(50 - 150)			SW846 8081A
	107	(50 - 150)	5.0	(0-50)	SW846 8081A
Endosulfan I	75	(50 - 150)			SW846 8081A
	72	(50 - 150)	4.1	(0-50)	SW846 8081A
Dieldrin	102	(50 - 150)			SW846 8081A
	97	(50 - 150)	5.5	(0-50)	SW846 8081A
4,4'-DDE	109	(50 - 150)			SW846 8081A
	106	(50 - 150)	2.8	(0-50)	SW846 8081A
Endrin	111	(50 - 150)			SW846 8081A
	92	(50 - 150)	19	(0-50)	SW846 8081A
Endosulfan II	84	(50 - 150)			SW846 8081A
	68	(50 - 150)	21	(0-50)	SW846 8081A
4,4'-DDD	121	(50 - 150)			SW846 8081A
	96	(50 - 150)	23	(0-50)	SW846 8081A
Endosulfan sulfate	106	(50 - 150)			SW846 8081A
	101	(50 - 150)	4.5	(0-50)	SW846 8081A
4,4'-DDT	95	(50 - 150)			SW846 8081A
	82	(50 - 150)	14	(0-50)	SW846 8081A
Methoxychlor	98	(50 - 150)			SW846 8081A
	87	(50 - 150)	12	(0-50)	SW846 8081A
Endrin ketone	97	(50 - 150)			SW846 8081A
	89	(50 - 150)	8.9	(0-50)	SW846 8081A
Endrin aldehyde	74	(50 - 150)			SW846 8081A
	66	(50 - 150)	10	(0-50)	SW846 8081A
alpha-Chlordane	109	(50 - 150)			SW846 8081A
	104	(50 - 150)	5.2	(0-50)	SW846 8081A
gamma-Chlordane	109	(50 - 150)			SW846 8081A
	105	(50 - 150)	3.5	(0-50)	SW846 8081A

(Continued on next page)

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.6-4.6 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Does the initial calibration curve consist of 5 concentration levels of Aroclors 1016 and 1260?	✓			Instrument A2HP13; ICAL on 7/20/10 Stds = 0.05, 0.1, 0.2, 0.5, 1.0, 2.0	LCG Table 3 R
8. Was the % RSD ≤ 20%? Were the r^2s >0.990?	✓				LCG Table 3 RSD>20% or r<0.99= J/R
9. Was a MDL Level Verification performed once per quarter? Were all target analytes detected?	✓			No data provided for evaluation.	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			7/21/10@ 0320	LCG Table 3 >115%=J; 80-85%=J/UJ; <80%=J/R
12. Were single standards of the other five Aroclors run to aid in pattern recognition and to determine a single point calibration factor?	✓				Method 8082 Section 5.6.2
13. Was a CCV run every 12 hours?	✓				LCG Table 3

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the % D ≤ 15 % for each analyte or the average %D across all analytes ≤ 15% with a maximum %D for each target analyte ≤30%?	✓				LCG Table 3 D>30% (neg) =J/R D>30% (pos) =J
15. Was a method blank prepared and analyzed with each batch?	✓			Section checked by ADR	LCG Table 5
16. Were target analytes <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was an equipment blank collected and analyzed?	✓				
18. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓			Section checked by ADR	<5x = B
19. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 3
20. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C >UL=J; LL-30%=J/UJ; <30%=J/R
21. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL12mw-088c-1546-GW was the parent MS/MSD sample from this SDG.	
23. Were MS/MSD recoveries 50-150% and RPD ≤20%?	✓			Checked by ADR.	QAPP Table 3-2 Pj
24. Was the surrogate spiked into all samples?	✓				
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in sample FWGLL12mw-113c-1548-GW at 38%, FWGLL12mw-154c-1551-GW at 48%, FWGLL12mw-183c-1553-GW at 34%, FWGLL12mw-188c-1558-GW at 15%, FWGLL12mw-242c-1560-GW at 45%, FWGLL12mw-245c-1563-GW at 41% and FWGLL12mw-DUP5-1570-GW at 47%. The associated results were qualified as estimated, "J/UJ".	LCG Table 3 >150%=J; 10-50%=J/UJ; <10%=R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
26. Was a field duplicate analyzed? Were the RPDs <30%?	✓			Sample FWGLL12mw-DUP5-1570-GW was the field duplicate for sample FWGLL12mw-245c-1563-GW and FWGLL2mw-DUP2-1567-GW was the field duplicate for sample FWGLL2mw-265c-1536-GW. Only sample results above the RL were evaluated.	QAPP Table 3-2 RPD >30=J
27. Were all positive results verified by a second dissimilar column confirmation? Was the RPD ≤ 40?			✓	No detected concentrations were reported.	LCG Table 3 RPD>40=J
28. Were reported sample concentrations within calibration range?			✓	No detected concentrations were reported.	
29. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.	✓			See narrative for surrogate outliers.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 3 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L33811AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G130405-006 L33811AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
	87	(50 - 150)
Decachlorobiphenyl	81	(50 - 150)
	68	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

PESTICIDES IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

FWGLL12MW -153C-1550

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A0G130405

Lab Sample ID: L339J1AD Date(s) Analyzed: 07/28/10 07/28/10

Instrument ID (1): A2HP3 Instrument ID (2): A2HP3

GC Column(1): CLP PESTICIDES ID: 0.53(mm) GC Column(2): CLP PESTICIDES II ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Heptachlor epoxide	1	9.07	9.06	9.12	0.0005302	
	2	10.41	10.39	10.45	0.003160	496.0
Endrin ketone	1	12.39	12.35	12.41	0.0002837	
	2	13.36	13.34	13.40	0.02513	8758
Methoxychlor	1	11.92	11.89	11.95	0.002410	
	2	13.16	13.13	13.19	0.03025	1155
alpha-BHC	1	5.97	5.93	5.99	0.001816	
	2	6.91	6.91	6.97	0.001857	2.2
gamma-BHC (Lindane)	1	6.47	6.44	6.50	0.001322	
	2	7.60	7.59	7.65	0.004875	268.8
beta-BHC	1	6.65	6.61	6.67	0.1170	
	2	7.85	7.81	7.87	0.09991	17.1
4,4'-DDT	1	11.20	11.20	11.26	0.008477	
	2	12.35	12.34	12.40	0.001027	725.4
Dieldrin	1	10.26	10.22	10.28	0.002002	
	2	11.41	11.36	11.42	0.0008911	124.7

POLYCHLORINATED BIPHENYLS DATA

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GW

GC Semivolatiles

Lot-Sample #...:	A0G130405-002	**Work Order #...:**	L338T1AG	**Matrix.....:**	WG
Date Sampled...:	07/12/10 12:07	**Date Received..:**	07/13/10		
Prep Date.....:	07/14/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0195037				
Dilution Factor:	1	**Initial Wgt/Vol:**	1020 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	67	(50 - 150)
Decachlorobiphenyl	38 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-004	**Work Order #...:** L338X1AG		**Matrix.....:** WG
Date Sampled...: 07/12/10 13:31	**Date Received..:** 07/13/10		
Prep Date.....: 07/14/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0195037			
Dilution Factor: 1	**Initial Wgt/Vol:** 1020 mL		**Final Wgt/Vol..:** 5 mL
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	69	(50 - 150)
Decachlorobiphenyl	15 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GW

GC Semivolatiles

Lot-Sample #...:	A0G130405-006	**Work Order #...:**	L33811AT	**Matrix.....:**	WG
Date Sampled...:	07/12/10 14:39	**Date Received..:**	07/13/10		
Prep Date.....:	07/14/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0195037				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	61	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GW

GC Semivolatiles

Lot-Sample #...:	A0G130405-008	**Work Order #...:**	L33841AG	**Matrix.....:**	WG
Date Sampled...:	07/12/10 17:29	**Date Received..:**	07/13/10		
Prep Date.....:	07/14/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0195037				
Dilution Factor:	1	**Initial Wgt/Vol:**	1030 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	34 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-011	**Work Order #...:** L33881AG	**Matrix.....:** WG	
Date Sampled...: 07/12/10 12:50	**Date Received..:** 07/13/10		
Prep Date.....: 07/14/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0195037			
Dilution Factor: 1	**Initial Wgt/Vol:** 980 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
Decachlorobiphenyl	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GW

GC Semivolatiles

Lot-Sample #...:	A0G130405-013	**Work Order #...:**	L339F1AF	**Matrix.....:**	WG
Date Sampled...:	07/12/10 14:04	**Date Received..:**	07/13/10		
Prep Date.....:	07/14/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0195037				
Dilution Factor:	1	**Initial Wgt/Vol:**	980 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-015	**Work Order #...:** L339H1AG	**Matrix.....:** WQ	
Date Sampled...: 07/12/10 14:34	**Date Received..:** 07/13/10		
Prep Date.....: 07/14/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0195037			
Dilution Factor: 1	**Initial Wgt/Vol:** 960 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	65	(50 - 150)
Decachlorobiphenyl	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GW

GC Semivolatiles

Lot-Sample #...:	A0G130405-016	**Work Order #...:**	L339J1AG	**Matrix.....:**	WG
Date Sampled...:	07/12/10 15:04	**Date Received..:**	07/13/10		
Prep Date.....:	07/14/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0195037				
Dilution Factor:	1	**Initial Wgt/Vol:**	950 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	50	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-018	**Work Order #...:** L339L1AG	**Matrix.....:** WG	
Date Sampled...: 07/12/10 16:44	**Date Received..:** 07/13/10		
Prep Date.....: 07/14/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0195037			
Dilution Factor: 1	**Initial Wgt/Vol:** 980 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	48 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GW

GC Semivolatiles

Lot-Sample #...:	A0G130405-021	**Work Order #...:**	L339Q1AG	**Matrix.....:**	WG
Date Sampled...:	07/12/10 12:10	**Date Received..:**	07/13/10		
Prep Date.....:	07/14/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0195037				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	72	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GW

GC Semivolatiles

Lot-Sample #...: A0G130405-023	**Work Order #...:** L339W1AG	**Matrix.....:** WG	
Date Sampled...: 07/12/10 13:00	**Date Received..:** 07/13/10		
Prep Date.....: 07/14/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0195037			
Dilution Factor: 1	**Initial Wgt/Vol:** 1050 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	47 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GW

GC Semivolatiles

Lot-Sample #...:	A0G130405-025	**Work Order #...:**	L33901AG	**Matrix.....:**	WG
Date Sampled...:	07/12/10 17:00	**Date Received..:**	07/13/10		
Prep Date.....:	07/14/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0195037				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	45 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L35L11AA **Matrix.....:** WATER
MB Lot-Sample #: A0G140000-037

Prep Date.....: 07/14/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/23/10 **Prep Batch #...:** 0195037
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/L	SW846 8082
Aroclor 1221	ND	0.50	ug/L	SW846 8082
Aroclor 1232	ND	0.50	ug/L	SW846 8082
Aroclor 1242	ND	0.50	ug/L	SW846 8082
Aroclor 1248	ND	0.50	ug/L	SW846 8082
Aroclor 1254	ND	0.50	ug/L	SW846 8082
Aroclor 1260	ND	0.50	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	84	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L35L11AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G140000-037
Prep Date.....: 07/14/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0195037
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**90**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**101**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G130405 **Work Order #...:** L33811AU-MS **Matrix.....:** WG
MS Lot-Sample #: A0G130405-006 L33811AV-MSD
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10
Prep Date.....: 07/14/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0195037
Dilution Factor: 2 **Initial Wgt/Vol:** 500 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**81**	**(50 - 150)**			**SW846 8082**
	88	**(50 - 150)**	**8.4**	**(0-50)**	**SW846 8082**
Aroclor 1260	**85**	**(50 - 150)**			**SW846 8082**
	84	**(50 - 150)**	**0.88**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	72	(50 - 150)
	85	(50 - 150)
Decachlorobiphenyl	84	(50 - 150)
	80	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.6. – 4.6 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			ICP- 5/17/10 ICPMS-7/16/2010	LCG Table 7 R
11. Was a MRL Level Verification performed at the beginning of the daily sequence? Were results 70-130%?	✓				LCG Table 7 >130%=J; 65-70%=J/UJ; <65%=J/R
12. Was the ICV (second source verification) analyzed after the ICAL?	✓				LCG Table 7
13. Were all analytes within 90-110% in the ICV?	✓				LCG Table 7 J>110%=J; 90-85%=J/UJ; <85%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG:** A0G130405 R0
Sample Event: July 2010 **Analysis:** SW846 6010B/6020
Data Reviewer/Date: Angye Dragotta / August 23, 2010

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		ICP The ICB analyzed 7/15/10 had detected potassium at 152ug/L. The potassium results for FWGLL2mw-265c-1536-GF and FWGLL2mw-DUP2-1567-GF were qualified, "U", as the detected concentrations were <5x blank contamination. ICPMS The ICB analyzed 7/30/10 had thallium detected at 0.23ug/L. The thallium results for samples FWGLL12mw-188c-1558-GF, FWGLL12mw-183c-1553-GF, FWGLL12mw-154c-1551-GF and FWGLL12mw-245c-1563-GF were <5x the ICB contamination and were qualified, "U". No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U
15. Were CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 7
16. Were CCV results within 90 to 110%?		✓		The CCVs analyzed 7/30/2010 at 1831 and at 2141 had recoveries above control limits for beryllium at 111%. No qualifications were made as there were no detected beryllium concentrations reported for the bracketed samples.	LCG Table 7 >110%=J 90-85%=J/UJ; <85%=J/R
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICP The CCBs analyzed 7/15/10 had detected potassium from 151ug/L to 164ug/L. No additional qualifications were made to the potassium results other than qualifications made for the ICB contamination. ICPMS The CCBs analyzed 7/30/2010 had aluminum detected at 8ug/L, antimony from 0.038 to 0.053ug/L, beryllium from 0.014 to 0.024ug/L, cadmium at 0.012-0.043ug/L, iron from 5.2ug/L to 19ug/L and thallium from 0.24ug/L to 0.33ug/L. The aluminum result for sample FWGLL12mw-245c-1563-GF was qualified, "U". No additional thallium qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all bracketed detected contaminants were >5x the blank contamination. The CCBs analyzed 8/2/2010 had detected iron from 3.2 to 3.5ug/L. Contaminants in the calibration blanks did not require qualification of the data as all detected sample results >5x the blank contamination.	LCG Table 7 <5x = U
18. Was an Interelement Check Standard run at the beginning of the analytical sequence?	✓				LCG Table 7

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
19. Was the ICS recovery within 80 to 120% of true value for each element of interest?	✓				LCG Table 7 >120%=J; 50-79%=J/UJ; <50%=Pj/R
21. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 7
22. Were target analytes <1/2 the MRL in the method blank?		✓		ADR checked section; ICPMS- Zinc was detected in the method blank at 3.9ug/L. The zinc results for samples FWGLL12mw-088c-1546-GF and FWGLL12mw-153c-1550-GF were qualified, "B", as the sample results were <5x contamination.	LCG Table 7 <5x = B
23. Was a field blank collected and analyzed?	✓				
24. Were target analytes reported in the field blank analyses >1/2 the MRL?		✓		ADR checked section;	<5x=B
25. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 7
26. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 60%-LL= J/UJ; <60%=J/R
27. Was a MS prepared with each batch?	✓				LCG Table 7
28. Was the MS and Lab Duplicate parent a Ravenna sample?	✓				
29. Were the MS recoveries within 75-125%?	✓			Checked by ADR.	LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤20%?	✓			Checked by ADR. Only detected results above RL were evaluated.	LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	Not evaluated as the MS/MSD results were acceptable.	LCG Table 7 >125%=J; 30-75%=J/UJ; <30%=R
32. Was a serial dilution performed as needed?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
33. Was the 4 fold dilution within ± 10% of the original result?		✓		The serial dilution %D for potassium analyzed on sample FWGLL12mw-088C-1546-GF was above control limits at 10.6%. All detected potassium results were qualified as estimated, "J".	LCG Table 7 >10%=J
34. Was a field duplicate analyzed? Were the RPDs ± 30%?		✓		Checked by ADR. Only results where both sample results were detected above the RL were evaluated.	QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				
36. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
37. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 7 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.6 – 4.6 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Were the CCBs analyzed every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?	✓			No qualifications were made for due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
16. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 9
17. Were target analytes detected in the method blank <1/2 the MRL?	✓				LCG Table 9 <5x = B
18. Was a field blank collected and analyzed?	✓				
19. Were target analytes reported in the field blank analyses at <1/2 the MRL?	✓				<5x=B
20. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 9
21. Were the LCS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 J>120%=J; 50-79%=J/UJ; <50%=R
22. Was a MS prepared with each batch?	✓				LCG Table 9
23. Was the MS and Lab Duplicate parent sample a Ravenna sample?	✓				
24. Were the MS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 >125% = J 30% - 75% = J/UJ <30% = J/R
25. Was the Matrix Duplicate RPD ± 20%?	✓				LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR.	QAPP Table 3-2
27. Were sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 9 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GF

TOTAL Metals

Lot-Sample #...: A0G130405-003 Matrix.....: WG
Date Sampled...: 07/12/10 12:07 Date Received..: 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L338V1AM
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**103000**	50.0	ug/L	SW846 6020	07/14-07/30/10	L338V1AA
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**249**	5.0	ug/L	SW846 6010B	07/14-07/15/10	L338V1AJ
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**381**	10.0	ug/L	SW846 6010B	07/14-07/15/10	L338V1AN
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	**5.0**	1.0	ug/L	SW846 6020	07/14-07/31/10	L338V1AC
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 001576	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**284000**	1000	ug/L	SW846 6010B	07/14-07/15/10	L338V1AP
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	**0.54**	0.50	ug/L	SW846 6020	07/14-07/30/10	L338V1AD
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**121**	5.0	ug/L	SW846 6010B	07/14-07/15/10	L338V1AQ
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	**163**	5.0	ug/L	SW846 6010B	07/14-07/15/10	L338V1AR
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	**257**	5.0	ug/L	SW846 6010B	07/14-07/15/10	L338V1AT
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GF

TOTAL Metals

Lot-Sample #...: A0G130405-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**354000**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L338V1AE**
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L338V1A2
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**23700**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L338V1AU**
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**151000**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L338V1AV**
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**5730**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L338V1AW**
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**24800**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L338V1AX**
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**283**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L338V1A0**
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	**127**	**3.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L338V1AK**
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**1.1 B**	**2.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L338V1AF**
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L338V1AL
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GF

TOTAL Metals

Lot-Sample #...: A0G130405-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**1.9**	**1.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L338V1AH**
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	**179**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L338V1A1**
		Dilution Factor: 1		Analysis Time..: 15:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**656 J**	**10.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L338V1AG**
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GF

TOTAL Metals

Lot-Sample #...: A0G130405-005 **Matrix.....:** WG
Date Sampled...: 07/12/10 13:31 **Date Received..:** 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33801AQ
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**65.0**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L33801AE**
		Dilution Factor: 1		Analysis Time..: 19:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33801AM
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**41.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33801AR**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L33801AF
		Dilution Factor: 1		Analysis Time..: 19:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**134000**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33801AT**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/14-07/30/10	L33801AG
		Dilution Factor: 1		Analysis Time..: 19:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.5 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33801AU**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33801AV
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33801AW
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GF

TOTAL Metals

Lot-Sample #...: A0G130405-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**246**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L33801AH**
		Dilution Factor: 1		Analysis Time..: 19:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L33801AD
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1930**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33801AX**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**108000**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33801A0**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**433**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33801A1**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**32200**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/21/10**	**L33801A2**
		Dilution Factor: 1		Analysis Time..: 11:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L33801AA
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L33801AN
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/14-07/30/10	L33801AJ
		Dilution Factor: 1		Analysis Time..: 19:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33801AP
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GF

TOTAL Metals

Lot-Sample #...: A0G130405-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.20 B**	**1.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L33801AL**
		Dilution Factor: 1		Analysis Time..: 19:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L33801AC
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/14-07/30/10	L33801AK
		Dilution Factor: 1		Analysis Time..: 19:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GF

TOTAL Metals

Lot-Sample #...: A0G130405-007 **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33821CL
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L33821AL
		Dilution Factor: 1		Analysis Time..: 19:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**29.4**	**5.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33821CA**
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**383**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33821CP**
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L33821AP
		Dilution Factor: 1		Analysis Time..: 19:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**159000**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33821CT**
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/14-07/30/10	L33821AT
		Dilution Factor: 1		Analysis Time..: 19:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33821CW
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33821C1
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33821C4
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GF

TOTAL Metals

Lot-Sample #...: A0G130405-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**3890**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L33821AW**
		Dilution Factor: 1		Analysis Time..: 19:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L33821AH
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2820 E**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33821C7**
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**55700**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33821DA**
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**428**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33821DE**
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**13500**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/21/10**	**L33821DH**
		Dilution Factor: 1		Analysis Time..: 11:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L33821AA
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L33821CE
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/14-07/30/10	L33821A1
		Dilution Factor: 1		Analysis Time..: 19:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33821CH
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GF

TOTAL Metals

Lot-Sample #...: A0G130405-007 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L33821A7
		Dilution Factor: 1		Analysis Time..: 19:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L33821AE
		Dilution Factor: 1		Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**5.6 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L33821A4**
		Dilution Factor: 1		Analysis Time..: 19:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

E Matrix interference.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GF

TOTAL Metals

Lot-Sample #...: A0G130405-009 **Matrix.....:** WG
Date Sampled...: 07/12/10 17:29 **Date Received..:** 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33851AQ
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L33851AE
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**29.8**	**5.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33851AM**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**65.0**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33851AR**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L33851AF
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**87600**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33851AT**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/14-07/30/10	L33851AG
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33851AU
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33851AV
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33851AW
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GF

TOTAL Metals

Lot-Sample #...: A0G130405-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**867**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L33851AH**
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L33851AD
		Dilution Factor: 1		Analysis Time..: 16:50	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**6050**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33851AX**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**36400**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33851A0**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**47.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33851A1**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**19800**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/21/10**	**L33851A2**
		Dilution Factor: 1		Analysis Time..: 12:22	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L33851AA
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L33851AN
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/14-07/30/10	L33851AJ
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33851AP
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GF

TOTAL Metals

Lot-Sample #...: A0G130405-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.20 B**	**1.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L33851AL**
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L33851AC
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/14-07/30/10	L33851AK
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GF

TOTAL Metals

Lot-Sample #...: A0G130405-012 **Matrix.....:** WG
Date Sampled...: 07/12/10 12:50 **Date Received..:** 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339E1AQ
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**26.4 B**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L339E1AE**
		Dilution Factor: 1		Analysis Time..: 20:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339E1AM
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**8.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339E1AR**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L339E1AF
		Dilution Factor: 1		Analysis Time..: 20:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**76100**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339E1AT**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/14-07/30/10	L339E1AG
		Dilution Factor: 1		Analysis Time..: 20:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**5.6**	**5.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339E1AU**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339E1AV
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339E1AW
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GF

TOTAL Metals

Lot-Sample #...: A0G130405-012 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**614**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L339E1AH**
		Dilution Factor: 1		Analysis Time..: 20:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L339E1AD
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**672 B**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339E1AX**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**22700**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339E1A0**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1430**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339E1A1**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**10400**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/21/10**	**L339E1A2**
		Dilution Factor: 1		Analysis Time..: 12:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**19.0**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339E1AA**
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L339E1AN
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/14-07/30/10	L339E1AJ
		Dilution Factor: 1		Analysis Time..: 20:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339E1AP
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GF

TOTAL Metals

Lot-Sample #...: A0G130405-012 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L339E1AL
		Dilution Factor: 1		Analysis Time..: 20:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339E1AC
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/14-07/30/10	L339E1AK
		Dilution Factor: 1		Analysis Time..: 20:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GF

TOTAL Metals

Lot-Sample #...: A0G130405-014 **Matrix.....:** WG
Date Sampled...: 07/12/10 14:04 **Date Received..:** 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 16:46 MDL.....: 1.7	07/14-07/15/10 Analyst ID.....: 001637	L339G1AQ
Aluminum	**24.2 B**	**50.0** Dilution Factor: 1 Instrument ID..: I8	**ug/L**	**SW846 6020** Analysis Time..: 20:21 MDL.....: 19.0	**07/14-07/30/10** Analyst ID.....: 000079	**L339G1AE**
Arsenic	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 16:46 MDL.....: 3.3	07/14-07/15/10 Analyst ID.....: 001637	L339G1AM
Barium	**8.5 B**	**10.0** Dilution Factor: 1 Instrument ID..: I5	**ug/L**	**SW846 6010B** Analysis Time..: 16:46 MDL.....: 2.8	**07/14-07/15/10** Analyst ID.....: 001637	**L339G1AR**
Beryllium	ND	1.0 Dilution Factor: 1 Instrument ID..: I8	ug/L	SW846 6020 Analysis Time..: 20:21 MDL.....: 0.20	07/14-07/30/10 Analyst ID.....: 000079	L339G1AF
Calcium	**72500**	**1000** Dilution Factor: 1 Instrument ID..: I5	**ug/L**	**SW846 6010B** Analysis Time..: 16:46 MDL.....: 634	**07/14-07/15/10** Analyst ID.....: 001637	**L339G1AT**
Cadmium	ND	0.50 Dilution Factor: 1 Instrument ID..: I8	ug/L	SW846 6020 Analysis Time..: 20:21 MDL.....: 0.13	07/14-07/30/10 Analyst ID.....: 000079	L339G1AG
Cobalt	**5.8**	**5.0** Dilution Factor: 1 Instrument ID..: I5	**ug/L**	**SW846 6010B** Analysis Time..: 16:46 MDL.....: 1.5	**07/14-07/15/10** Analyst ID.....: 001637	**L339G1AU**
Chromium	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 16:46 MDL.....: 1.4	07/14-07/15/10 Analyst ID.....: 001637	L339G1AV
Copper	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 16:46 MDL.....: 4.4	07/14-07/15/10 Analyst ID.....: 001637	L339G1AW

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GF

TOTAL Metals

Lot-Sample #...: A0G130405-014 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**595**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L339G1AH**
		Dilution Factor: 1		Analysis Time..: 20:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L339G1AD
		Dilution Factor: 1		Analysis Time..: 16:55	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**651 B**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339G1AX**
		Dilution Factor: 1		Analysis Time..: 16:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**21600**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339G1A0**
		Dilution Factor: 1		Analysis Time..: 16:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1370**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339G1A1**
		Dilution Factor: 1		Analysis Time..: 16:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**9650**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/21/10**	**L339G1A2**
		Dilution Factor: 1		Analysis Time..: 12:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**20.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339G1AA**
		Dilution Factor: 1		Analysis Time..: 16:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L339G1AN
		Dilution Factor: 1		Analysis Time..: 16:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/14-07/30/10	L339G1AJ
		Dilution Factor: 1		Analysis Time..: 20:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339G1AP
		Dilution Factor: 1		Analysis Time..: 16:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GF

TOTAL Metals

Lot-Sample #...: A0G130405-014 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L339G1AL
		Dilution Factor: 1		Analysis Time..: 20:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339G1AC
		Dilution Factor: 1		Analysis Time..: 16:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/14-07/30/10	L339G1AK
		Dilution Factor: 1		Analysis Time..: 20:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

TOTAL Metals

Lot-Sample #...: A0G130405-015 **Matrix.....:** WQ
Date Sampled...: 07/12/10 14:34 **Date Received..:** 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339H1AU
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L339H1AH
		Dilution Factor: 1		Analysis Time..: 20:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339H1AQ
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339H1AV
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L339H1AJ
		Dilution Factor: 1		Analysis Time..: 20:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	07/14-07/15/10	L339H1AW
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/14-07/30/10	L339H1AK
		Dilution Factor: 1		Analysis Time..: 20:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339H1AX
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339H1A0
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339H1A1
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

TOTAL Metals

Lot-Sample #...: A0G130405-015 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L339H1AL
		Dilution Factor: 1		Analysis Time..: 20:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L339H1A8
		Dilution Factor: 1		Analysis Time..: 17:03	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	07/14-07/15/10	L339H1A2
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	07/14-07/15/10	L339H1A3
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339H1A4
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6010B	07/14-07/21/10	L339H1A5
		Dilution Factor: 1		Analysis Time..: 12:40	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339H1A6
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L339H1AR
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/14-07/30/10	L339H1AM
		Dilution Factor: 1		Analysis Time..: 20:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339H1AT
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

TOTAL Metals

Lot-Sample #...: A0G130405-015 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L339H1AP
		Dilution Factor: 1		Analysis Time..: 20:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339H1A7
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/14-07/30/10	L339H1AN
		Dilution Factor: 1		Analysis Time..: 20:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GF

TOTAL Metals

Lot-Sample #...: A0G130405-017 **Matrix.....:** WG
Date Sampled...: 07/12/10 15:04 **Date Received..:** 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339K1AQ
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L339K1AE
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**21.4**	**5.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339K1AM**
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**64.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339K1AR**
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L339K1AF
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**140000**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339K1AT**
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/14-07/30/10	L339K1AG
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**2.0 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339K1AU**
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	**2.0 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339K1AV**
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339K1AW
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GF

TOTAL Metals

Lot-Sample #...: A0G130405-017 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**3420**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L339K1AH**
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L339K1AD
		Dilution Factor: 1		Analysis Time..: 16:51	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2010**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339K1AX**
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**76800**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339K1A0**
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**188**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339K1A1**
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**23400**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/21/10**	**L339K1A2**
		Dilution Factor: 1		Analysis Time..: 12:46	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**2.7 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339K1AA**
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L339K1AN
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/14-07/30/10	L339K1AJ
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339K1AP
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GF

TOTAL Metals

Lot-Sample #...: A0G130405-017 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L339K1AL
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339K1AC
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**9.0 B,J**	**10.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L339K1AK**
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GF

TOTAL Metals

Lot-Sample #...: A0G130405-019 **Matrix.....:** WG
Date Sampled...: 07/12/10 16:44 **Date Received..:** 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339N1AQ
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L339N1AE
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**16.2**	5.0	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339N1AM**
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**44.1**	10.0	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339N1AR**
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L339N1AF
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**147000**	1000	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339N1AT**
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/14-07/30/10	L339N1AG
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339N1AU
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339N1AV
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339N1AW
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GF

TOTAL Metals

Lot-Sample #...: A0G130405-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1760**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L339N1AH**
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L339N1AD
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1820**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339N1AX**
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**70000**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339N1A0**
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**85.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339N1A1**
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**24300**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/21/10**	**L339N1A2**
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339N1AA
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L339N1AN
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/14-07/30/10	L339N1AJ
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339N1AP
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GF

TOTAL Metals

Lot-Sample #...: A0G130405-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.16 B**	**1.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L339N1AL**
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339N1AC
		Dilution Factor: 1		Analysis Time..: 17:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/14-07/30/10	L339N1AK
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GF

TOTAL Metals

Lot-Sample #...: A0G130405-022 **Matrix.....:** WG
Date Sampled...: 07/12/10 12:10 **Date Received..:** 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339T1AQ
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**24.5 B**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L339T1AE**
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**9.1**	**5.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339T1AM**
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**34.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339T1AR**
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L339T1AF
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**134000**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339T1AT**
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/14-07/30/10	L339T1AG
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**3.2 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339T1AU**
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339T1AV
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339T1AW
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GF

TOTAL Metals

Lot-Sample #...: A0G130405-022 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L339T1AH
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L339T1AD
		Dilution Factor: 1		Analysis Time..: 17:01	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**3140**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339T1AX**
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**65400**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339T1A0**
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**103**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339T1A1**
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**23200**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/21/10**	**L339T1A2**
		Dilution Factor: 1		Analysis Time..: 13:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**5.1 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339T1AA**
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L339T1AN
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.29 B**	**2.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L339T1AJ**
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339T1AP
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GF

TOTAL Metals

Lot-Sample #...: A0G130405-022 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.14 B**	**1.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L339T1AL**
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339T1AC
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/14-07/30/10	L339T1AK
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GF

TOTAL Metals

Lot-Sample #...: A0G130405-024 **Matrix.....:** WG
Date Sampled...: 07/12/10 13:00 **Date Received..:** 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339X1AQ
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L339X1AE
		Dilution Factor: 1		Analysis Time..: 21:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**8.9**	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339X1AM
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**34.5**	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339X1AR
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L339X1AF
		Dilution Factor: 1		Analysis Time..: 21:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**141000**	1000	ug/L	SW846 6010B	07/14-07/15/10	L339X1AT
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/14-07/30/10	L339X1AG
		Dilution Factor: 1		Analysis Time..: 21:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**3.3 B**	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339X1AU
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339X1AV
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339X1AW
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GF

TOTAL Metals

Lot-Sample #...: A0G130405-024 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L339X1AH
		Dilution Factor: 1		Analysis Time..: 21:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L339X1AD
		Dilution Factor: 1		Analysis Time..: 16:52	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**3060**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339X1AX**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**69900**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339X1A0**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**105**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339X1A1**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**22600**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/21/10**	**L339X1A2**
		Dilution Factor: 1		Analysis Time..: 13:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**6.2 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L339X1AA**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L339X1AN
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.35 B**	**2.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L339X1AJ**
		Dilution Factor: 1		Analysis Time..: 21:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L339X1AP
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GF

TOTAL Metals

Lot-Sample #...: A0G130405-024 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L339X1AL
		Dilution Factor: 1		Analysis Time..: 21:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L339X1AC
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/14-07/30/10	L339X1AK
		Dilution Factor: 1		Analysis Time..: 21:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GF

TOTAL Metals

Lot-Sample #...: A0G130405-026 **Matrix.....:** WG
Date Sampled...: 07/12/10 17:00 **Date Received..:** 07/13/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0195013						
Silver	**1.9 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33941AQ**
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L33941AE
		Dilution Factor: 1		Analysis Time..: 21:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**21.3**	**5.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33941AM**
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**22.0**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33941AR**
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L33941AF
		Dilution Factor: 1		Analysis Time..: 21:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**69300**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33941AT**
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/14-07/30/10	L33941AG
		Dilution Factor: 1		Analysis Time..: 21:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33941AU
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33941AV
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33941AW
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GF

TOTAL Metals

Lot-Sample #...: A0G130405-026 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**833**	**50.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	**L33941AH**
		Dilution Factor: 1		Analysis Time..: 21:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L33941AD
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1630**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33941AX**
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**46500**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33941A0**
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**56.0**	**10.0**	**ug/L**	**SW846 6010B**	**07/14-07/15/10**	**L33941A1**
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**33800**	**1000**	**ug/L**	**SW846 6010B**	**07/14-07/21/10**	**L33941A2**
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L33941AA
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L33941AN
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/14-07/30/10	L33941AJ
		Dilution Factor: 1		Analysis Time..: 21:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L33941AP
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GF

TOTAL Metals

Lot-Sample #...: A0G130405-026 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L33941AL
		Dilution Factor: 1		Analysis Time..: 21:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L33941AC
		Dilution Factor: 1		Analysis Time..: 17:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/14-07/30/10	L33941AK
		Dilution Factor: 1		Analysis Time..: 21:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G130405 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A0G140000-013 **Prep Batch #...:** 0195013						
Aluminum	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L35KT1AE
		Dilution Factor: 1				
		Analysis Time..: 19:17		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	07/14-07/30/10	L35KT1AJ
		Dilution Factor: 1				
		Analysis Time..: 19:17		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AM
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AR
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	07/14-07/31/10	L35KT1AF
		Dilution Factor: 1				
		Analysis Time..: 16:45		Analyst ID.....: 001576	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	07/14-07/30/10	L35KT1AG
		Dilution Factor: 1				
		Analysis Time..: 19:17		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AT
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AV
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AU
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AW
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	07/14-07/30/10	L35KT1AH
		Dilution Factor: 1				
		Analysis Time..: 19:17		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G130405 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AN
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	07/14-07/15/10	L35KT1A0
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L35KT1A1
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	07/14-07/15/10	L35KT1AD
		Dilution Factor: 1				
		Analysis Time..: 16:38		Analyst ID.....: 001576	Instrument ID..: H1	
Nickel	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AA
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AX
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AP
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AQ
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6010B	07/14-07/15/10	L35KT1A2
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Thallium	ND	1.0	ug/L	SW846 6020	07/14-07/30/10	L35KT1AL
		Dilution Factor: 1				
		Analysis Time..: 19:17		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	07/14-07/15/10	L35KT1AC
		Dilution Factor: 1				
		Analysis Time..: 15:35		Analyst ID.....: 001637	Instrument ID..: I5	
Zinc	**3.9 B**	**10.0**	**ug/L**	**SW846 6020**	**07/14-07/30/10**	L35KT1AK
		Dilution Factor: 1				
		Analysis Time..: 19:17		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G130405 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G130405 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A0G140000-013 **Prep Batch #...:** 0195013					
Nickel	94	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1A3
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Vanadium	94	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1A4
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Mercury	96	(80 - 120)	SW846 7470A	07/14-07/15/10	L35KT1A5
		Dilution Factor: 1	Analysis Time..: 16:39	Analyst ID.....: 001576	
		Instrument ID..: H1			
Aluminum	92	(80 - 120)	SW846 6020	07/14-07/30/10	L35KT1A6
		Dilution Factor: 1	Analysis Time..: 19:22	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	90	(80 - 120)	SW846 6020	07/14-07/31/10	L35KT1A7
		Dilution Factor: 1	Analysis Time..: 16:49	Analyst ID.....: 001576	
		Instrument ID..: I8			
Cadmium	95	(80 - 120)	SW846 6020	07/14-07/30/10	L35KT1A8
		Dilution Factor: 1	Analysis Time..: 19:22	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	83	(80 - 120)	SW846 6020	07/14-08/02/10	L35KT1A9
		Dilution Factor: 1	Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	91	(80 - 120)	SW846 6020	07/14-07/30/10	L35KT1CA
		Dilution Factor: 1	Analysis Time..: 19:22	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	97	(80 - 120)	SW846 6020	07/14-07/30/10	L35KT1CC
		Dilution Factor: 1	Analysis Time..: 19:22	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	89	(80 - 120)	SW846 6020	07/14-07/30/10	L35KT1CD
		Dilution Factor: 1	Analysis Time..: 19:22	Analyst ID.....: 000079	
		Instrument ID..: I8			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G130405 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic	98	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CE
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Lead	98	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CF
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Selenium	98	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CG
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Silver	91	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CH
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Barium	94	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CJ
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Calcium	100	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CK
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Cobalt	93	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CL
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Chromium	95	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CM
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Copper	96	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CN
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Potassium	94	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CP
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Magnesium	101	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CQ
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G130405 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Manganese	97	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CR
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			
Sodium	96	(80 - 120)	SW846 6010B	07/14-07/15/10	L35KT1CT
		Dilution Factor: 1	Analysis Time..: 15:41	Analyst ID.....: 001637	
		Instrument ID..: I5			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G130405 **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A0G130405-007 **Prep Batch #...:** 0195013					
Aluminum	99	(75 - 125)	SW846 6020	07/14-07/30/10	L33821AM
		Dilution Factor: 1	Analysis Time..: 19:50	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	99	(75 - 125)	SW846 6020	07/14-07/30/10	L33821A2
		Dilution Factor: 1	Analysis Time..: 19:50	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	101	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821CC
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Barium	102	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821CQ
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Beryllium	108	(75 - 125)	SW846 6020	07/14-07/30/10	L33821AQ
		Dilution Factor: 1	Analysis Time..: 19:50	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	100	(75 - 125)	SW846 6020	07/14-07/30/10	L33821AU
		Dilution Factor: 1	Analysis Time..: 19:50	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	93	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821CU
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Chromium	97	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821C2
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Cobalt	94	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821CX
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Copper	103	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821C5
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G130405 **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	104	(75 - 125)	SW846 6020	07/14-07/30/10	L33821AX
		Dilution Factor: 1	Analysis Time..: 19:50	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	98	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821CF
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Magnesium	100	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821DC
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Manganese	98	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821DF
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Mercury	96	(80 - 120)	SW846 7470A	07/14-07/15/10	L33821AJ
		Dilution Factor: 1	Analysis Time..: 16:40	Instrument ID..: H1	
		Analyst ID.....: 001576			
Nickel	96	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821AC
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Potassium	107	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821C8
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Selenium	100	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821CJ
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Silver	97	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821CM
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Sodium	101	(75 - 125)	SW846 6010B	07/14-07/21/10	L33821DJ
		Dilution Factor: 1	Analysis Time..: 11:59	Instrument ID..: I5	
		Analyst ID.....: 001637			
Thallium	97	(75 - 125)	SW846 6020	07/14-07/30/10	L33821A8
		Dilution Factor: 1	Analysis Time..: 19:50	Instrument ID..: I8	
		Analyst ID.....: 000079			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G130405 **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	98	(75 - 125)	SW846 6010B	07/14-07/15/10	L33821AF
		Dilution Factor: 1	Analysis Time..: 16:10	Instrument ID..: I5	
		Analyst ID.....: 001637			
Zinc	93	(75 - 125)	SW846 6020	07/14-07/30/10	L33821A5
		Dilution Factor: 1	Analysis Time..: 19:50	Instrument ID..: I8	
		Analyst ID.....: 000079			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A0G130405 **Work Order #...:** L3382-SMP L3382-DUP **Matrix.....:** WG

Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/14-07/30/10	0195013
		Dilution Factor: 1				Analysis Time..: 19:50	Analyst ID.....: 000079	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #: A0G130405-007		
	29.4	30.3	ug/L	3.2	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						
Barium						SD Lot-Sample #: A0G130405-007		
	383	393	ug/L	2.5	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/14-07/30/10	0195013
		Dilution Factor: 1				Analysis Time..: 19:50	Analyst ID.....: 000079	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #: A0G130405-007		
	159000	163000	ug/L	2.3	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/14-07/30/10	0195013
		Dilution Factor: 1				Analysis Time..: 19:50	Analyst ID.....: 000079	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G130405-000 **Work Order #...:** L3382-SMP L3382-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A0G130405-007		
	3890	3990	ug/L	2.5	(0-20)	SW846 6020	07/14-07/30/10	0195013
		Dilution Factor: 1				Analysis Time..: 19:50	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:40	Analyst ID.....: 001576	
		Instrument ID..: H1						
Potassium						SD Lot-Sample #: A0G130405-007		
	2820 E	2890	ug/L	2.4	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A0G130405-007		
	55700	57000	ug/L	2.3	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A0G130405-007		
	428	438	ug/L	2.2	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A0G130405-007		
	13500	14300	ug/L	6.3	(0-20)	SW846 6010B	07/14-07/21/10	0195013
		Dilution Factor: 1				Analysis Time..: 11:59	Analyst ID.....: 001637	
		Instrument ID..: I5						
Nickel						SD Lot-Sample #: A0G130405-007		
	ND	2.2 B	ug/L	200	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/14-07/15/10	0195013
		Dilution Factor: 1				Analysis Time..: 16:10	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G130405-000 **Work Order #...:** L3382-SMP L3382-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/14-07/30/10	0195013
			Dilution Factor: 1			Analysis Time..: 19:50	Analyst ID.....: 000079	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/14-07/15/10	0195013
			Dilution Factor: 1			Analysis Time..: 16:10	Analyst ID.....: 001637	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/14-07/30/10	0195013
			Dilution Factor: 1			Analysis Time..: 19:50	Analyst ID.....: 000079	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #: A0G130405-007		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/14-07/15/10	0195013
			Dilution Factor: 1			Analysis Time..: 16:10	Analyst ID.....: 001637	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #: A0G130405-007		
	5.6 B,J	ND	ug/L	200	(0-20)	SW846 6020	07/14-07/30/10	0195013
			Dilution Factor: 1			Analysis Time..: 19:50	Analyst ID.....: 000079	
			Instrument ID..: I8					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

E Matrix interference.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50715A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/15/10 11:54 AM Found	Q	CCB 07/15/10 2:45 PM Found	Q	CCB 07/15/10 3:58 PM Found	Q	CCB 07/15/10 5:09 PM Found	Q	CCB 07/15/10 6:20 PM Found	Q
Arsenic	189.042	5	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
Barium	493.409	10	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Calcium	317.933	1000	8.2	U	8.2	U	8.2	U	**-9.7**	**B**	**-17.0**	**B**
Chromium	267.716	5	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Cobalt	228.616	5	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
Copper	324.753	5	2.1	U	2.1	U	2.1	U	**-2.9**	**B**	**-2.5**	**B**
Lead	220.353	3	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Magnesium	279.078	1000	14.8	U	14.8	U	14.8	U	14.8	U	14.8	U
Manganese	257.61	10	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Nickel	231.604	10	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U
Potassium	766.491	1000	**160.0**	**B**	**151.0**	**B**	**164.0**	**B**	**162.0**	**B**	**161.0**	**B**
Selenium	196.026	5	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U
Silver	328.068	5	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
Sodium	330.232	1000	750.0	U	750.0	U	750.0	U	750.0	U	750.0	U
Vanadium	292.402	10	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50715A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 07/15/10 10:59 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	4.4	U								
Barium	493.409	10	0.3	U								
Calcium	317.933	1000	8.2	U								
Chromium	267.716	5	1.4	U								
Cobalt	228.616	5	1.3	U								
Copper	324.753	5	2.1	U								
Lead	220.353	3	1.5	U								
Magnesium	279.078	1000	14.8	U								
Manganese	257.61	10	0.3	U								
Nickel	231.604	10	2.3	U								
Potassium	766.491	1000	**152.0**	**B**								
Selenium	196.026	5	3.4	U								
Silver	328.068	5	1.3	U								
Sodium	330.232	1000	750.0	U								
Vanadium	292.402	10	2.0	U								

K < 760

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv **Acceptable Range:** 90% - 110%

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	True Conc	CCV 07/30/10 11:09 AM Found	% Rec	CCV 7 07/30/10 6:31 PM Found	% Rec	CCV 8 07/30/10 7:33 PM Found	% Rec	CCV 9 07/30/10 8:35 PM Found	% Rec	CCV 07/30/10 8:59 PM Found	% Rec
Aluminum	27	500.0	515.27	**103.1**	513.23	**102.6**	511.30	**102.3**	515.03	**103.0**	510.50	**102.1**
Antimony	121	100.0	99.55	**99.6**	99.66	**99.7**	100.52	**100.5**	100.80	**100.8**	100.93	**100.9**
Beryllium	9	100.0	106.80	**106.8**	110.87	**110.9**	107.47	**107.5**	110.17	**110.2**	109.23	**109.2**
Cadmium	111	100.0	101.93	**101.9**	101.40	**101.4**	103.37	**103.4**	101.93	**101.9**	103.33	**103.3**
Iron	56	25000.0	25176.67	**100.7**	25126.67	**100.5**	25470.00	**101.9**	25153.33	**100.6**	25170.00	**100.7**
Thallium	205	100.0	92.10	**92.1**	96.66	**96.7**	97.49	**97.5**	97.00	**97.0**	97.26	**97.3**
Zinc	66	100.0	101.73	**101.7**	102.50	**102.5**	101.00	**101.0**	99.68	**99.7**	101.40	**101.4**

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv **Acceptable Range:** 90% - 110%

Standard Source: **Standard ID:**

Element	WL/ Mass	True Conc	CCV 10 07/30/10 9:41 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	27	500.0	514.80	**103.0**								
Antimony	121	100.0	99.33	**99.3**								
Beryllium	9	100.0	110.47	**110.5**								
Cadmium	111	100.0	101.47	**101.5**								
Iron	56	25000.0	24910.00	**99.6**								
Thallium	205	100.0	98.20	**98.2**								
Zinc	66	100.0	100.49	**100.5**								

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 07/30/10 10:47 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	4.2	U								
Antimony	121	2	0.038	U								
Beryllium	9	1	0.0076	U								
Cadmium	111	0.5	0.0074	U								
Iron	56	50	3.2	U								
Thallium	205	1	**0.23**	**B**								
Zinc	66	10	8	U								

Tl c 1.15 ug/L
-1558
-1553
~~1550~~
-1551
-1563

5.04.5

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/30/10 11:16 AM Found	Q	CCB 7 07/30/10 6:38 PM Found	Q	CCB 8 07/30/10 7:40 PM Found	Q	CCB 9 07/30/10 8:42 PM Found	Q	CCB 07/30/10 9:06 PM Found	Q
Aluminum	27	50	4.2	U	4.2	U	4.2	U	4.2	U	**8**	**B**
Antimony	121	2	0.038	U	0.038	U	0.038	U	**0.038**	**B**	**0.053**	**B**
Beryllium	9	1	0.0076	U	**0.017**	**B**	**0.02**	**B**	**0.014**	**B**	**0.024**	**B**
Cadmium	111	0.5	**0.012**	**B**	**0.013**	**B**	**0.028**	**B**	**0.043**	**B**	**0.034**	**B**
Iron	56	50	3.2	U	**5.2**	**B**	**8.5**	**B**	**10.9**	**B**	**19**	**B**
Thallium	205	1	**0.27**	**B**	**0.28**	**B**	**0.26**	**B**	**0.24**	**B**	**0.33**	**B**
Zinc	66	10	8	U	8	U	8	U	8	U	8	U

Al L 40 ug/L 1563,

Sb L 0.265 ug/L NQ

Be L 0.12 ug/L NQ

Cd L 0.215 ug/L NQ

Fe L 95 ug/L NQ

Tl L 1.65 ug/L No additional

5.04.5

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 10 07/30/10 9:48 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	4.2	U								
Antimony	121	2	**0.04**	**B**								
Beryllium	9	1	**0.017**	**B**								
Cadmium	111	0.5	**0.031**	**B**								
Iron	56	50	**11.1**	**B**								
Thallium	205	1	**0.32**	**B**								
Zinc	66	10	8	U								

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80802B.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 08/02/10 3:32 PM Found	Q	CCB 1 08/02/10 4:19 PM Found	Q	CCB 2 08/02/10 5:06 PM Found	Q	Found	Q	Found	Q
Iron	56	50	3.2	U	**3.5**	**B**	**3.2**	**B**				

U Result is less than the IDL

B Result is between IDL and RL

TestAmerica North Canton

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: L3382L

Original Sample ID: L3382 **Client ID:** FWGLL12mw-088C-1546-GF

Matrix: Water **Units:** ug/L **Prep Date:** 07/14/10 **Prep Batch:** 0195013

Weight: NA **Volume:** NA **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	29.4		25.1			1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Barium	493.409	383		379		1.0	1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Calcium	317.933	159000		160000		0.8	1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Chromium	267.716	1.4	U	7.0	U		1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Cobalt	228.616	1.3	U	6.5	U		1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Copper	324.753	2.1	U	10.5	U		1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Lead	220.353	1.5	U	7.5	U		1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Magnesium	279.078	55700		54800		1.6	1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Manganese	257.61	428		428		0.1	1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Nickel	231.604	2.3	U	11.5	U		1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Potassium	766.491	2820		3120	B E	10.6	1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Selenium	196.026	3.4	U	17.0	U		1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Silver	328.068	1.3	U	6.5	U		1	5	ICPST	07/15/10	16:10	07/15/10	16:16
Sodium	330.232	13500		14400			1	5	ICPST	07/21/10	11:59	07/21/10	12:04
Vanadium	292.402	2.0	U	10.0	U		1	5	ICPST	07/15/10	16:10	07/15/10	16:16

Comments:

E Serial dilution percent difference not within limits

U Result is less than the IDL

B Result is between IDL and RL

Form 9 Equivalent

A0G140000 MB	013 L35KT *HG*	TOTAL	H1	07/15/10	16:38
A0G140000 LCS	013 L35KT *HG*	TOTAL	H1	07/15/10	16:39
A0G130405	007 L3382 *HG*	TOTAL	H1	07/15/10	16:40
A0G130405 DUP	007 L3382 *HG*	TOTAL	H1	07/15/10	16:46
A0G130405 MS	007 L3382 *HG*	TOTAL	H1	07/15/10	16:47
A0G130405	005 L3380 *HG*	TOTAL	H1	07/15/10	16:48
A0G130405	009 L3385 *HG*	TOTAL	H1	07/15/10	16:50
A0G130405	017 L339K *HG*	TOTAL	H1	07/15/10	16:51
A0G130405	024 L339X *HG*	TOTAL	H1	07/15/10	16:52
A0G130405	019 L339N *HG*	TOTAL	H1	07/15/10	16:54
A0G130405	014 L339G *HG*	TOTAL	H1	07/15/10	16:55
A0G130405	026 L3394 *HG*	TOTAL	H1	07/15/10	16:56
A0G130405	003 L338V *HG*	TOTAL	H1	07/15/10	16:57
A0G130405	022 L339T *HG*	TOTAL	H1	07/15/10	17:01
A0G130405	012 L339E *HG*	TOTAL	H1	07/15/10	17:02
A0G130405	015 L339H *HG*	TOTAL	H1	07/15/10	17:03

Metals Run Log
Additional Information

A0G140000	013	L35KT	TOTAL	I5	07/15/10	15:35
MB	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					
A0G140000	013	L35KT	TOTAL	I5	07/15/10	15:41
LCS	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					
A0G130405	003	L338V	TOTAL	I5	07/15/10	15:46
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G130405	005	L3380	TOTAL	I5	07/15/10	16:04
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A0G130405	007	L3382	TOTAL	I5	07/15/10	16:10
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A0G130405	007	L3382	TOTAL	I5	07/15/10	16:22
DUP	*AG AS BA CA CO CR CU KX MG MN NI PB SE VX*					
A0G130405	007	L3382	TOTAL	I5	07/15/10	16:28
MS	*AG AS BA CA CO CR CU KX MG MN NI PB SE VX*					
A0G130405	009	L3385	TOTAL	I5	07/15/10	16:34
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A0G130405	012	L339E	TOTAL	I5	07/15/10	16:40
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A0G130405	014	L339G	TOTAL	I5	07/15/10	16:46
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A0G130405	015	L339H	TOTAL	I5	07/15/10	16:51
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A0G130405	017	L339K	TOTAL	I5	07/15/10	16:57
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A0G130405	019	L339N	TOTAL	I5	07/15/10	17:15
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A0G130405	022	L339T	TOTAL	I5	07/15/10	17:21
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A0G130405	024	L339X	TOTAL	I5	07/15/10	17:27
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A0G130405	026	L3394	TOTAL	I5	07/15/10	17:33
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					

A0G130405

Metals Run Log
Additional Information

A0G130405	005	L3380	TOTAL	I8	07/30/10	19:45
	AL BE CD FE SB TL ZN					
A0G130405	007	L3382	TOTAL	I8	07/30/10	19:50
	AL BE CD FE SB TL ZN					
A0G130405 DUP	007	L3382	TOTAL	I8	07/30/10	19:59
	AL BE CD FE SB TL ZN					
A0G130405 MS	007	L3382	TOTAL	I8	07/30/10	20:04
	AL BE CD FE SB TL ZN					
A0G130405	009	L3385	TOTAL	I8	07/30/10	20:11
	AL BE CD FE SB TL ZN					
A0G130405	012	L339E	TOTAL	I8	07/30/10	20:16
	AL BE CD FE SB TL ZN					
A0G130405	014	L339G	TOTAL	I8	07/30/10	20:21
	AL BE CD FE SB TL ZN					
A0G130405	015	L339H	TOTAL	I8	07/30/10	20:26
	AL BE CD FE SB TL ZN					
A0G130405	017	L339K	TOTAL	I8	07/30/10	20:30
	AL BE CD FE SB TL ZN					
A0G130405	019	L339N	TOTAL	I8	07/30/10	21:10
	AL BE CD FE SB TL ZN					
A0G130405	022	L339T	TOTAL	I8	07/30/10	21:15
	AL BE CD FE SB TL ZN					
A0G130405	024	L339X	TOTAL	I8	07/30/10	21:20
	AL BE CD FE SB TL ZN					
A0G130405	026	L3394	TOTAL	I8	07/30/10	21:25
	AL BE CD FE SB TL ZN					
A0G140000 MB	013	L35KT	TOTAL	I8	07/31/10	16:45
	BE					
A0G140000 LCS	013	L35KT	TOTAL	I8	07/31/10	16:49
	BE					
A0G130405	003	L338V	TOTAL	I8	07/31/10	16:56
	BE					

Be high
No Be detected

A0G130405

Metals Run Log
Additional Information

A0G140000 LCS	013 *FE*	L35KT	TOTAL	I8	08/02/10	16:54

EXECUTIVE SUMMARY - Detection Highlights

A0G130405

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGTEAM1-TRIP 07/12/10 10:00 001				
Acetone	1.6 J	10	ug/L	SW846 8260B
FWGLL12mw-113C-1548-GW 07/12/10 12:07 002				
bis(2-Ethylhexyl) phthalate	1.9 J,B	10	ug/L	SW846 8270C
Phenol	0.83 J	1.0	ug/L	SW846 8270C
Nitrate-Nitrite	0.2	0.1	mg/L	MCAWW 353.2
FWGLL12mw-113C-1548-GF 07/12/10 12:07 003				
Aluminum	103000	50.0	ug/L	SW846 6020
Beryllium	5.0	1.0	ug/L	SW846 6020
Cadmium	0.54	0.50	ug/L	SW846 6020
Iron	354000	50.0	ug/L	SW846 6020
Antimony	1.1 B	2.0	ug/L	SW846 6020
Thallium	1.9	1.0	ug/L	SW846 6020
Zinc	656 J	10.0	ug/L	SW846 6020
Arsenic	249	5.0	ug/L	SW846 6010B
Lead	127	3.0	ug/L	SW846 6010B
Barium	381	10.0	ug/L	SW846 6010B
Calcium	284000	1000	ug/L	SW846 6010B
Cobalt	121	5.0	ug/L	SW846 6010B
Chromium	163	5.0	ug/L	SW846 6010B
Copper	257	5.0	ug/L	SW846 6010B
Potassium	23700	1000	ug/L	SW846 6010B
Magnesium	151000	1000	ug/L	SW846 6010B
Manganese	5730	10.0	ug/L	SW846 6010B
Sodium	24800	1000	ug/L	SW846 6010B
Nickel	283	10.0	ug/L	SW846 6010B
Vanadium	179	10.0	ug/L	SW846 6010B
FWGLL12mw-188C-1558-GW 07/12/10 13:31 004				
Heptachlor	0.017 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	2.4 J,B	10	ug/L	SW846 8270C
Nitrate-Nitrite	0.2	0.1	mg/L	MCAWW 353.2

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EXECUTIVE SUMMARY - Detection Highlights

A0G130405

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL12mw-188C-1558-GF 07/12/10 13:31 005				
Aluminum	65.0	50.0	ug/L	SW846 6020
Iron	246	50.0	ug/L	SW846 6020
Thallium U	0.20 B	1.0	ug/L	SW846 6020
Barium	41.4	10.0	ug/L	SW846 6010B
Calcium	134000	1000	ug/L	SW846 6010B
Cobalt	1.5 B	5.0	ug/L	SW846 6010B
Potassium	1930	1000	ug/L	SW846 6010B
Magnesium	108000	1000	ug/L	SW846 6010B
Manganese	433	10.0	ug/L	SW846 6010B
Sodium	32200	1000	ug/L	SW846 6010B
FWGLL12mw-088C-1546-GW 07/12/10 14:39 006				
bis(2-Ethylhexyl) phthalate	2.4 J,B	10	ug/L	SW846 8270C
Nitrate-Nitrite	0.02 B	0.1	mg/L	MCAWW 353.2
FWGLL12mw-088C-1546-GF 07/12/10 14:39 007				
Iron	3890	50.0	ug/L	SW846 6020
Zinc	5.6 B,J	10.0	ug/L	SW846 6020
Arsenic	29.4	5.0	ug/L	SW846 6010B
Barium	383	10.0	ug/L	SW846 6010B
Calcium	159000	1000	ug/L	SW846 6010B
Potassium	2820 E	1000	ug/L	SW846 6010B
Magnesium	55700	1000	ug/L	SW846 6010B
Manganese	428	10.0	ug/L	SW846 6010B
Sodium	13500	1000	ug/L	SW846 6010B
FWGLL12mw-183C-1553-GW 07/12/10 17:29 008				
Heptachlor	0.027 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	2.4 J,B	10	ug/L	SW846 8270C
FWGLL12mw-183C-1553-GF 07/12/10 17:29 009				
Iron	867	50.0	ug/L	SW846 6020
Thallium U	0.20 B	1.0	ug/L	SW846 6020
Arsenic	29.8	5.0	ug/L	SW846 6010B
Barium	65.0	10.0	ug/L	SW846 6010B
Calcium	87600	1000	ug/L	SW846 6010B
Potassium	6050	1000	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G130405

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL12mw-183C-1553-GF 07/12/10 17:29 009				
Magnesium	36400	1000	ug/L	SW846 6010B
Manganese	47.7	10.0	ug/L	SW846 6010B
Sodium	19800	1000	ug/L	SW846 6010B
FWGTEAM2-TRIP 07/12/10 10:00 010				
Acetone	1.5 J	10	ug/L	SW846 8260B
FWGLL2mw-265C-1536-GW 07/12/10 12:50 011				
bis(2-Ethylhexyl) phthalate	2.5 J,B	10	ug/L	SW846 8270C
FWGLL2mw-265C-1536-GF 07/12/10 12:50 012				
Aluminum	26.4 B	50.0	ug/L	SW846 6020
Iron	614	50.0	ug/L	SW846 6020
Barium	8.8 B	10.0	ug/L	SW846 6010B
Calcium	76100	1000	ug/L	SW846 6010B
Cobalt	5.6	5.0	ug/L	SW846 6010B
Potassium	672 B	1000	ug/L	SW846 6010B
Magnesium	22700	1000	ug/L	SW846 6010B
Manganese	1430	10.0	ug/L	SW846 6010B
Sodium	10400	1000	ug/L	SW846 6010B
Nickel	19.0	10.0	ug/L	SW846 6010B
FWGLL2mw-DUP2-1567-GW 07/12/10 14:04 013				
beta-BHC	0.020 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.2 J,B	10	ug/L	SW846 8270C
FWGLL2mw-DUP2-1567-GF 07/12/10 14:04 014				
Aluminum	24.2 B	50.0	ug/L	SW846 6020
Iron	595	50.0	ug/L	SW846 6020
Barium	8.5 B	10.0	ug/L	SW846 6010B
Calcium	72500	1000	ug/L	SW846 6010B
Cobalt	5.8	5.0	ug/L	SW846 6010B
Potassium	651 B	1000	ug/L	SW846 6010B
Magnesium	21600	1000	ug/L	SW846 6010B
Manganese	1370	10.0	ug/L	SW846 6010B
Sodium	9650	1000	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G130405

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL2mw-DUP2-1567-GF 07/12/10 14:04	**014**			
Nickel	20.1	10.0	ug/L	SW846 6010B
FWGEQUIPRINSE2-1579-GW 07/12/10 14:34	**015**			
Methylene chloride	2.0 B	2.0	ug/L	SW846 8260B
Acetone	5.3 J	10	ug/L	SW846 8260B
2-Butanone	10	10	ug/L	SW846 8260B
FWGLL12mw-153C-1550-GW 07/12/10 15:04	**016**			
beta-BHC	0.10	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.3 J,B	10	ug/L	SW846 8270C
FWGLL12mw-153C-1550-GF 07/12/10 15:04	**017**			
Iron	3420	50.0	ug/L	SW846 6020
Zinc	9.0 B,J	10.0	ug/L	SW846 6020
Arsenic	21.4	5.0	ug/L	SW846 6010B
Barium	64.4	10.0	ug/L	SW846 6010B
Calcium	140000	1000	ug/L	SW846 6010B
Cobalt	2.0 B	5.0	ug/L	SW846 6010B
Chromium	2.0 B	5.0	ug/L	SW846 6010B
Potassium	2010	1000	ug/L	SW846 6010B
Magnesium	76800	1000	ug/L	SW846 6010B
Manganese	188	10.0	ug/L	SW846 6010B
Sodium	23400	1000	ug/L	SW846 6010B
Nickel	2.7 B	10.0	ug/L	SW846 6010B
FWGLL12mw-154C-1551-GW 07/12/10 16:44	**018**			
beta-BHC	0.011 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.5 J,B	10	ug/L	SW846 8270C
FWGLL12mw-154C-1551-GF 07/12/10 16:44	**019**			
Iron	1760	50.0	ug/L	SW846 6020
Thallium	0.16 B	1.0	ug/L	SW846 6020
Arsenic	16.2	5.0	ug/L	SW846 6010B
Barium	44.1	10.0	ug/L	SW846 6010B
Calcium	147000	1000	ug/L	SW846 6010B
Potassium	1820	1000	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G130405

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL12mw-154C-1551-GF 07/12/10 16:44 019				
Magnesium	70000	1000	ug/L	SW846 6010B
Manganese	85.9	10.0	ug/L	SW846 6010B
Sodium	24300	1000	ug/L	SW846 6010B
FWGTEAM3-TRIP 07/12/10 10:00 020				
Acetone	1.8 J	10	ug/L	SW846 8260B
FWGLL12mw-245C-1563-GW 07/12/10 12:10 021				
bis(2-Ethylhexyl) phthalate	1.8 J,B	10	ug/L	SW846 8270C
Nitrate-Nitrite	0.1	0.1	mg/L	MCAWW 353.2
Cyanide, Total	0.0080 B	0.010	mg/L	SW846 9012A
FWGLL12mw-245C-1563-GF 07/12/10 12:10 022				
Aluminum U	24.5 B	50.0	ug/L	SW846 6020
Antimony	0.29 B	2.0	ug/L	SW846 6020
Thallium U	0.14 B	1.0	ug/L	SW846 6020
Arsenic	9.1	5.0	ug/L	SW846 6010B
Barium	34.6	10.0	ug/L	SW846 6010B
Calcium	134000	1000	ug/L	SW846 6010B
Cobalt	3.2 B	5.0	ug/L	SW846 6010B
Potassium	3140	1000	ug/L	SW846 6010B
Magnesium	65400	1000	ug/L	SW846 6010B
Manganese	103	10.0	ug/L	SW846 6010B
Sodium	23200	1000	ug/L	SW846 6010B
Nickel	5.1 B	10.0	ug/L	SW846 6010B
FWGLL12mw-DUP5-1570-GW 07/12/10 13:00 023				
bis(2-Ethylhexyl) phthalate	1.1 J,B	10	ug/L	SW846 8270C
Nitrate-Nitrite	0.1	0.1	mg/L	MCAWW 353.2
FWGLL12mw-DUP5-1570-GF 07/12/10 13:00 024				
Antimony	0.35 B	2.0	ug/L	SW846 6020
Arsenic	8.9	5.0	ug/L	SW846 6010B
Barium	34.5	10.0	ug/L	SW846 6010B
Calcium	141000	1000	ug/L	SW846 6010B
Cobalt	3.3 B	5.0	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G130405

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL12mw-DUP5-1570-GF 07/12/10 13:00 024				
Potassium	3060	1000	ug/L	SW846 6010B
Magnesium	69900	1000	ug/L	SW846 6010B
Manganese	105	10.0	ug/L	SW846 6010B
Sodium	22600	1000	ug/L	SW846 6010B
Nickel	6.2 B	10.0	ug/L	SW846 6010B
FWGLL12mw-242C-1560-GW 07/12/10 17:00 025				
bis(2-Ethylhexyl) phthalate	1.7 J,B	10	ug/L	SW846 8270C
Butyl benzyl phthalate	0.89 J	1.0	ug/L	SW846 8270C
Isophorone	0.38 J	1.0	ug/L	SW846 8270C
Nitrate-Nitrite	0.02 B	0.1	mg/L	MCAWW 353.2
FWGLL12mw-242C-1560-GF 07/12/10 17:00 026				
Iron	833	50.0	ug/L	SW846 6020
Arsenic	21.3	5.0	ug/L	SW846 6010B
Silver	1.9 B	5.0	ug/L	SW846 6010B
Barium	22.0	10.0	ug/L	SW846 6010B
Calcium	69300	1000	ug/L	SW846 6010B
Potassium	1630	1000	ug/L	SW846 6010B
Magnesium	46500	1000	ug/L	SW846 6010B
Manganese	56.0	10.0	ug/L	SW846 6010B
Sodium	33800	1000	ug/L	SW846 6010B

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.6 – 4.6 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-9
7. Does the initial calibration curve consist of at least 6 standards and one blank?	✓				LCG Table 10 R
8. Was the correlation coefficient R ≥ 0.995?	✓				LCG Table 10 R<0.995=-J/R
9. Were % RSDs ≤ 10% in all standards and ICV/CCVs?	✓				LCG Table 10 RSD%>10=J
10. Were a high and low standard distilled and compared to the undistilled standard? Were the results within ± 10%?			✓		LCG Table 10 R
11. Was an MDL Level Verification performed at least once per quarter with all target analytes detected?	✓			7/22/10	LCG Table 10 R
12. Was a MRL Level Verification performed at the beginning of every daily sequence? Were results within 70-130%?	✓				LCG Table 10 >130%=J; 65-70%=J/UJ; <65%=J/R
13. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓				LCG Table 10 >115%=J; 80-85%=J/UJ; <80%=J/R
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				LCG Table 7 < 5x = U
15. Was a CCV run at the beginning and end of the analytical sequence?	✓				LCG Table 10

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
16. Were the CCV results 80-120%?	✓				LCG Table 10 >120%=J; 75-80%=J/UJ; <75%=J/R
17. Was a method blank prepared and analyzed with each batch?	✓				
18. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR.	LCG Table 10 <5x=B
19. Was a field blank collected and analyzed?	✓				
20. Were target analytes in the field blank analyses <1/2 the MRL?	✓				<5x=B
21. Was a field duplicate analyzed? Were the RPDs <30%?	✓			Checked by ADR.	QAPP Table 3-2 >30% = J
22. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 10
23. Were the LCS recoveries 80-120%?	✓			Checked by ADR.	LCG Table 10 >120%=J; 50-79%=J/UJ; <50%=R
24. Was a MS prepared once per every 10 samples?	✓				LCG Table 10
25. Was the MS parent a Ravenna sample?	✓				
26. Were MS recoveries 80-120%?	✓				QAPP Table 3-2 >120%=J; 30-79%=J/UJ; <30%=J/R
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 23, 2010

SDG: A0G130405 R0
Analysis: SW846 9012

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 10 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 23, 2010

SDG: A0G130405 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
1. Did Chain-of-Custody information agree with laboratory report?	X				
2. Were samples preserved properly and received in good condition?	X			The coolers were received between 2.6 – 4.6°C.	QAPP Table 4-2
3. Were holding times met?	X				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	X				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	X				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	X				QAPP Table 3-9
7. Was the Linear Calibration Range verified using 3 standards and 1 blank? Was the ICV within 10% of the initial values?	X				Method EPA 353.2 Section 9.2.2 J
8. Were the calibration standards verified by preparation and analysis of a Quality Control Sample? Were results within 10% of the stated values?					Method EPA 353.2 Section 9.2.3 Pj
9. Was an Instrument Performance Check Solution (CCV) analyzed immediately following daily calibration, after every 10th sample, and at the end of the analytical sequence?	X				Method EPA 353.2 Section 9.3.4
10. Was the CCV a mid-level standard from the initial calibration curve?	X				Method EPA 353.2 Section 9.3.4
11. Were the CCVs 90-110%?	X				Method EPA 353.2 Section 9.3.4 >110%=J; 85-90%=J/UJ; <85%=J/R
12. Was a method blank and a calibration blank prepared and analyzed with each batch?	X				Method EPA 353.2 Section 9.3.1, 9.3.4

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SDG: A0G130405 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
13. Were target analytes detected in the method blank or calibration blank >1/2 the MRL?	X			ADR checked section; The closing CCB had a detected nitrate nitrite concentration of 0.0207mg/L. The nitrate/nitrite result for sample FWGLL12mw-242c-1560-GW was qualified, "B".	LCG Attachment A Section 11 <5x = B
14. Was a field blank (trip or equipment) collected and analyzed?	X				
15. Were target analytes reported in the field blank analyses (trip or equipment) >1/2 the MRL?		X		*ADR checked section;*	*<5x=U*
16. Was a field duplicate analyzed? Were the RPDs acceptable?	X				
17. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within 90-110%?	X				Method EPA 353.2 Section 9.3.3 J/UJ; <50%= R
18. Was a MS/MSD pair prepared with each batch?	X				*Method EPA 353.2 Section 9.4.1*
19. Was the MS/MSD parent sample a Ravenna sample?	X				
20. Were MS/MSD recoveries and RPD within acceptance criteria?	X			*ADR checked section*	*Method EPA 353.2 Section 9.4.2 Pj*
21. Were sample concentrations within calibration range?	X				
22. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		X			
23. Were lab comments included in report? If yes, summarize contents.	X				

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GW

General Chemistry

Lot-Sample #...: A0G130405-002 **Work Order #...:** L338T **Matrix.....:** WG
Date Sampled...: 07/12/10 12:07 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346
	Dilution Factor: 1			MDL.....: 0.0050		
Nitrate-Nitrite	**0.2**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/16/10**	**0197124**
	Dilution Factor: 1			MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GW

General Chemistry

Lot-Sample #...: A0G130405-004 **Work Order #...:** L338X **Matrix.....:** WG
Date Sampled...: 07/12/10 13:31 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/26/10	0207365
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.2**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/16/10**	**0197124**
		Dilution Factor: 1		MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GW

General Chemistry

Lot-Sample #...: A0G130405-006 **Work Order #...:** L3381 **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/26/10	0207365
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.02 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/16/10**	**0197124**
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GW

General Chemistry

Lot-Sample #...: A0G130405-008 **Work Order #...:** L3384 **Matrix.....:** WG
Date Sampled...: 07/12/10 17:29 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/26/10	0207365
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1		MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GW

General Chemistry

Lot-Sample #...: A0G130405-011 **Work Order #...:** L3388 **Matrix.....:** WG
Date Sampled...: 07/12/10 12:50 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/26/10	0207365
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GW

General Chemistry

Lot-Sample #...: A0G130405-013 **Work Order #...:** L339F **Matrix.....:** WG
Date Sampled...: 07/12/10 14:04 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/26/10	0207365

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

General Chemistry

Lot-Sample #...: A0G130405-015 **Work Order #...:** L339H **Matrix.....:** WQ
Date Sampled...: 07/12/10 14:34 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/26/10	0207365
	Dilution Factor: 1			MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/16/10	0197124
	Dilution Factor: 1			MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GW

General Chemistry

Lot-Sample #...: A0G130405-016 **Work Order #...:** L339J **Matrix.....:** WG
Date Sampled...: 07/12/10 15:04 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/26/10	0207365
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1		MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GW

General Chemistry

Lot-Sample #...: A0G130405-018 **Work Order #...:** L339L **Matrix.....:** WG
Date Sampled...: 07/12/10 16:44 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/26/10	0207365
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1		MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GW

General Chemistry

Lot-Sample #...: A0G130405-021 Work Order #...: L339Q Matrix.....: WG
Date Sampled...: 07/12/10 12:10 Date Received..: 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	0.0080 B	0.010	mg/L	SW846 9012A	07/26/10	0207365
	Dilution Factor: 1			MDL.....: 0.0050		
Nitrate-Nitrite	0.1	0.1	mg/L	MCAWW 353.2	07/16/10	0197124
	Dilution Factor: 1			MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GW

General Chemistry

Lot-Sample #...: A0G130405-023 **Work Order #...:** L339W **Matrix.....:** WG
Date Sampled...: 07/12/10 13:00 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/26/10	0207365
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.1**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/16/10**	**0197124**
		Dilution Factor: 1		MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GW

General Chemistry

Lot-Sample #...: A0G130405-025 Work Order #...: L3390 Matrix.....: WG
Date Sampled...: 07/12/10 17:00 Date Received..: 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/26/10	0207365
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.02 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/16/10**	**0197124**
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0G130405 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: L4J841AA		MB Lot-Sample #:	A0G220000-346	
	ND	0.010	mg/L	SW846 9012A	07/22/10	0203346
		Dilution Factor: 1				
Cyanide, Total		Work Order #: L4N4W1AA		MB Lot-Sample #:	A0G260000-365	
	ND	0.010	mg/L	SW846 9012A	07/26/10	0207365
		Dilution Factor: 1				
Nitrate-Nitrite		Work Order #: L39KG1AA		MB Lot-Sample #:	A0G160000-124	
	ND	0.1	mg/L	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G130405 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: L4J841AC	LCS Lot-Sample#: A0G220000-346		
	108	(80 - 120)	SW846 9012A	07/22/10	0203346
		Dilution Factor: 1			
Cyanide, Total		Work Order #: L4N4W1AC	LCS Lot-Sample#: A0G260000-365		
	85	(80 - 120)	SW846 9012A	07/26/10	0207365
		Dilution Factor: 1			
Nitrate-Nitrite		Work Order #: L39KG1AC	LCS Lot-Sample#: A0G160000-124		
	100	(79 - 117)	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G130405 **Matrix.....:** WATER
Date Sampled...: 07/09/10 09:15 **Date Received..:** 07/09/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: L31TP1AG-MS/L31TP1AH-MSD				MS Lot-Sample #: A0G090540-012	
	87	(80 - 120)			SW846 9012A	07/22/10	0203346
	82	(80 - 120)	6.5	(0-20)	SW846 9012A	07/22/10	0203346
		Dilution Factor: 1					
Nitrate-Nitrite		WO#: L35M41AM-MS/L35M41AN-MSD				MS Lot-Sample #: A0G140402-002	
	107	(34 - 125)			MCAWW 353.2	07/16/10	0197124
	97	(34 - 125)	9.4	(0-20)	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1					
Nitrate-Nitrite		WO#: L35NJ1AM-MS/L35NJ1AN-MSD				MS Lot-Sample #: A0G140402-015	
	100	(34 - 125)			MCAWW 353.2	07/16/10	0197124
	97	(34 - 125)	2.9	(0-20)	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G130405 **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: L33811AQ-MS/L33811AR-MSD				MS Lot-Sample #: A0G130405-006	
	96	(80 - 120)			SW846 9012A	07/26/10	0207365
	92	(80 - 120)	4.3	(0-20)	SW846 9012A	07/26/10	0207365
		Dilution Factor: 1					
Nitrate-Nitrite		WO#: L33811AM-MS/L33811AN-MSD				MS Lot-Sample #: A0G130405-006	
	100	(34 - 125)			MCAWW 353.2	07/16/10	0197124
	105	(34 - 125)	4.3	(0-20)	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
353.2	FWGLL12mw-088C-1546-GW	AQ	N							
				Nitrate as N (NO3-N)	0.1	0.02B		J	mg/L	L
353.2	FWGLL12mw-242C-1560-GW	AQ	N							
				Nitrate as N (NO3-N)	0.1	0.02B		UJ	mg/L	Cb,L
6010B	FWGLL12mw-088C-1546-GF	AQ	N							
				Potassium	1000	2820E		J	ug/L	Pj
6010B	FWGLL12mw-113C-1548-GF	AQ	N							
				Potassium	1000	23700		J	ug/L	Pj
6010B	FWGLL12mw-153C-1550-GF	AQ	N							
				Chromium	5.0	2.0B		J	ug/L	L
				Cobalt	5.0	2.0B		J	ug/L	L
				Nickel	10.0	2.7B		J	ug/L	L
				Potassium	1000	2010		J	ug/L	Pj
6010B	FWGLL12mw-154C-1551-GF	AQ	N							
				Potassium	1000	1820		J	ug/L	Pj
6010B	FWGLL12mw-183C-1553-GF	AQ	N							
				Potassium	1000	6050		J	ug/L	Pj
6010B	FWGLL12mw-188C-1558-GF	AQ	N							
				Cobalt	5.0	1.5B		J	ug/L	L
				Potassium	1000	1930		J	ug/L	Pj
6010B	FWGLL12mw-242C-1560-GF	AQ	N							
				Potassium	1000	1630		J	ug/L	Pj
				Silver	5.0	1.9B		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
6010B	FWGLL12mw-245C-1563-GF	AQ	N							
				Cobalt	5.0	3.2B		J	ug/L	L
				Nickel	10.0	5.1B		J	ug/L	L
				Potassium	1000	3140		J	ug/L	Pj
6010B	FWGLL12mw-DUP5-1570-GF	AQ	FD							
				Cobalt	5.0	3.3B		J	ug/L	L
				Nickel	10.0	6.2B		J	ug/L	L
				Potassium	1000	3060		J	ug/L	Pj
6010B	FWGLL2mw-265C-1536-GF	AQ	N							
				Barium	10.0	8.8B		J	ug/L	L
				Potassium	1000	672B		UJ	ug/L	Pj,L,Cb
6010B	FWGLL2mw-DUP2-1567-GF	AQ	FD							
				Barium	10.0	8.5B		J	ug/L	L
				Potassium	1000	651B		UJ	ug/L	Pj,L,Cb
6020	FWGLL12mw-088C-1546-GF	AQ	N							
				Zinc	10.0	5.6B J		JB	ug/L	L,F
6020	FWGLL12mw-113C-1548-GF	AQ	N							
				Antimony	2.0	1.1B		J	ug/L	L
6020	FWGLL12mw-153C-1550-GF	AQ	N							
				Zinc	10.0	9.0B J		JB	ug/L	L,F
6020	FWGLL12mw-154C-1551-GF	AQ	N							
				Thallium	1.0	0.16B		UJ	ug/L	Cb,L
6020	FWGLL12mw-183C-1553-GF	AQ	N							
				Thallium	1.0	0.20B		UJ	ug/L	Cb,L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
6020	FWGLL12mw-188C-1558-GF	AQ	N							
				Thallium	1.0	0.20B		UJ	ug/L	Cb,L
6020	FWGLL12mw-245C-1563-GF	AQ	N							
				Aluminum	50.0	24.5B		UJ	ug/L	Cb,P,L
				Antimony	2.0	0.29B		J	ug/L	L
				Thallium	1.0	0.14B		UJ	ug/L	Cb,P,L
6020	FWGLL12mw-DUP5-1570-GF	AQ	FD							
				Antimony	2.0	0.35B		J	ug/L	L
6020	FWGLL2mw-265C-1536-GF	AQ	N							
				Aluminum	50.0	26.4B		J	ug/L	L
6020	FWGLL2mw-DUP2-1567-GF	AQ	FD							
				Aluminum	50.0	24.2B		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8081A	FWGLL12mw-113C-1548-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8081A	FWGLL12mw-153C-1550-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.10		J	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8081A	FWGLL12mw-154C-1551-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.011J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8081A	FWGLL12mw-183C-1553-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.027J		J	ug/L	G,L
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8081A	FWGLL12mw-188C-1558-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.017J		J	ug/L	G,L
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8081A	FWGLL12mw-242C-1560-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8081A	FWGLL12mw-245C-1563-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8081A	FWGLL12mw-DUP5-1570-GW	AQ	FD							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8081A	FWGLL2mw-DUP2-1567-GW	AQ	FD							
				beta-BHC	0.030	0.020J		J	ug/L	L

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8082	FWGLL12mw-113C-1548-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL12mw-154C-1551-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL12mw-183C-1553-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

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FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8082	FWGLL12mw-188C-1558-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL12mw-242C-1560-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL12mw-245C-1563-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8082	FWGLL12mw-DUP5-1570-GW	AQ	FD							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8260B	FWGEQUIPRINSE2-1579-GW	AQ	EB							
				2-Butanone	10	10		J	ug/L	Pj
				Acetone	10	5.3J		JB	ug/L	Pj,L,O
				Methylene chloride	2.0	2.0B		JB	ug/L	Pj,F
8260B	FWGTEAM1-TRIP	AQ	TB							
				Acetone	10	1.6J		J	ug/L	Pj,L
8260B	FWGTEAM2-TRIP	AQ	TB							
				Acetone	10	1.5J		J	ug/L	Pj,L
8260B	FWGTEAM3-TRIP	AQ	TB							
				Acetone	10	1.8J		J	ug/L	Pj,L
8270C	FWGEQUIPRINSE2-1579-GW	AQ	EB							
				Hexachlorocyclopentadiene	200	200U		UJ	ug/L	Pj
8270C	FWGLL12mw-088C-1546-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.4J B		JB	ug/L	L,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
8270C	FWGLL12mw-113C-1548-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.9J B		JB	ug/L	L,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
				Phenol	1.0	0.83J		J	ug/L	L

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8270C	FWGLL12mw-153C-1550-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.3J B		JB	ug/L	L,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
8270C	FWGLL12mw-154C-1551-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.5J B		JB	ug/L	L,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
8270C	FWGLL12mw-183C-1553-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.4J B		JB	ug/L	L,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
8270C	FWGLL12mw-188C-1558-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.4J B		JB	ug/L	L,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
8270C	FWGLL12mw-242C-1560-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.7J B		JB	ug/L	L,F
				Butylbenzyl Phthalate	1.0	0.89J		J	ug/L	L
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
				Isophorone	1.0	0.38J		J	ug/L	L
8270C	FWGLL12mw-245C-1563-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.8J B		JB	ug/L	L,P,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
8270C	FWGLL12mw-DUP5-1570-GW	AQ	FD							
				bis(2-Ethylhexyl) phthalate	10	1.1J B		JB	ug/L	L,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
8270C	FWGLL2mw-265C-1536-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.5J B		JB	ug/L	L,P,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130405										
8270C	FWGLL2mw-DUP2-1567-GW	AQ	FD							
				bis(2-Ethylhexyl) phthalate	10	1.2J B		JB	ug/L	L,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
9012A	FWGLL12mw-245C-1563-GW	AQ	N							
				Cyanide	0.010	0.0080B		J	mg/L	L,P

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE2-1579-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G130405015

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 20**															
Hexachlorocyclopentadiene	200		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE2-1579-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405015

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
2-Butanone	10		ug/L		YES	J															Pj
Acetone	5.3		ug/L	J	YES	UJ JB								J		UB					Pj,L,O
Methylene chloride	2.0		ug/L	B	YES	UJ JB			UB												Pj,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-088C-1546-GF **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G130405007

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	2820		ug/L	E	YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Zinc	5.6		ug/L	B J	YES	~~U~~ J SB			JB					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-088C-1546-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405006

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.02		mg/L	B	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	2.4		ug/L	J B	YES	~~UJ~~ J SB			J B					J							L,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-113C-1548-GF **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G130405003

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	23700		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Antimony	1.1		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-113C-1548-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405002

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-113C-1548-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405002

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C																					
														Dilution: 1							
bis(2-Ethylhexyl) phthalate	1.9		ug/L	J B	YES	~~UJ~~ J			J					J							L,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj
Phenol	0.83		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-153C-1550-GF **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G130405017

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Chromium	2.0		ug/L	B	YES	J								J							L
Cobalt	2.0		ug/L	B	YES	J								J							L
Nickel	2.7		ug/L	B	YES	J								J							L
Potassium	2010		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Zinc	9.0		ug/L	B J	YES	~~U~~ J B			J B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-153C-1550-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405016

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.10		ug/L		YES	J							J								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.3		ug/L	J B	YES	~~UJ~~ J B			J B					J							L,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-154C-1551-GF **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G130405019

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	1820		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.16		ug/L	B	YES	UJ UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-154C-1551-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405018

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.011		ug/L	J	YES	J							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-154C-1551-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405018

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C									**Dilution: 1**												
bis(2-Ethylhexyl) phthalate	1.5		ug/L	J B	YES	~~UJ~~ SB			~~UJ~~ B					J							L,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-183C-1553-GF **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G130405009

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	6050		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.20		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-183C-1553-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405008

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.027		ug/L	J	YES	J							J	J							G,L
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-183C-1553-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405008

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C																					
bis(2-Ethylhexyl) phthalate	2.4		ug/L	J B	YES	~~U~~ UJ			J B					J							L,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-188C-1558-GF **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G130405005

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	1.5		ug/L	B	YES	J								J							L
Potassium	1930		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.20		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-188C-1558-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405004

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.017		ug/L	J	YES	J							J	J							G,L
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-188C-1558-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405004

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	2.4		ug/L	J B	YES	~~UJ~~ JB			U					J							L,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-242C-1560-GF **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G130405026

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	1630		ug/L		YES	J															Pj
Silver	1.9		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-242C-1560-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405025

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.02		mg/L	B	YES	UJ								J							Cb,L
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-242C-1560-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405025

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.7		ug/L	J B	YES	UJ JB			JB					J							L,F
Butylbenzyl Phthalate	0.89		ug/L	J	YES	J								J							L
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj
Isophorone	0.38		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-245C-1563-GF **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G130405022

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	3.2		ug/L	B	YES	J								J							L
Nickel	5.1		ug/L	B	YES	J								J							L
Potassium	3140		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Aluminum	24.5		ug/L	B	YES	UJ								J							Cb,P,L
Antimony	0.29		ug/L	B	YES	J								J							L
Thallium	0.14		ug/L	B	YES	UJ								J							Cb,P,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-245C-1563-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405021

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-245C-1563-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405021

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.8		ug/L	J B	YES	~~UJ~~ J B			Y B					J							L,P,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.0080		mg/L	B	YES	J								J							L,P

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-DUP5-1570-GF **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G130405024

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	3.3		ug/L	B	YES	J								J							L
Nickel	6.2		ug/L	B	YES	J								J							L
Potassium	3060		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.35		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-DUP5-1570-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405023

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-DUP5-1570-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405023

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.1		ug/L	J B	YES	UJ B			UB					J							L,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-265C-1536-GF **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G130405012

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	8.8		ug/L	B	YES	J								J							L
Potassium	672		ug/L	B	YES	UJ								J							Pj,L,Cb
Analysis Method : 6020						**Dilution: 1**															
Aluminum	26.4		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-265C-1536-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405011

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	2.5		ug/L	J B	YES	~~UJ~~ BB			~~J~~ B					J							L,P,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-DUP2-1567-GF **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G130405014

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	8.5		ug/L	B	YES	J								J							L
Potassium	651		ug/L	B	YES	UJ								J							Pj,L,Cb
Analysis Method : 6020						**Dilution: 1**															
Aluminum	24.2		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-DUP2-1567-GW **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405013

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
beta-BHC	0.020		ug/L	J	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.2		ug/L	J B	YES	~~UJ~~ SB			JB					J							L,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM1-TRIP
Lab Report Batch : A0G130405
Lab ID : TALCAN
Sample Date : 07/12/2010
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A0G130405001

Reviewed By / Date : Angye Dragotta 8/25/2010
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.6		ug/L	J	YES	J								J							Pj,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM2-TRIP **Lab Report Batch :** A0G130405 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130405010

Reviewed By / Date : Angye Dragotta 8/25/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.5		ug/L	J	YES	J								J							Pj,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM3-TRIP
Lab Report Batch : A0G130405
Lab ID : TALCAN
Sample Date : 07/12/2010
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A0G130405020

Reviewed By / Date : Angye Dragotta 8/25/2010
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.8		ug/L	J	YES	J								J							Pj,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0195036 **Analysis Method :** 8081A **Analysis Date :** 07/27/2010

Preparation Batch : 0195036 **Preparation Type :** 3520C **Preparation Date :** 07/14/2010

Lab Reporting Batch : A0G130405 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL12mw-088C-1546	A0G130405006D	AQ	4,4'-DDD		23	0.00	40.00	140.00	20.00
			Endosulfan II		21	0.00	40.00	140.00	20.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL12mw-088C-1546-GW	A0G130405006

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.

** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0195050 **Analysis Method :** 8270C **Analysis Date :** 07/22/2010

Preparation Batch : 0195050 **Preparation Type :** 3520C **Preparation Date :** 07/14/2010

Lab Reporting Batch : A0G130405 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL12mw-088C-1546	A0G130405006S	AQ	3,3'-Dichlorobenzidine	40		0.00	45.00	135.00	20.00
FWGLL12mw-088C-1546	A0G130405006D		3,3'-Dichlorobenzidine	39		0.00	45.00	135.00	20.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL12mw-088C-1546-GW	A0G130405006

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.

** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G130405 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE2-1579	A0G130405015	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Potassium	U	1000	200.00	ug/L
				Sodium	U	1000	200.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G130405 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE2-1579	A0G130405015	8260B	AQ	Acetone	J	5.3	10	ug/L
FWGLL12mw-088C-1546-	A0G130405007	6020		Zinc	B J	5.6	10.0	ug/L
FWGLL12mw-088C-1546-	A0G130405006	353.2		Nitrate as N (NO3-N)	B	0.02	0.1	mg/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	2.4	10	ug/L
FWGLL12mw-113C-1548-	A0G130405003	6020		Antimony	B	1.1	2.0	ug/L
FWGLL12mw-113C-1548-	A0G130405002	8270C		bis(2-Ethylhexyl) phthalate	J B	1.9	10	ug/L
				Phenol	J	0.83	1.0	ug/L
FWGLL12mw-153C-1550-	A0G130405017	6010B		Chromium	B	2.0	5.0	ug/L
				Cobalt	B	2.0	5.0	ug/L
				Nickel	B	2.7	10.0	ug/L
		6020		Zinc	B J	9.0	10.0	ug/L
FWGLL12mw-153C-1550-	A0G130405016	8270C		bis(2-Ethylhexyl) phthalate	J B	1.3	10	ug/L
FWGLL12mw-154C-1551-	A0G130405019	6020		Thallium	B	0.16	1.0	ug/L
FWGLL12mw-154C-1551-	A0G130405018	8081A		beta-BHC	J	0.011	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.5	10	ug/L
FWGLL12mw-183C-1553-	A0G130405009	6020		Thallium	B	0.20	1.0	ug/L
FWGLL12mw-183C-1553-	A0G130405008	8081A		Heptachlor	J	0.027	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	2.4	10	ug/L
FWGLL12mw-188C-1558-	A0G130405005	6010B		Cobalt	B	1.5	5.0	ug/L
		6020		Thallium	B	0.20	1.0	ug/L
FWGLL12mw-188C-1558-	A0G130405004	8081A		Heptachlor	J	0.017	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	2.4	10	ug/L
FWGLL12mw-242C-1560-	A0G130405026	6010B		Silver	B	1.9	5.0	ug/L
FWGLL12mw-242C-1560-	A0G130405025	353.2		Nitrate as N (NO3-N)	B	0.02	0.1	mg/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.7	10	ug/L
				Butylbenzyl Phthalate	J	0.89	1.0	ug/L
				Isophorone	J	0.38	1.0	ug/L
FWGLL12mw-245C-1563-	A0G130405022	6010B		Cobalt	B	3.2	5.0	ug/L
				Nickel	B	5.1	10.0	ug/L
		6020		Aluminum	B	24.5	50.0	ug/L
				Antimony	B	0.29	2.0	ug/L
				Thallium	B	0.14	1.0	ug/L
FWGLL12mw-245C-1563-	A0G130405021	8270C		bis(2-Ethylhexyl) phthalate	J B	1.8	10	ug/L
		9012A		Cyanide	B	0.0080	0.010	mg/L
FWGLL12mw-DUP5-1570	A0G130405024	6010B		Cobalt	B	3.3	5.0	ug/L
				Nickel	B	6.2	10.0	ug/L

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G130405 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL12mw-DUP5-1570	A0G130405024	6020	AQ	Antimony	B	0.35	2.0	ug/L
FWGLL12mw-DUP5-1570	A0G130405023	8270C		bis(2-Ethylhexyl) phthalate	J B	1.1	10	ug/L
FWGLL2mw-265C-1536-G	A0G130405012	6010B		Barium	B	8.8	10.0	ug/L
				Potassium	B	672	1000	ug/L
		6020		Aluminum	B	26.4	50.0	ug/L
FWGLL2mw-265C-1536-G	A0G130405011	8270C		bis(2-Ethylhexyl) phthalate	J B	2.5	10	ug/L
FWGLL2mw-DUP2-1567-	A0G130405014	6010B		Barium	B	8.5	10.0	ug/L
				Potassium	B	651	1000	ug/L
		6020		Aluminum	B	24.2	50.0	ug/L
FWGLL2mw-DUP2-1567-	A0G130405013	8081A		beta-BHC	J	0.020	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.2	10	ug/L
FWGTEAM1-TRIP	A0G130405001	8260B		Acetone	J	1.6	10	ug/L
FWGTEAM2-TRIP	A0G130405010			Acetone	J	1.5	10	ug/L
FWGTEAM3-TRIP	A0G130405020			Acetone	J	1.8	10	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A0G130405
Lab ID: TALCAN
Analysis Method : 8260B
Analysis Date : 07/22/2010
Preparation Type : 5030B
Preparation Date : 07/22/2010
Method Blank Lab Sample ID : A0G220000119B
Preparation Batch : 0203119

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.54	2.0	ug/L	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE2-1579-G	A0G130405015	1	2.0	B	ug/L

QC Outlier Report: Trip Blank

Lab Reporting Batch : A0G130405
Lab ID: TALCAN
Method/Preparation Batch : 0203119 / 0203119
Analysis Date : 07/22/2010
Client Sample ID : FWGTEAM1-TRIP
Preparation Date : 07/22/2010
Lab Sample ID : A0G130405001
Preparation Type : 5030B

Analysis Method : 8260B

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.6	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.5	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGEQUIPRINSE2-1579-G	A0G130405015	1	5.3	J	ug/L

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.8	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Method Blank Outlier Report

Lab Reporting Batch : A0G130405 **Lab ID:** TALCAN

Analysis Method : 8270C **Analysis Date :** 07/22/2010

Preparation Type : 3520C **Preparation Date :** 07/14/2010

Method Blank Lab Sample ID : A0G140000050B **Preparation Batch :** 0195050

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.4	10	ug/L	J	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGLL12mw-088C-1546-G	A0G130405006	1	2.4	J B	ug/L
FWGLL12mw-113C-1548-G	A0G130405002	1	1.9	J B	ug/L
FWGLL12mw-153C-1550-G	A0G130405016	1	1.3	J B	ug/L
FWGLL12mw-154C-1551-G	A0G130405018	1	1.5	J B	ug/L
FWGLL12mw-183C-1553-G	A0G130405008	1	2.4	J B	ug/L
FWGLL12mw-188C-1558-G	A0G130405004	1	2.4	J B	ug/L
FWGLL12mw-242C-1560-G	A0G130405025	1	1.7	J B	ug/L
FWGLL12mw-245C-1563-G	A0G130405021	1	1.8	J B	ug/L
FWGLL12mw-DUP5-1570-G	A0G130405023	1	1.1	J B	ug/L
FWGLL2mw-265C-1536-GW	A0G130405011	1	2.5	J B	ug/L
FWGLL2mw-DUP2-1567-GW	A0G130405013	1	1.2	J B	ug/L

Surrogate Recovery Outlier Report

Lab Report Batch: A0G130405 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGEQUIPRINSE2-1579-GW	A0G130405015	8270C	20	AQ	2,4,6-Tribromophenol	0.0	50.0	150.0	10.0	Acid
					2-Fluorophenol	44	50.0	150.0	10.0	Acid
					Phenol-d5	41	50.0	150.0	10.0	Acid
FWGLL12mw-113C-1548-GW	A0G130405002	8081A	1	AQ	Decachlorobiphenyl	34	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	38	50.0	150.0	10.0	All Target
FWGLL12mw-153C-1550-GW	A0G130405016	8081A	1	AQ	Decachlorobiphenyl	46	50.0	150.0	10.0	All Target
FWGLL12mw-154C-1551-GW	A0G130405018	8081A	1	AQ	Decachlorobiphenyl	43	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	48	50.0	150.0	10.0	All Target
FWGLL12mw-183C-1553-GW	A0G130405008	8081A	1	AQ	Decachlorobiphenyl	34	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	34	50.0	150.0	10.0	All Target
FWGLL12mw-188C-1558-GW	A0G130405004	8081A	1	AQ	Decachlorobiphenyl	15	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	15	50.0	150.0	10.0	All Target
FWGLL12mw-242C-1560-GW	A0G130405025	8081A	1	AQ	Decachlorobiphenyl	45	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	45	50.0	150.0	10.0	All Target
FWGLL12mw-245C-1563-GW	A0G130405021	8081A	1	AQ	Decachlorobiphenyl	41	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	43	50.0	150.0	10.0	All Target
FWGLL12mw-DUP5-1570-GW	A0G130405023	8081A	1	AQ	Decachlorobiphenyl	48	50.0	150.0	10.0	All Target

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Surrogate Recovery Outlier Report

Lab Report Batch: A0G130405 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGLL12mw-DUP5-1570-GW	A0G130405023	8082	1	AQ	Decachlorobiphenyl	47	50.0	150.0	10.0	All Target

Method Blank Outlier Report

Lab Reporting Batch : A0G130405
Lab ID: TALCAN
Analysis Method : 6020
Analysis Date : 07/30/2010
Preparation Type : 3005A
Preparation Date : 07/14/2010
Method Blank Lab Sample ID : A0G140000013B
Preparation Batch : 0195013

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	3.9	10.0	ug/L	B	

Zinc was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGLL12mw-088C-1546-GF	A0G130405007	1	5.6	B J	ug/L
FWGLL12mw-153C-1550-GF	A0G130405017	1	9.0	B J	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A0G130405 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
6020	AQ	Aluminum	FWGLL12mw-245	ES/TO	24.5	B	FWGLL12mw-DU	ES/TO	50.0	U	200.0	30	ug/L
	AQ	Thallium		ES/TO	0.14	B		ES/TO	1.0	U	200.0	30	ug/L
8270C	AQ	bis(2-Ethylhexyl) phthalate	FWGLL12mw-245	RES	1.8	J B	FWGLL12mw-DU	RES	1.1	J B	48.3	30	ug/L
9012A	AQ	Cyanide		RES	0.0080	B		RES	0.010	U	200.0	30	mg/L
8081A	AQ	beta-BHC	FWGLL2mw-265C	RES	0.030	U	FWGLL2mw-DUP	RES	0.020	J	200.0	30	ug/L
8270C	AQ	bis(2-Ethylhexyl) phthalate		RES	2.5	J B		RES	1.2	J B	70.3	30	ug/L

Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** September 1, 2010
STL Sample Delivery Group: A0G130410 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 12 , 2010, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0G130410.

Field Sample ID	Analytes	Method
FWGLL12mw-113c-1548-GW	Explosives	SW846 8330
FWGLL12mw-188c-1558-GW	Nitroguanidine	SW846 M8330
FWGLL12mw-088c-1546-GW	Nitrocellulose	TAL- SOP WS-WC-0050
FWGLL12mw-183c-1553-GW		
FWGLL2mw-265c-1536-GW		
FWGLL2mw-DUP2-1567-GW		
FWGEQUIPRinse2-1579-GW		
FWGLL12mw-153c-1550-GW		
FWGLL12mw-154c-1551-GW		
FWGLL12mw-245c-1563-GW		
FWGLL12mw-DUP5-1570-GW		
FWGLL12mw-242c-1560-GW		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004, Analytical Methods, and Laboratory Standard Operating Procedures.* These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** September 1, 2010
STL Sample Delivery Group: A0G130410 **Revision:** 0

Explosives- 8330

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration Criteria
- ICV criteria
- Retention time criteria
- MDL Verification
- Surrogate recovery criteria
- Method blanks free from contamination
- MS Recovery Criteria
- LCS Recovery Criteria

LC9-4-Nitrotoluene appears to not have been spiked and/or recover in the calibration verifications or MRL verifications; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation and the %D for 2-nitrotoluene were within criteria.

MRL Recovery

LC10- the following outliers were noted:

- The MRL analyzed 8/1/10 @1954 recovered above control limits with a %D of 39% for PETN and on 8/2/10 @ 0126 the %D was 40%.

No qualifications were required as there were no detected PETN concentrations in the associated field samples.

Blanks

- Due to excessive particulates, samples FWGLL12mw-113c-1548-GW, FWGLL12mw-154c-1551-GW, FWGLL12mw-245c-1563-GW, FWGLL12mw-DUP5-1570-GW and FWGLL12mw-242c-1560-GW required filtration. A filter blank was prepared and analyzed with no detected concentrations reported.
- Tetryl was detected in FWGEQUIPRinse2-1579-GW at 0.099ug/L. The tetryl result for sample FWGLL12mw-242c-1560-GW was qualified, "B" as the result was <5x the equipment rinse contamination.

CCV

LC10

- The CCV analyzed 7/28/10 @2118 recovered above limits for nitrobenzene with a %D of 22%.
- The CCV analyzed 7/29/10 @0610 recovered above limits for nitrobenzene with a %D of 21%.

No qualifications were made as the CCV did not bracket any detected nitrobenzene concentrations.

LC9

- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.

Field Duplicate RPD

Sample FWGLL12mw-DUP5-1570-GW was the field duplicate for FWGLL12mw-245c-1563-GW. The duplicate RPD was above control limits for 1, 3,5-trinitrobenzene at 200. The 1, 3,5-trinitrobenzene result for FWGLL12mw-245c-1563-GW was qualified as estimated, "J".

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010
STL Sample Delivery Group: A0G130410

Date: September 1, 2010
Revision: 0

Nitroguanidine- 8330M

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MRL level verification criteria
- MDL verification criteria
- ICV and CCV criteria
- The method blank and equipment blanks were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Nitrocellulose - 353.2

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Sample preparation criteria
- Initial Calibration criteria
- ICV and CCV criteria
- The method and equipment blanks were free from contamination
- MRL Level Verification criteria
- ICB and CCBs were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- MS/MSD percent recoveries
- Nitrocellulose assay criteria

No QC outliers were noted.

Data Validator: Angie Dye
Date: 8/19/10

2nd Level Data Review: Eric Carlin
Date: 9/9/10

CASE NARRATIVE

A0G130410

The following report contains the analytical results for twelve water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 13, 2010, according to documented sample acceptance procedures.

The 8330 Explosives, Nitroguanidine, and 353.2 Nitrocellulose as N analyses were performed at the TestAmerica West Sacramento laboratory. Refer to TestAmerica West Sacramento narrative included in their data package for additional information.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 05, 2010. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.6 to 4.6°C.

See TestAmerica's Cooler Receipt Form for additional information.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

Case Narrative

TestAmerica West Sacramento Project Number A0G130410

General Comments
Following US EPA Region V guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. The reasons for manual integration have been documented on the affected chromatograms, which are provided in the raw data package. The raw data also includes the original chromatograms prior to any manual integrations being performed. The following samples and analytes required manual integrations:

Instrument LC10
MRL standard (analyzed on 7/28/10 @ 22:06) - 2-Amino-4,6-Dinitrotoluene, Tetryl, 3,4-Dinitrotolulene, & Nitrobenzene
MRL standard (analyzed on 7/29/10 @ 06:49) - Tetryl & Nitrobenzene
MRL standard (analyzed on 8/1/10 @ 11:59) - 3,4-Dinitrotoluene, 2,4,6-Trinitrotoluene, 2-Amino-4,6-Dinitrotoluene, PETN, & 4-Amino-2,6-Dinitrotoluene
MRL standard (analyzed on 8/1/10 @ 19:54) - PETN
Continuing calibration verification (CCV) standard (analyzed on 7/28/10 @ 21:18) - Tetryl & Nitrobenzene
CCV standard (analyzed on 7/29/10 @ 06:01) - Tetryl & Nitrobenzene
Sample 1 – HMX & 3,4-Dinitrotoluene
Sample 2 - HMX & RDX
Sample 3MS - HMX
Sample 3MSD - HMX, Tetryl, Nitrobenzene, 3,4-Dinitrotoluene, 2,4,6-Trinitrotoluene, 2-Amino-4,6-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
Sample 5 - HMX & 3,4-Dinitrotoluene
Sample 8 - HMX & 3,4-Dinitrotoluene
Sample 9 - HMX & 3,4-Dinitrotoluene
Sample 10 - HMX & 3,4-Dinitrotoluene
Sample 11 - HMX
Sample 12 - HMX & 3,4-Dinitrotoluene

WATER, 8330, Explosives
Samples: 1, 9, 10, 11, 12
These samples were filtered prior to extraction since they contained excessive sediment/particulates. A filtered blank was included with the batch.

Case Narrative

TestAmerica West Sacramento Project Number A0G130410

Samples: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
The beginning continuing calibration verification standards did not meet percent difference acceptance criteria for PETN. Since the associated sample results were all "ND" for this analyte, no corrective action was performed.

Samples: 1, 2, 3
The beginning continuing calibration verification standards did not meet percent difference acceptance criteria for Nitrobenzene. Since the associated sample results were all "ND" for this analyte, no corrective action was performed.

There were no other anomalies associated with this project.

SAMPLE SUMMARY

A0G130410

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L34AN	001	FWGLL12mw-113C-1548-GW	07/12/10	12:07
L34AP	002	FWGLL12mw-188C-1558-GW	07/12/10	13:31
L34AQ	003	FWGLL12mw-088C-1546-GW	07/12/10	14:39
L34AT	004	FWGLL12mw-183C-1553-GW	07/12/10	17:29
L34AV	005	FWGLL2mw-265C-1536-GW	07/12/10	12:50
L34AW	006	FWGLL2mw-DUP2-1567-GW	07/12/10	14:04
L34AX	007	FWGEQUIPRINSE2-1579-GW	07/12/10	14:34
L34A1	008	FWGLL12mw-153C-1550-GW	07/12/10	15:04
L34A2	009	FWGLL12mw-154C-1551-GW	07/12/10	16:44
L34A3	010	FWGLL12mw-245C-1563-GW	07/12/10	12:10
L34A4	011	FWGLL12mw-DUP5-1570-GW	07/12/10	13:00
L34A6	012	FWGLL12mw-242C-1560-GW	07/12/10	17:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Erik Corbin	Mark Loeb	
Address: 1800 Carillon Blvd	Telephone: 513-825-7500	Telephone: 513-825-7500	Telephone: 330-497-9396	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email:	Purchase Order requested	Analyses	
Phone: 513-825-7500		TAT if different from below per SOW		
Project Name: CVAAP(OH)	Method of Shipment/Carrier: Lab pickup	☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 30240 0006	Shipping/Tracking No:			
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:			VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Expl. 8330	Propellants 9012	Cyanide 6010/6020	Metals 7470	NO3/NO2 353.2	Sample Specific Notes / Special Instructions:
FWG Team 1 - Trip	7/12/10	10:00		X						2					N	G	X									EC1
FWGLL12mw-113C-1548-GW	7/12/10	12:07		X				1	X	EC 3 7/12/10	1		9		N	G	X	X	X	X	X	X	X		X	EC9
FWGLL12mw-113C-1548-GF	7/12/10	12:07		X					1						Y	G								X		EC9
FWGLL12mw-188C-1558-GW	7/12/10	18:31		X				1		3	1		9		N	G	X	X	X	X	X	X	X		X	A192
FWGLL12mw-188C-1558-GF	7/12/10	18:31		X					1						Y	G								X		A192
FWGLL12mw-088C-1546-GW	7/12/10	14:39		X				3		9 3 7/12/10	3		27		N	G	X	X	X	X	X	X	X		X	MS/MSD 334W, M23, ASD3
FWGLL12mw-088C-1546-GF	7/12/10	14:39		X					3						Y	G								X		MS/MSD 334W, M23, ASD3
FWGLL12mw-183C-1553-GW	7/12/10	17:29		X				1		3	1		9		N	G	X	X	X	X	X	X	X		X	EC1
FWGLL12mw-183C-1553-GF	7/12/10	17:29		X					1						Y	G								X		EC1
								Ext		7/12/10																

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Temps may not meet requirements if sample collection is close to lab pickup times. Metals field filtered.
ALL VOAs in cooler EC1

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	7/12/10 18:30		TestAmerica	7/12/10 1830
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	7/12/10 19:15			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TANC	7/13/10 0730

TAL-0018 (1008)

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North Canton

Chain of Custody Record

SEVERN TRENT STL TestAmerica

Severn Trent Laboratories, Inc.

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STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
EQM	JOHN MILLER	7-12-10	336188
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
5000 CARILLON BLVD	513 825 7500 (Fax 7495)	330 497 9396	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Cincinnati OH 45240	E CORBIN	M WEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP Ravenna Ohio	LAB PICK UP (7-12-10)		
Contract/Purchase Order/Quote No.			
PO 16726 PN 30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOC	SVOC	Pest	PCB	Explo	Perchlorate	Cyanide	Metals	NO2NO3			Special Instructions/ Conditions of Receipt
																								Cooler ID #
FWG Trauma Trip	7-12-10	1000		X						2			X											STL-1
FWGU2mw-265C-1536-GW	"	1250		X			9			3	1		X	X	X	X	X	X	X					B111
FWG U2mw-265C-1536-GF	"	"		X					1											X				B111
FWGU2mw-DUP2-1567-GW	"	1404		X			9			3	1		X	X	X	X	X	X	X					E115
FWGU2mw-DUP2-1567-GF	"	"		X					1											X				E115
FWGSQUIPRinse2-1579-GW	"	1434 1504 GC		X			9	1	1	3	1		X	X	X	X	X	X	X	X	X			E-21
FWGU12mw-153C-1550-GW	"	1504		X			9	1		3	1		X	X	X	X	X	X	X		X			STL-1
FWGU12mw-153C-1550-GF	"	"		X					1											X				STL-1
FWGU12mw-154C-1551-GW	"	1644		X			9	1		3	1		X	X	X	X	X	X	X		X			A291
FWGU12mw-154C-1551-GF	"	"		X					1											X				A291

Entry error - on time all are 1434

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per COC

QC Requirements (Specify): Metals GF are field filtered except for Rinse Metals GW

	Date	Time		Date	Time
1. Relinquished By: Emily Cordray EQ	7/12/10	1818:30	1. Received By:	7/12/10	1830
2. Relinquished By:	7/12/10	1915	2. Received By:	7/13/10	0730
3. Relinquished By:			3. Received By:		

Comments: Temps may not meet requirements if sample collection is closest to lab pick up time (entry error on cooler/bottle times FWGEQUIPRinse2 time = 1434 per COC) All VOA in coolers

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

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TestAmerica Laboratory location: _____

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	E Corbin	M. Loeb	
Address: 1800 Carillon Blvd	Telephone: 513 825 7500	Telephone:	Telephone: 330 497 9396	____ of ____ COCs
City/State/Zip: Cincinnati OH 45240	Email: JMiller@eqm.com			
Phone: 513 825 7500				
Project Name: RVAAP OH	Method of Shipment/Carrier: ~~7-13-10~~ Fed EX LAB PICK UP			
Project Number: 030240.0006	Shipping/Tracking No:			
PO# 167126				

TAT if different from below _____

☒ 3 weeks
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAsf/NaOH	Unpres	Other:	Analyses: NDC 8260	BCC 8270	Test 8081	PCB 8082	EXPL 8330	Propellants 8095	Metals 6010/7470		Sample Specific Notes / Special Instructions:
FWGTeam3 - Trip	7-13-10	1000		X						2					X								
FWGLL12MW-245C-1563-GW		1210		X				1		3	1		9		X	X	X	X	X	X	X		A385
FWGLL12MW-245C-1563-GF		1210		X					1													X	A385
FWGLL12MW-DUP5-1570-GW		1300		X				1		3	1		9		X	X	X	X	X	X	X		1415
FWGLL12MW-DUP5-1570-GF		1300		X					1													X	1415
FWGLL12MW-242C-1560-GW		1700		X				1		3	1		9		X	X	X	X	X	X	X		1810
FWGLL12MW-242C-1560-GF	↓	1700		X					1													X	1810

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments: * ALL VOAS IN COOLER 1810 *
Temps may not meet requirements if Collection time is close to lab pickup time

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	7/12/10 18:30	R Cole	Test America	7/12/10 1830
Relinquished by: R Cole	Company: Test America	Date/Time: 7/12/10 1915	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 7/13/10 0730

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TAL-0018 (1008)

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number: ADG130410**
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 7/13/10 Opened on 7/13/10
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 14 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? ~~Yes~~ 7/13/10 ~~☒~~ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:
Temp 3 had 7/13/10 as the collection date. Will log 7/12/10.

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 051010-HNO_3; Sulfuric Acid Lot# 121709-H_2SO_4; Sodium Hydroxide Lot# 100108 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-$(CH_3COO)_2ZN$/NaOH.* What time was preserved added to sample(s)?

Client ID	pH	Date	Initials
113C-1548	<2 <2 >12	7/13/10	
188C-1558	<2 <2 >12		
088C-1546	<2 <2 <2 <2 <2 <2 >12 >12 >12		
183C-1553	<2 <2 >12		
265C-1536	<2 >12		
DUP2-1567	<2 >12		
Equip Rinse 2	<2 <2 >12		
153C-1550	<2 <2 >12		

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A06130410
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
L415	3.4	IR	Ice	
L810	2.7	"	"	

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1546-1551	<2 <2 >12	7/13/10	9
2456-1563	<2 >12 <2		
DUP5-1570	<2 >12 <2		
2426-1560	<2 <2 >12		

Cooler #	Temp. °C	Method	Coolant
EC1	2.7	IR	ICE
EC9	3.1		
A192	4.6		
33UW	4.5		
M23	4.4		
A5D3	3.1		
5TL-1	3.1		
Bill	4.3		
E115	2.6		
E-21	3.2		
A291	4.4		
A385	3.1		

Discrepancies Cont'd:

8330 EXPLOSIVES DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

SDG: A0G130410 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.6 and 4.6 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓				LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?		✓		LC10- the following outliers were noted: • The MRL analyzed 8/1/10 @1954 recovered above control limits with a %D of 39% for PETN and on 8/2/10 @ 0126 the %D was 40%. No qualifications were required as there were no detected PETN concentrations in the associated field samples.	LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			LC10 7/21/10, 7/30/10 , LC9 7/21/10	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve).			✓		STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			LC10 7/21/10@0443, 7/31/10 @0246 LC9 7/22/10 @0641- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical	✓				STL SOP Section 10.9

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

SDG: A0G130410 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
run?					
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓			LC10- The CCV analyzed 7/28/10 @2118 recovered above limits for nitrobenzene with a %D of 22%. The CCV analyzed 7/29/10 @0610 recovered above limits for nitrobenzene with a %D of 21%. No qualifications were made as the CCV did not bracket any detected nitrobenzene concentrations. LC9- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓			Due to excessive particulates, samples FWGLL12mw-113c-1548-GW, FWGLL12mw-154c-1551-GW, FWGLL12mw-245c-1563-GW, FWGLL12mw-DUP5-1570-GW and FWGLL12mw-242c-1560-GW required filtration. A filter blank was prepared and analyzed with no detected concentrations reported.	LCG Attachment A Section 5.6
16. Were target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR.	LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓				
18. Were target analytes in the field blank analyses < ½ the MRL?	✓			Checked by ADR. Tetryl was detected in FWGEQUIPRinse2-1579-GW at 0.099ug/L. The tetryl result for sample FWGLL12mw-242c-1560-GW was qualified, "B" as the result was <5x the equipment rinse contamination.	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?		✓		Sample FWGLL12mw-DUP5-1570-GW was the field duplicate for FWGLL12mw-245c-1563-GW. The duplicate RPD was above control limits for 1, 3,5-trinitrobenzene at 200. The 1, 3,5-trinitrobenzene result for FWGLL12mw-245c-1563-GW was qualified as estimated, "J".	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Were the RPDs ≤ 40%?			✓	No concentrations were reported above the RL.	LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

SDG: A0G130410 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR.	QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments: Only LC10 was evaluated as there were no reported concentrations above the RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GW

HPLC

Lot-Sample #...: A0G130410-001 **Work Order #...:** L34AN1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 12:07 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197127
Dilution Factor: 1 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.088
3-Nitrotoluene	ND	0.50	ug/L	0.057
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.65	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GW

HPLC

Lot-Sample #...: A0G130410-002 **Work Order #...:** L34AP1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 13:31 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197127
Dilution Factor: 0.96 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	**0.052 J**	**0.096**	**ug/L**	**0.035**
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	**0.067 J**	**0.096**	**ug/L**	**0.035**
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GW

HPLC

Lot-Sample #...: A0G130410-003 **Work Order #...:** L34AQ1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197127
Dilution Factor: 0.95 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.095	ug/L	0.028
1,3-Dinitrobenzene	ND	0.095	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.095	ug/L	0.095
2,4,6-Trinitrotoluene	ND	0.095	ug/L	0.048
2,4-Dinitrotoluene	ND	0.095	ug/L	0.048
2,6-Dinitrotoluene	ND	0.095	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.054
4-Amino-2,6-dinitrotoluene	ND	0.095	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.095	ug/L	0.034
Nitrobenzene	ND	0.095	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.31
RDX	ND	0.095	ug/L	0.034
PETN	ND	0.62	ug/L	0.28
Tetryl	ND	0.095	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GW

HPLC

Lot-Sample #...: A0G130410-004 **Work Order #...:** L34AT1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 17:29 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0197127
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	105	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GW

HPLC

Lot-Sample #...: A0G130410-005 **Work Order #...:** L34AV1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 12:50 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0197127
Dilution Factor: 1.06 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.032
1,3-Dinitrobenzene	ND	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.053
2,4-Dinitrotoluene	ND	0.11	ug/L	0.053
2,6-Dinitrotoluene	ND	0.11	ug/L	0.053
2-Nitrotoluene	ND	0.53	ug/L	0.093
3-Nitrotoluene	ND	0.53	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.053
4-Nitrotoluene	ND	0.53	ug/L	0.093
HMX	ND	0.11	ug/L	0.038
Nitrobenzene	ND	0.11	ug/L	0.053
Nitroglycerin	ND	0.69	ug/L	0.35
RDX	ND	0.11	ug/L	0.038
PETN	ND	0.69	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GW

HPLC

Lot-Sample #...: A0G130410-006 **Work Order #...:** L34AW1AA **Matrix.....:** WG
Date Sampled...: 07/12/10 14:04 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0197127
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

HPLC

Lot-Sample #...: A0G130410-007 **Work Order #...:** L34AX1AA **Matrix.....:** WQ
Date Sampled...: 07/12/10 14:34 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0197127
Dilution Factor: 1 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.088
3-Nitrotoluene	ND	0.50	ug/L	0.057
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.65	ug/L	0.30
Tetryl	**0.099 J**	**0.10**	**ug/L**	**0.050**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GW

HPLC

Lot-Sample #...: A0G130410-008 **Work Order #...:** L34A11AA **Matrix.....:** WG
Date Sampled...: 07/12/10 15:04 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0197127
Dilution Factor: 1.18 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.035
1,3-Dinitrobenzene	ND	0.12	ug/L	0.059
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.12
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.059
2,4-Dinitrotoluene	ND	0.12	ug/L	0.059
2,6-Dinitrotoluene	ND	0.12	ug/L	0.059
2-Nitrotoluene	ND	0.59	ug/L	0.10
3-Nitrotoluene	ND	0.59	ug/L	0.067
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.059
4-Nitrotoluene	ND	0.59	ug/L	0.10
HMX	**0.055 J**	**0.12**	**ug/L**	**0.042**
Nitrobenzene	ND	0.12	ug/L	0.059
Nitroglycerin	ND	0.77	ug/L	0.39
RDX	ND	0.12	ug/L	0.042
PETN	ND	0.77	ug/L	0.35
Tetryl	ND	0.12	ug/L	0.059

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GW

HPLC

Lot-Sample #...: A0G130410-009 **Work Order #...:** L34A21AA **Matrix.....:** WG
Date Sampled...: 07/12/10 16:44 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0197127
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GW

HPLC

Lot-Sample #...: A0G130410-010 **Work Order #...:** L34A31AA **Matrix.....:** WG
Date Sampled...: 07/12/10 12:10 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0197127
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.057 J**	**0.097**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GW

HPLC

Lot-Sample #...: A0G130410-011 **Work Order #...:** L34A41AA **Matrix.....:** WG
Date Sampled...: 07/12/10 13:00 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0197127
Dilution Factor: 0.96 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GW

HPLC

Lot-Sample #...: A0G130410-012 **Work Order #...:** L34A61AA **Matrix.....:** WG
Date Sampled...: 07/12/10 17:00 **Date Received..:** 07/13/10
Prep Date.....: 07/16/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0197127
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	**0.057 J**	**0.097**	**ug/L**	**0.048**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G130410 **Work Order #...:** L39KJ1AA **Matrix.....:** WATER
MB Lot-Sample #: G0G160000-127

Prep Date.....: 07/16/10
Analysis Date..: 07/29/10 **Prep Batch #...:** 0197127
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	ND	0.10	ug/L	SW846 8330
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G130410 **Work Order #...:** L39KJ1AD **Matrix.....:** WATER
MB Lot-Sample #: G0G160000-127

Prep Date.....: 07/16/10
Analysis Date..: 07/29/10 **Prep Batch #...:** 0197127
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	ND	0.10	ug/L	SW846 8330
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G130410 **Work Order #...:** L39KJ1AC **Matrix.....:** WATER
LCS Lot-Sample#: G0G160000-127
Prep Date.....: 07/16/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197127
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	**101**	**(53 - 135)**	**SW846 8330**
1,3-Dinitrobenzene	**105**	**(54 - 120)**	**SW846 8330**
2-Amino-4,6-dinitrotoluene	**102**	**(53 - 120)**	**SW846 8330**
2,4,6-Trinitrotoluene	**100**	**(37 - 120)**	**SW846 8330**
2,4-Dinitrotoluene	**102**	**(58 - 136)**	**SW846 8330**
2,6-Dinitrotoluene	**102**	**(52 - 144)**	**SW846 8330**
2-Nitrotoluene	**97**	**(52 - 120)**	**SW846 8330**
3-Nitrotoluene	**96**	**(48 - 136)**	**SW846 8330**
4-Amino-2,6-dinitrotoluene	**97**	**(58 - 159)**	**SW846 8330**
4-Nitrotoluene	**98**	**(46 - 136)**	**SW846 8330**
HMX	**95**	**(45 - 140)**	**SW846 8330**
Nitrobenzene	**118**	**(49 - 120)**	**SW846 8330**
Nitroglycerin	**99**	**(60 - 120)**	**SW846 8330**
RDX	**108**	**(39 - 120)**	**SW846 8330**
PETN	**96**	**(60 - 120)**	**SW846 8330**
Tetryl	**102**	**(30 - 120)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G130410 Work Order #...: L34AQ1AC-MS Matrix.....: WG
MS Lot-Sample #: A0G130410-003 L34AQ1AD-MSD
Date Sampled...: 07/12/10 14:39 Date Received..: 07/13/10
Prep Date.....: 07/16/10 Analysis Date..: 07/29/10
Prep Batch #...: 0197127
Dilution Factor: 0.96

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	100	(50 - 150)			SW846 8330
	104	(50 - 150)	5.9	(0-50)	SW846 8330
1,3-Dinitrobenzene	104	(50 - 150)			SW846 8330
	107	(50 - 150)	3.9	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	104	(50 - 150)			SW846 8330
	105	(50 - 150)	3.1	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	100	(50 - 150)			SW846 8330
	102	(50 - 150)	3.7	(0-50)	SW846 8330
2,4-Dinitrotoluene	98	(50 - 150)			SW846 8330
	100	(50 - 150)	3.9	(0-50)	SW846 8330
2,6-Dinitrotoluene	97	(50 - 150)			SW846 8330
	98	(50 - 150)	3.2	(0-50)	SW846 8330
2-Nitrotoluene	100	(50 - 150)			SW846 8330
	98	(50 - 150)	0.10	(0-50)	SW846 8330
3-Nitrotoluene	98	(50 - 150)			SW846 8330
	101	(50 - 150)	4.7	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	99	(50 - 150)			SW846 8330
	100	(50 - 150)	3.5	(0-50)	SW846 8330
4-Nitrotoluene	101	(50 - 150)			SW846 8330
	99	(50 - 150)	0.24	(0-50)	SW846 8330
HMX	93	(50 - 150)			SW846 8330
	97	(50 - 150)	6.2	(0-50)	SW846 8330
Nitrobenzene	117	(50 - 150)			SW846 8330
	101	(50 - 150)	13	(0-50)	SW846 8330
Nitroglycerin	99	(50 - 150)			SW846 8330
	102	(50 - 150)	4.6	(0-50)	SW846 8330
RDX	102	(50 - 150)			SW846 8330
	96	(50 - 150)	4.3	(0-50)	SW846 8330
PETN	96	(50 - 150)			SW846 8330
	102	(50 - 150)	8.4	(0-50)	SW846 8330
Tetryl	102	(50 - 150)			SW846 8330
	98	(50 - 150)	1.7	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G130410 **Work Order #...:** L34AQ1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G130410-003 L34AQ1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)
	99	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC10 Batch ID: 07282010
Method : Method 8330 Test : SOP SAC-LC-0009
ICAL Date: See Calibration Report

Date	Time	Operator	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
28-JUL-2010	10:58	RN	8330 PRIMER	A-000001.	0 g	0 mL	1	
28-JUL-2010	11:46	RN	8330 PRIMER	A-000002.	0 g	0 mL	1	
28-JUL-2010	12:33	RN	STD_06 10GCSV0217 8330 200-500	A-000003.	0 g	0 mL	1	
28-JUL-2010	13:23	RN	STD_MRL 10GCSV0309 8330 5-20ng	A-000004.	0 g	0 mL	1	
28-JUL-2010	14:10	RN	L31QH1AA 0196200 A0G090535-5 1	A-000005.	1023.9 mL	20 mL	1	
28-JUL-2010	14:58	RN	L31QK1AA 0196200 A0G090535-6 1	A-000006.	1010.86 mL	20 mL	1	
28-JUL-2010	15:46	RN	L31QM1AA 0196200 A0G090535-7 1	A-000007.	1015.22 mL	20 mL	1	
28-JUL-2010	16:33	RN	L31QN1AA 0196200 A0G090535-8 1	A-000008.	1006.82 mL	20 mL	1	
28-JUL-2010	17:21	RN	L31QP1AA 0196200 A0G090535-9 1	A-000009.	983.29 mL	20 mL	1	
28-JUL-2010	18:08	RN	L31QT1AA 0196200 A0G090535-10	A-000010.	948.56 mL	20 mL	1	
28-JUL-2010	18:56	RN	L31QV1AA 0196200 A0G090535-11	A-000011.	964.86 mL	20 mL	1	
28-JUL-2010	19:43	RN	L31QX1AA 0196200 A0G090535-12	A-000012.	993.86 mL	20 mL	1	
28-JUL-2010	20:31	RN	L31Q21AA 0196200 A0G090535-13	A-000013.	922.33 mL	20 mL	1	
28-JUL-2010	21:18	RN	STD_05 10GCSV0320 8330 100-250	A-000014.	0 g	0 mL	1	
28-JUL-2010	22:06	RN	STD_MRL 10GCSV0309 8330 5-20ng	A-000015.	0 g	0 mL	1	
28-JUL-2010	22:53	RN	L31Q41AA 0196200 A0G090535-14	A-000016.	942.66 mL	20 mL	1	
28-JUL-2010	23:41	RN	L31Q91AA 0196200 A0G090535-15	A-000017.	984.69 mL	20 mL	1	
29-JUL-2010	00:28	RN	L39KJ1AA 0197127 G0G160000-127	A-000018.	1000 mL	20 mL	1	
29-JUL-2010	01:16	RN	L39KJ1AD 0197127 G0G160000-127	A-000019.	1000 mL	20 mL	1	
29-JUL-2010	02:04	RN	L39KJ1AC 0197127 G0G160000-127	A-000020.	1000 mL	20 mL	1	
29-JUL-2010	02:51	RN	L34AN1AA 0197127 A0G130410-1 1	A-000021.	998.61 mL	20 mL	1	
29-JUL-2010	03:39	RN	L34AP1AA 0197127 A0G130410-2 1	A-000022.	1032.57 mL	20 mL	1	
29-JUL-2010	04:26	RN	L34AQ1AA 0197127 A0G130410-3 1	A-000023.	1048.81 mL	20 mL	1	
29-JUL-2010	05:14	RN	L34AQ1AC 0197127 A0G130410-3 S	A-000024.	1033.55 mL	20 mL	1	
29-JUL-2010	06:01	RN	STD_05 10GCSV0210 8330 100-250	A-000025.	0 g	0 mL	1	
29-JUL-2010	06:49	RN	STD_MRL 10GCSV0309 8330 5-20ng	A-000026.	0 g	0 mL	1	
29-JUL-2010	07:36	RN	L34AQ1AD 0197127 A0G130410-3 D	A-000027.	1014.87 mL	20 mL	1	

TestAmerica West Sacramento

A-000014.D

Chromatography Summary

Injection Date: 7/28/2010 21:18 **Operator:** RN

DataFile: LC10.I\07282010.B\A-000014.D **Vial Num:** 3

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_05 10GCSV0320 8330 100-250ng/mL**

Method File: LC10.I\07282010.B\8330AB.M

Start Cal Date: 7/21/2010 19:43 **End Cal Date:** 7/22/2010 1:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** CAL.SUB **SpikeList:** 0

Samp. Info: STD_05 10GCSV0320 8330 100-250ng/mL;2;

Misc. Info: ;5;;;;3;CAL.SUB;0,1;

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	17.41	4646	90.5100<	100	-9%	Acceptable		17.41	8734	89.9200	100	-10%	Acceptable		(±15)	
HMX	5.44	11931	93.4000<	100	-7%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.76	8370	98.0100<	100	-2%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	**8.94**	**21086**	**243.4000**	**200**	**22%**	**Fails**	NA				200	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	10.18	14989	95.6700<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.86	14778	96.6300<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	14.29	9764	104.0000<	100	4%	Acceptable	M				100	-100%	Fails		(±15)	45
Nitrobenzene	**14.38**	**9019**	**122.0000<**	**100**	**22%**	**Fails**	M	T and ND			100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	16.33	9255	96.1500<	100	-4%	Acceptable		MB 7/30/10			100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	16.86	7050	95.1300<	100	-5%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	17.87	7845	96.7300<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	19.38	5520	97.0800<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	20.11	8922	96.7100<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	23.20	3906	95.6300<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	25.04	4721	95.6400<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	26.88	4642	95.3700<	100	-5%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				**100**	**-100%**	**Fails**		15.35	6128	93.9700<	100	-6%	Acceptable		(±15)	45
PETN				**100**	**-100%**	**Fails**		30.04	3369	93.9800<	100	-6%	Acceptable		(±15)	45
3,5-Dinitroaniline	13.71	9727	95.8300<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				**100**	**-100%**	**Fails**					100	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

MB 7/30/10

TestAmerica West Sacramento

A-000025.D

Chromatography Summary

Injection Date: 7/29/2010 6:01 Operator: RN

DataFile: LC10 I\07282010.B\A-000025.D Vial Num: 4

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_05 10GCSV0210 8330 100-250ng/mL**

Method File: LC10.I\07282010.B\8330AB.M

Start Cal Date: 7/21/2010 19:43 End Cal Date: 7/22/2010 1:27

Matrix: NONE SubList: CAL.SUB SpikeList: 0

Samp. Info: STD_05 10GCSV0210 8330 100-250ng/mL,2,

Misc. Info: ;5;;;;3;CAL.SUB;0,1;

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	17.40	4598	89.5800<	100	-10%	Acceptable		17.39	8707	89.6400	100	-10%	Acceptable		(±15)	
HMX	5.44	11864	92.8800<	100	-7%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.75	8306	97.2600<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	8.93	20970	242.1000	200	21%	Fails NA					200	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	10.17	14933	95.3100<	100	-5%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.85	14715	96.2200<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	14.27	9728	103.6000<	100	4%	Acceptable	M				100	-100%	Fails		(±15)	45
Nitrobenzene	14.36	8961	121.2000<	100	21%	Fails	M				100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	16.32	9226	95.8500<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	16.84	7044	95.0500<	100	-5%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	17.85	7820	96.4200<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	19.36	5509	96.8900<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	20.09	8909	96.5700<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	23.17	3910	95.7300<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	25.00	4753	96.2900<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	26.83	4664	95.8200<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	Fails		15.33	6131	94.0200<	100	-6%	Acceptable		(±15)	45
PETN				100	-100%	Fails		29.96	3319	92.5800<	100	-7%	Acceptable		(±15)	45
3,5-Dinitroaniline	13.69	9698	95.5400<	100	-4%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails					100	-100%	Fails		(±15)	

M and MP 7/30/10

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

MP 7/30/10

Notes: M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

TestAmerica West Sacramento

A-000044.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 8/1/2010 19:54 Operator: RN
DataFile: LC10.I\07312010.B\A-000044.D Vial Num: 83
Instrument ID: LC10

Sample : **STD_MRL 10GCSV0213 8330 5ng/mL** Method File: LC10.I\07312010 B\8330AB.M
Start Cal Date: 7/30/2010 18:51 End Cal Date: 7/31/2010 0:23

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE SubList: CAL.SUB SpikeList: 0
Samp. Info: STD_MRL 10GCSV0213 8330 5ng/mL;2;
Misc. Info: ;1;;;;3;CAL.SUB;0;1;

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.24	268	5.0170<	5	0%	Acceptable		16.23	365	3.7020	5	-26%	Fails		(±15)	
HMX	5.31	681	5.4170<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
RDX	**7.46**	**565**	**6.0590<**	**5**	**21%**	**Fails** Pass					5	-100%	Fails		(±15)	45
Picric ACID	**8.55**	**913**	**10.1500**	**5**	**103%**	**Fails**		8.54	1348	9.8300<	5	97%	Fails		(±15)	
1,3,5-Trinitrobenzene	9.75	811	5.1680<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.23	820	5.2800<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.33	527	5.3590<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
Nitrobenzene	13.70	409	5.5080<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.36	529	5.3340<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.70	427	5.3410<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.67	439	5.2240<	5	4%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.07	314	5.3170<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.79	504	5.2780<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.62	232	5.4310<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.28	274	5.3080<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.92	267	5.2850<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
Nitroglycerin				**5**	**-100%**	**Fails**		14.36	370	5.5840<	5	12%	Acceptable		(±15)	45
PETN				**5**	**-100%**	**Fails**		27.43	255	6.9560<	5	39%	Fails M		(±15)	45
3,5-Dinitroaniline	12.95	567	5.4730<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				**5**	**-100%**	**Fails**					5	-100%	Fails		(±15)	

± see DCN# 07-01108-38
VM 8/24/10

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

M 8/3/10

8330MOD NITROGUANIDINE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

SDG: A0G130410 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.6 and 4.6 °C.	QAPP Table 4-2
3. Were holding times met?	✓			Checked by ADR.	QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			7/30/2010	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			Varian Star #1 ICAL: 4/20/10 primary column Stds: 20, 50, 100, 200, 500, 1000	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve)	✓			Linear fit used. No qualifications were made as r>0.995.	STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			4/21/10 @ 0143	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓				LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

SDG: A0G130410 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes reported in the method blank <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓				
18. Were target analytes reported in the field blank analyses < ½ the MRL?	✓				<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓				QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?			✓		LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

SDG: A0G130410 R0
Analysis: SW846 8330M Nitroguanadine

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0010 "Determination of Nitroguanidine Based on Method 8330, SW-846" April 2007, revision 2.0

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GW

Dissolved HPLC

Lot-Sample #...:	A0G130410-001	**Work Order #...:**	L34AN1AD	**Matrix.....:**	WG
Date Sampled...:	07/12/10 12:07	**Date Received..:**	07/13/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	08/02/10		
Prep Batch #...:	0196252				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GW

Dissolved HPLC

Lot-Sample #...:	A0G130410-002	**Work Order #...:**	L34AP1AD	**Matrix.....:**	WG
Date Sampled...:	07/12/10 13:31	**Date Received..:**	07/13/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	08/02/10		
Prep Batch #...:	0196252				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GW

Dissolved HPLC

Lot-Sample #...: A0G130410-003 **Work Order #...:** L34AQ1AH **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10
Prep Date.....: 07/15/10 **Analysis Date..:** 08/02/10
Prep Batch #...: 0196252
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GW

Dissolved HPLC

Lot-Sample #...: A0G130410-004 **Work Order #...:** L34AT1AD **Matrix.....:** WG
Date Sampled...: 07/12/10 17:29 **Date Received..:** 07/13/10
Prep Date.....: 07/15/10 **Analysis Date..:** 08/03/10
Prep Batch #...: 0196252
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GW

Dissolved HPLC

Lot-Sample #...: A0G130410-005 **Work Order #...:** L34AV1AD **Matrix.....:** WG
Date Sampled...: 07/12/10 12:50 **Date Received..:** 07/13/10
Prep Date.....: 07/15/10 **Analysis Date..:** 08/03/10
Prep Batch #...: 0196252
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GW

Dissolved HPLC

Lot-Sample #...:	A0G130410-006	**Work Order #...:**	L34AW1AD	**Matrix.....:**	WG
Date Sampled...:	07/12/10 14:04	**Date Received..:**	07/13/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	08/03/10		
Prep Batch #...:	0196252				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

Dissolved HPLC

Lot-Sample #...:	A0G130410-007	**Work Order #...:**	L34AX1AD	**Matrix.....:**	WQ
Date Sampled...:	07/12/10 14:34	**Date Received..:**	07/13/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	08/03/10		
Prep Batch #...:	0196252				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GW

Dissolved HPLC

Lot-Sample #...: A0G130410-008	**Work Order #...:** L34A11AD	**Matrix.....:** WG	
Date Sampled...: 07/12/10 15:04	**Date Received..:** 07/13/10		
Prep Date.....: 07/15/10	**Analysis Date..:** 08/03/10		
Prep Batch #...: 0196252			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GW

Dissolved HPLC

Lot-Sample #...: A0G130410-009 **Work Order #...:** L34A21AD **Matrix.....:** WG
Date Sampled...: 07/12/10 16:44 **Date Received..:** 07/13/10
Prep Date.....: 07/15/10 **Analysis Date..:** 08/03/10
Prep Batch #...: 0196252
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GW

Dissolved HPLC

Lot-Sample #...:	A0G130410-010	**Work Order #...:**	L34A31AD	**Matrix.....:**	WG
Date Sampled...:	07/12/10 12:10	**Date Received..:**	07/13/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	08/03/10		
Prep Batch #...:	0196252				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GW

Dissolved HPLC

Lot-Sample #...:	A0G130410-011	**Work Order #...:**	L34A41AD	**Matrix.....:**	WG
Date Sampled...:	07/12/10 13:00	**Date Received..:**	07/13/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	08/03/10		
Prep Batch #...:	0196252				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GW

Dissolved HPLC

Lot-Sample #...:	A0G130410-012	**Work Order #...:**	L34A61AD	**Matrix.....:**	WG
Date Sampled...:	07/12/10 17:00	**Date Received..:**	07/13/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	08/03/10		
Prep Batch #...:	0196252				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G130410 **Work Order #...:** L38QC1AA **Matrix.....:** WATER
MB Lot-Sample #: G0G150000-252

Prep Date.....: 07/15/10
Analysis Date..: 08/02/10 **Prep Batch #...:** 0196252
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitroguanidine	ND	20	ug/L	SW846 8330 (Modif

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G130410 **Work Order #...:** L38QC1AC **Matrix.....:** WATER
LCS Lot-Sample#: G0G150000-252
Prep Date.....: 07/15/10 **Analysis Date..:** 08/02/10
Prep Batch #...: 0196252
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	116	(73 - 117)	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G130410 **Work Order #...:** L34AQ1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G130410-003 L34AQ1AK-MSD
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10
Prep Date.....: 07/15/10 **Analysis Date..:** 08/03/10
Prep Batch #...: 0196252
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**114**	**(73 - 117)**			**SW846 8330 (Modified**
	114	**(73 - 117)**	**0.46**	**(0-15)**	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG:** A0G130410 Rev 0
Sample Event: July 2010 **Analysis:** TAL-SOP WS-WC-005 Nitrocellulose
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

Review Questions:	Yes	No	N/A	Comments	Qualifier
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 2.6 and 4.6 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3.7
7. Was Acetone used to extract the samples? Was the Acetone evaporated using Nitrogen?	✓				STL SOP Sections 11.4
8. Does the initial calibration curve consist of 5 concentration levels with the low standard near but > MDL?	✓			Instrument FS4; ICAL 7/22/10 Stds- 0, 0.05, 0.2, 0.4, 1, 2	STL SOP Section 10.2 R
9. Was the correlation coefficient >0.995?	✓				STL SOP Section 10.2
10. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D <30%?	✓				LCG Table 5 >30%=J
11. Was a second source verification (ICV) analyzed after the ICAL? Were all analytes 90-110%?	✓				STL SOP Section 9.8, 10.3, LCG >110%=J; 90-85%=J/UJ; <85%=J/R
12. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 9.8, LCG < 5x = U
13. Was a CCV run every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.4
14. Was the ICV and CCV a mid-level standard from the initial calibration curve?	✓				STL SOP Section 10.3.1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

SDG: A0G130410 Rev 0
Analysis: TAL-SOP WS-WC-005 Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
15. Were all CCV calibration analytes within 90-110%?	✓				STL SOP Section 10.4, LCG >110%=J; 85-90%=J/UJ; <85%=J/R
16. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 10.4, LCG < 5x = U
17. Was the Nitrocellulose assay available and/or analyzed to be within 10%?	✓				STL SOP Section 7.14.1 R
18. Was a method blank prepared and analyzed with each batch?	✓				
19. Were target analytes reported in the method blank <1/2 the MRL?	✓			ADR checked section.	STL SOP Section 9.4, LCG <5x=B
20. Was a field blank collected and analyzed?	✓				
21. Were target analytes reported in the field blank analyses <1/2 the MRL?	✓				<5x=B
22. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			ADR checked section.	QAPP Table 3-2 RPD > 30% = J
23. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within lab's in-house limits% (26-144%)?	✓				>UL%=J; 50-LL%=J/UJ; <50%=J/R
24. Was a MS/MSD pair prepared with each batch?	✓				
25. Was the MS/MSD parent a Ravenna sample?	✓				
26. Were MS/MSD recoveries 26-144% and RPD ≤20?	✓			ADR checked section.	Method EPA 353.2 Section 9.4.2 >UL%=J; <LL%=J/UJ; RPD>20%=J/UJ
27. Were sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.1, 2010

SDG: A0G130410 Rev 0
Analysis: TAL-SOP WS-WC-005 Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.		✓			

References: *STL SOP SAC-WC-0050 "Preparation and Analysis of Nitrocellulose in Aqueous and Soil/Sediment Samples by Colorimetric Autoanalyzer", Jan 2007, rev. 2.0*

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-113C-1548-GW

General Chemistry

Lot-Sample #...: A0G130410-001 **Work Order #...:** L34AN **Matrix.....:** WG
Date Sampled...: 07/12/10 12:07 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-188C-1558-GW

General Chemistry

Lot-Sample #...: A0G130410-002 **Work Order #...:** L34AP **Matrix.....:** WG
Date Sampled...: 07/12/10 13:31 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-088C-1546-GW

General Chemistry

Lot-Sample #...: A0G130410-003 Work Order #...: L34AQ Matrix.....: WG
Date Sampled...: 07/12/10 14:39 Date Received..: 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-183C-1553-GW

General Chemistry

Lot-Sample #...: A0G130410-004 **Work Order #...:** L34AT **Matrix.....:** WG
Date Sampled...: 07/12/10 17:29 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-265C-1536-GW

General Chemistry

Lot-Sample #...: A0G130410-005 **Work Order #...:** L34AV **Matrix.....:** WG
Date Sampled...: 07/12/10 12:50 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP2-1567-GW

General Chemistry

Lot-Sample #...: A0G130410-006 **Work Order #...:** L34AW **Matrix.....:** WG
Date Sampled...: 07/12/10 14:04 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1579-GW

General Chemistry

Lot-Sample #...: A0G130410-007 Work Order #...: L34AX Matrix.....: WQ
Date Sampled...: 07/12/10 14:34 Date Received..: 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-153C-1550-GW

General Chemistry

Lot-Sample #...: A0G130410-008 **Work Order #...:** L34A1 **Matrix.....:** WG
Date Sampled...: 07/12/10 15:04 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-154C-1551-GW

General Chemistry

Lot-Sample #...: A0G130410-009 **Work Order #...:** L34A2 **Matrix.....:** WG
Date Sampled...: 07/12/10 16:44 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-245C-1563-GW

General Chemistry

Lot-Sample #...: A0G130410-010 **Work Order #...:** L34A3 **Matrix.....:** WG
Date Sampled...: 07/12/10 12:10 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP5-1570-GW

General Chemistry

Lot-Sample #...: A0G130410-011 **Work Order #...:** L34A4 **Matrix.....:** WG
Date Sampled...: 07/12/10 13:00 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-242C-1560-GW

General Chemistry

Lot-Sample #...: A0G130410-012 **Work Order #...:** L34A6 **Matrix.....:** WG
Date Sampled...: 07/12/10 17:00 **Date Received..:** 07/13/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248

Dilution Factor: 1 MDL.....: 0.12

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0G130410 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: L4GHN1AA		MB Lot-Sample #: G0G210000-248		
	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/21-07/22/10	0202248
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G130410 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: L4GHN1AC	LCS Lot-Sample#: G0G210000-248		
	82	(26 - 144)	TAL-SOP WS-WC-005	07/21-07/22/10	0202248
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G130410 **Matrix.....:** WG
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: L34AQ1AF-MS/L34AQ1AG-MSD				MS Lot-Sample #: A0G130410-003	
	83	(26 - 144)			TAL-SOP WS-WC-005	07/21-07/22/10	0202248
	66	(26 - 144)	22	(0-45)	TAL-SOP WS-WC-005	07/21-07/22/10	0202248
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G130410										
8330	FWGEQUIPRINSE2-1579-GW	AQ	EB							
				TETRYL	0.10	0.099J		J	ug/L	L
8330	FWGLL12mw-153C-1550-GW	AQ	N							
				HMX	0.12	0.055J		J	ug/L	L
8330	FWGLL12mw-188C-1558-GW	AQ	N							
				HMX	0.096	0.052J		J	ug/L	L
				RDX	0.096	0.067J		J	ug/L	L
8330	FWGLL12mw-242C-1560-GW	AQ	N							
				TETRYL	0.097	0.057J		JB	ug/L	L,N
8330	FWGLL12mw-245C-1563-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.097	0.057J		J	ug/L	L,P

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE2-1579-GW **Lab Report Batch :** A0G130410 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G130410007

Reviewed By / Date : ASD 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1**															
TETRYL	0.099		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-153C-1550-GW **Lab Report Batch :** A0G130410 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G130410008

Reviewed By / Date : ASD 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.18**															
HMX	0.055		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-188C-1558-GW **Lab Report Batch :** A0G130410 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G130410002

Reviewed By / Date : ASD 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.96**															
HMX	0.052		ug/L	J	YES	J								J							L
RDX	0.067		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-242C-1560-GW **Lab Report Batch :** A0G130410 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G130410012

Reviewed By / Date : ASD 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330																**Dilution: 0.97**					
TETRYL	0.057		ug/L	J	YES	UJ JB								J		JB					L,N

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW 11-7-07

ADR 8.1 Report Date: 9/1/2010 17:02

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-245C-1563-GW **Lab Report Batch :** A0G130410 **Lab ID :** TALCAN

Sample Date : 07/12/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G130410010

Reviewed By / Date : ASD 9/1/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.97**															
1,3,5-Trinitrobenzene	0.057		ug/L	J	YES	J								J							L,P

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW 11-7-07

ADR 8.1 Report Date: 9/1/2010 17:02

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G130410 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE2-1579	A0G130410007	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL12mw-088C-1546-	A0G130410003	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL12mw-113C-1548-	A0G130410001	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL12mw-153C-1550-	A0G130410008	8330	AQ	2,4-Dinitrotoluene	U	0.12	0.12	ug/L
				2,6-Dinitrotoluene	U	0.12	0.12	ug/L
				2-Nitrotoluene	U	0.59	0.24	ug/L
				3-Nitrotoluene	U	0.59	0.24	ug/L
				4-Nitrotoluene	U	0.59	0.24	ug/L
FWGLL12mw-154C-1551-	A0G130410009	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL12mw-183C-1553-	A0G130410004	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL12mw-188C-1558-	A0G130410002	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL12mw-242C-1560-	A0G130410012	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL12mw-245C-1563-	A0G130410010	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G130410 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGLL12mw-245C-1563-	A0G130410010	8330	AQ	3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL12mw-DUP5-1570	A0G130410011	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL2mw-265C-1536-G	A0G130410005	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.53	0.21	ug/L
				3-Nitrotoluene	U	0.53	0.21	ug/L
				4-Nitrotoluene	U	0.53	0.21	ug/L
FWGLL2mw-DUP2-1567-	A0G130410006	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G130410 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE2-1579	A0G130410007	8330	AQ	TETRYL	J	0.099	0.10	ug/L
FWGLL12mw-153C-1550-	A0G130410008			HMX	J	0.055	0.12	ug/L
FWGLL12mw-188C-1558-	A0G130410002			HMX	J	0.052	0.096	ug/L
				RDX	J	0.067	0.096	ug/L
FWGLL12mw-242C-1560-	A0G130410012			TETRYL	J	0.057	0.097	ug/L
FWGLL12mw-245C-1563-	A0G130410010			1,3,5-Trinitrobenzene	J	0.057	0.097	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A0G130410 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
8330	AQ	1,3,5-Trinitrobenzene	FWGLL12mw-245	DL	0.057	J	FWGLL12mw-DU	DL	0.096	U	200.0	30	ug/L

Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.

Project Number and Name: ***30240.0006 - RVAAP (OH)***

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0G130410
Lab ID: TALCAN
Method/Preparation Batch : 0197127 / 0197127
Analysis Date : 08/01/2010
Client Sample ID : FWGEQUIPRINSE2-1579-GW
Preparation Date : 07/16/2010
Lab Sample ID : A0G130410007
Preparation Type : 3535

Analysis Method : 8330

TETRYL	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.099	0.10	ug/L	J	

TETRYL was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL12mw-242C-1560-G	A0G130410012	0.97	0.057	J	ug/L

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 26, 2010
STL Sample Delivery Group: A0G140402 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 13, 2010 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0G140402.

Field Sample ID	Analytes	Method
FWGLL12mw-128c-1549-GW	VOCs	SW846 8260B
FWGLL12mw-243c-1561-GW	SVOCs	SW846 8270C
FWGLL12mw-187c-1557-GW	Pesticides	SW846 8081A
FWGLL12mw-244c-1562-GW	PCBs	SW846 8082
FWGLL12mw-186c-1556-GW	Cyanide	SW846 9012A
FWGLL12mw-189c-1559-GW	Nitrate/Nitrite	353.2
FWGSCFmw-003-1517-GW		
FWGLL12mw-182c-1552-GW		
FWGLL12mw-107c-1547-GW		
FWGLL12mw-DUP4-1569-GW		
FWGLL12mw-246c-1564-GW		
FWGLL12mw-184c-1554-GW		
FWGLL12mw-185c-1555-GW		
FWGEQUIPRinse3-1580-GW		
FWGEQUIPRinse3-1580-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL12mw-128c-1549-GF	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGLL12mw-243c-1561-GF		
FWGLL12mw-187c-1557-GF		
FWGLL12mw-244c-1562-GF		
FWGLL12mw-186c-1556-GF		
FWGLL12mw-189c-1559-GF		
FWGSCFmw-003-1517-GF		
FWGLL12mw-182c-1552-GF		
FWGLL12mw-107c-1547-GF		
FWGLL12mw-DUP4-1569-GF		
FWGLL12mw-246c-1564-GF		
FWGLL12mw-184c-1554-GF		
FWGLL12mw-185c-1555-GW		
FWGTEAM1-Trip	VOCs	SW846 8260B
FWGTEAM3-Trip		
FWGTEAM2-Trip		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004*, Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The cooler temperatures were documented as being received from 2.6°C – 4.6°C.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 98.2%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 26, 2010
STL Sample Delivery Group: A0G140402 **Revision:** 0

VOAs - 8260B

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- CCV criteria
- Initial Calibration Criteria including SPCC and CCC compounds
- Internal standard area counts and retention times
- MDL verification criteria
- Surrogate recoveries
- Field duplicate RPD criteria
- Matrix Spike Recovery Criteria and RPD

QC/MRL

- The opening MRL check analyzed 7/22/10 at 1100 had methylene chloride recover above limits at 155%, acetone at 152%, 2-butanone at 140% and bromoform at 162%.
- The closing MRL check analyzed 7/22/10 at 2024 had methylene chloride recover above limits at 165%, chloroethane at 145% and bromoform at 154%.
- The opening MRL check analyzed 7/23/10 at 1226 had methylene chloride recover above limits at 185%, chloroethane at 140%, bromomethane at 140% and bromoform at 167%.
- The closing MRL check analyzed 7/23/10 at 2141 had 2-butanone recover above limits at 140%, acetone at 151%, chloroethane at 142% and bromoform at 154%.

The acetone result for the FWGTEAM1-Trip and the 2-butanone result for FWGLL12mw-243c-1561-GW were qualified as estimated, "J". The acetone results for the trip blanks and FWGSCFmw-003-1517-GW and the 2-butanone and acetone results for FWGLL12mw-244c-1562-GW and FWGEQUIPRinse3-1580-GW were qualified as estimated, "J".

Blanks

Methylene chloride was detected in the method blank (batch 0204233) at 0.76ug/L. Sample FWGEQUIPRinse3-1580-GW was qualified, "B". Methylene chloride was also detected in the method blank (batch 0203119) at 0.54ug/L, however no qualifications were made as there were no detected methylene chloride results associated with the blank.

- FWGEQUIPRinse3-1580-GW had 2-butanone detected at 15ug/L, acetone at 9.7ug/L and methylene chloride at 1.5ug/L.
- The trip blanks had acetone contamination detected from 1.5- 1.7ug/L.

The acetone results for samples FWGEQUIPRinse3-1580-GW, FWGSCFmw-003-1517-GW and FWGLL12mw-244-1562-GW were qualified, "B" as the results were <10x trip blank contamination and or equipment blank contamination. The 2-butanone results for samples FWGLL12mw-243-1561-GW and FWGLL12mw-244-1562-GW were qualified, "B" as the results were <10x equipment blank contamination. As there were no detected concentrations of the methylene chloride, no additional qualifications were made.

LCS Recovery

Carbon disulfide recovered above control limits in the LCS/LCD for batch 0203119 at 128% and 125%, however no qualifications were made as there were no detected concentrations of these analytes in the reported samples.

SVOCs- 8270C

The following QC criteria were reviewed with acceptable results:

- Preservation, holding time and sample handling
- Tuning criteria
- Initial Calibration criteria including CCC and SPCC compounds
- ICV/ CCV criteria
- MDL Level Verification
- Internal standard area counts and retention times
- Field duplicate RPD
- Surrogate Recovery

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 26, 2010
STL Sample Delivery Group: A0G140402 **Revision:** 0

MRL Recovery Criteria
Hexachlorocyclopentadiene recovered below control limits at 30.88%, 4,6-dinitro-2-methylphenol at 25%, 2,4-dinitrophenol at 9.5% and pentachlorophenol at 47% in the MRL analyzed 7/27/10 at 1753. An MDL check was analyzed with acceptable results for hexachlorocyclopentadiene and results were qualified as estimated, "J/UJ". The MDL check did not recover for 4,6-dinitro-2-methylphenol, 2,4-dinitrophenol or pentachlorophenol. The results for these targets were qualified, as unusable, "R".

Blanks

- bis(2-Ethylhexyl) phthalate was detected in the method blank at 2.3ug/L.

Samples with detected concentrations of bis(2-ethylhexyl) phthalate <5x contamination were qualified, "B". See Appendix 1 for list of impacted samples.

- bis(2-ethylhexyl)phthalate was detected in FWGEQUIPRinse3-1580-GW at 8.5ug/L and di-n-butyl phthalate at 0.83ug/L.

Samples with detected concentrations of bis(2-ethylhexyl) phthalate and di-n-butyl phthalate <5x contamination were qualified, "B". See Appendix 1 for list of impacted samples.

LCS Recovery
The LCS recovered below control limits for 2,4-dinitrophenol at 23% and 9.4% for benzoic acid. The 2,4-dinitrophenol and benzoic acid results were qualified as estimated, "J/UJ".

Matrix Spike Recovery
Samples FWGLL12mw-128c-1549-GW and FWGSCFmw-003-1517-GW were the parent MS/MSD samples from this SDG. Several MS/MSD outliers were noted.
For the FWGLL12mw-128c-1549-GW parent:

- The MS and MSD recovered below control limits for 3,3'-dichorobenzidine at 33 and 37%.
- Hexachlorocyclopentadiene recovered below control limits at 41% in the MS. Bis(2-Ethylhexyl)phthalate recovered above control limits in the MSD at 169% with an RPD of 65%.
- The MS/MSD RPD recovered above control limits for benzo(a)anthracene at 21%, benzo(k)fluoranthene at 26%, hexachlorobenzene and hexachloroethane at 22%, hexachlorobutadiene at 32% and hexachlorocyclopentadiene at 33%.

No qualifications were made for these outliers as the associated LCS recovered within limits.

For the FWGSCFmw-003-1517-GW parent:

- The MS and MSD recovered below control limits for 2,4-dinitrophenol at 35 and 42% and for benzoic acid at 22 and 31%.
- Bis(2-Etheylhexyl)phthalate recovered above control limits in the MSD at 188% with an RPD of 68%.
- The MS/MSD RPD recovered above control limits for benzoic acid at 34%.

The 2,4-dinitrophenol and benzoic acid results were qualified as estimated, "UJ". No additional qualifications were made for the bis(2-Ethylhexyl)phthalate outlier as the associated LCS recovered within limits

Pesticides- 8081A
The following QC criteria were reviewed with acceptable results:

- Preservation, holding time and sample handling
- Initial Calibration criteria
- DDT and Endrin breakdown criteria
- Retention time criteria
- ICV criteria
- CCV Criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS Recoveries
- Field Duplicate Criteria
- MDL verification criteria
- MRL verification criteria
- Matrix Spike Recovery

Site: Ravenna Army Ammunition Plant
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Surrogate Recoveries
The surrogate, DCB, recovered below control limits in sample FWGLL12mw-107c-1547-GW at 49%, FWGLL12mw-128c-1549-GW at 30%, FWGLL12mw-182c-1552-GW at 49%, FWGLL12mw-185c-1555-GW at 38%, FWGLL12mw-186c-1556-GW at 40%, FWGLL12mw-189c-1559-GW at 31%, FWGLL12mw-243c-1561-GW at 31% and FWGLL12mw-244c-1562-GW at 22%. The associated results were qualified as estimated, "J/UJ".

PCBs- 8082
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MDL and MRL verification criteria
- ICV/ CCV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS/ LCSD percent recoveries and RPD value criteria
- Second Column confirmation criteria
- Field Duplicate RPD criteria

Matrix Spike Criteria
The MS for Aroclor 1260 recovered below limits at 37%. The Aroclor 1016 MS/MSD RPD was above limits at 24% and 53% for Aroclor 1260. No qualifications were made as the LCS recovered within limits.

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in sample FWGLL12mw-128c-1549-GW at 40%, FWGLL12mw-189c-1559-GW at 36%, FWGLL12mw-243c-1561-GW at 33% and FWGLL12mw-244c-1562-GW at 29%. The associated results were qualified as estimated, "UJ".

Metals - 6010B
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV criteria
- Interference Check Sample (ICSA/ICSAB) criteria
- LCS recovery criteria
- MS/MSD recovery criteria
- MDL Verification criteria
- MRL verification criteria
- Field Duplicate RPD

Blanks

- The ICB analyzed 7/15/10 had detected potassium at 152ug/L. No qualifications were made as there were no detected potassium concentrations <5x contamination.
- The CCBs analyzed 7/15/10 had detected potassium from 159ug/L to 164ug/L No qualifications were made as there were no detected potassium concentrations <5x contamination.

No qualifications were made for ICP results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

CCV Recovery
The CCV analyzed 7/15/2010 at 2112 had a vanadium recovery below control limits at 111%. No qualifications were made as there were no reported vanadium results for the bracketed samples.

Serial Dilution
The serial dilution %D for potassium analyzed on sample FWGLL12mw-128C-1549-GF was above control limits at 10.5% and at 15.9% for iron. All detected iron and potassium results were qualified as estimated, "J".

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 26, 2010
STL Sample Delivery Group: A0G140402 **Revision:** 0

Metals - 6020
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Internal standard and tune criteria
- Initial Calibration criteria
- ICV criteria
- MDL Verification Data
- MRL verification criteria
- Interference Check Sample (ICSA/ICSAB) criteria
- LCS Recovery Criteria
- MS recovery criteria
- Field Duplicate RPD

Blanks

- The ICB analyzed 7/30/10 had thallium detected at 0.23ug/L. The thallium results for samples FWGLL12mw-128c-1549-GF, FWGLL12mw-243c-1561-GF, FWGLL12mw-187c-1557-GF and FWGLL12mw-244c-1562-GF were <5x the ICB contamination and were qualified, "U".
- The CCBs analyzed 7/30/2010 had beryllium detected from 0.017 to 0.02ug/L, cadmium at 0.012-0.028ug/L, iron from 3.5ug/L to 8.5ug/L and thallium from 0.24ug/L to 0.28ug/L. No additional thallium qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all bracketed detected contaminants were >5x the blank contamination.
- The CCBs analyzed 8/2/2010 had detected iron from 3.2 to 3.5ug/L. Contaminants in the calibration blanks did not require qualification of the data as all detected sample results >5x the blank contamination.

No qualifications were made for ICPMS results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

CCV Recovery
The CCVs analyzed 7/30/2010 at 1831 and at 2141 had recoveries above control limits for beryllium at 111%. No qualifications were made as there were no detected beryllium concentrations reported for the bracketed samples.

Lab Duplicate RPD
The lab duplicate RPD for zinc analyzed on sample FWGLL12mw-128C-1549-GF was above control limits at 39%. All detected zinc results were qualified as estimated, "J".

Mercury - 7470A
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- ICB /CCBs were free from contamination
- The method blank was free from contamination
- The equipment blank was free from contamination
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

No QC outliers were noted.

Cyanide- 9012
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination

- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria

Matrix spike recovery criteria
The MS analyzed on sample FWGLL12mw-128c-1549-GW recovered below control limits at 69%. The MS analyzed on sample FWGSCFmw-003-1517-GW recovered below control limits at 62%, with an RPD of 43%. The cyanide results were qualified as estimated, "J/UJ".

Nitrate/Nitrite- 353.2
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria

Blanks

- The closing CCB had a detected nitrate concentration of 0.0207mg/L. The nitrate/nitrite result for sample FWGLL12mw-243c-1561-GW was qualified, "U".
- Nitrate was detected in the method blank at 0.09mg/L. All nitrate results with the exception of samples FWGLL12mw-128c-1549-GW, FWGLL12mw-187c-1557-GW and FWGSCFmw-003c-1517-GW were qualified "U" as the detected concentrations were less than 5x blank contamination.

Matrix Spike
The matrix spike analyzed on sample FWGLL12mw-189c-1559-GW recovered above limits in the MS and MSD at 134% and 124%. Detected sample results associated with batch 0208347 were qualified as estimated, "J".

Data Reviewer:
Date: 8/27/10

2nd Level Data Reviewer: Erik Carlson
Date: 9/9/10

CASE NARRATIVE

A0G140402

The following report contains the analytical results for twenty-seven water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 030240.0006. The samples were received July 14, 2010, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 03, 2010. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 1.2 to 5.0° C.

GC/MS VOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

GC/MS SEMIVOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL12mw-128C-1549-GW and FWGSCFmw-003-1517-GW had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The LCS and/or LCSD associated with batch 0196051 had surrogate recoveries outside acceptance criteria. Due to length of time since sampling, re-preparation and reanalysis did not occur.

CASE NARRATIVE (continued)

GC/MS SEMIVOLATILES (cont)

The LCS associated with QC batch 0196051 failed two acid analyte recoveries below acceptance criteria. Benzoic acid was at 9% and 2,4-Dinitrophenol was at 23%. Corrective action could not be initiated since it was over two weeks since sampling had occurred.

Following sample analysis the QC/MRL closer failed four analyte recoveries. Hexachlorocylopentadine was recovered at 37%, 4,6-Dinitro-2-methylphenol was recovered at 32%, 2,4-Dinitophenol at 11% and pentachlorophenol at 63%. Subsequent QCMDL checks were able to detect Hexachloropentadine. However, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol and pentachlorophenol were not detected.

PESTICIDES-8081

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

For sample(s), FWGLL12mw-128C-1549-GW, FWGLL12mw-243C-1561-GW, FWGLL12mw-244C-1562-GW, FWGLL12mw-186C-1556-GW, FWGLL12mw-189C-1559-GW, FWGLL12mw-182C-1552-GW, FWGLL12mw-107C-1547-GW, FWGLL12mw-185C-1555-GW and the LCS associated with batch 0196036, the recovery for one surrogate compound is outside acceptance criteria. Since the LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit but above 10%)

POLYCHLORINATED BIPHENYLS-8082

The matrix spike/matrix spike duplicate(s) for FWGLL12mw-128C-1549-GW had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

For sample(s) FWGLL12mw-128C-1549-GW, FWGLL12mw-243C-1561-GW, FWGLL12mw-244C-1562-GW and FWGLL12mw-189C-1559-GW the recovery for one surrogate compound is outside acceptance criteria. Since the LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit but above 10%)

The MS associated with sample FWGTEAM1-TRIP failed low, since the MSD was within range no corrective action is required.

CASE NARRATIVE (continued)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

Serial dilution of a sample in this lot indicates that physical and chemical interferences were present. Refer to the sample report pages for the affected analytes flagged with "E".

The CCV associated with samples FWGLL12mw-186C-1556-GF, FWGLL12mw-189C-1559-GF, FWGSCFmw-003-1517-GF, FWGLL12mw-182C-1552-GF, FWGLL12mw-107C-1547-GF, FWGLL12mw-DUP4-1569-GF, FWGLL12mw-246C-1564-GF, FWGLL12mw-184C-1554-GF, FWGLL12mw-185C-1555-GF, FWGLL12mw-128C-1549-GF, FWGEQUIPRINSE3-1580-GW, FWGLL12mw-243C-1561-GF and FWGLL12mw-187C-1557-GF exceeded method criteria on the high side for Beryllium. Since the sample result(s) was/were below the requested reporting limit the result(s) was/were accepted.

GENERAL CHEMISTRY

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The matrix spike/matrix spike duplicate(s) for FWGLL12mw-128C-1549-GW, FWGLL12mw-189C-1559-GW and FWGSCFmw-003-1517-GW had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

MANUAL INTEGRATION SUMMARY

Lot A0G140402

Client ID: FWGLL12mw-128C-1549
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 057F5701.D
Inj. Date and Time: 23-JUL-2010 00:30
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGLL12mw-128C-1549
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 058F5801.D
Inj. Date and Time: 23-JUL-2010 00:45
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGSCFmw-003-1517-G
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 074F7401.D
Inj. Date and Time: 23-JUL-2010 04:42
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGSCFmw-003-1517-G
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 075F7501.D
Inj. Date and Time: 23-JUL-2010 04:57
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 038F3801.D
Inj. Date and Time: 23-JUL-2010 18:32
Manual Integration Reason: Analyte not Identified by the Data System

SAMPLE SUMMARY

A0G140402

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L35M1	001	FWGTEAM1-TRIP	07/13/10	08:00
L35M4	002	FWGLL12mw-128C-1549-GW	07/13/10	09:09
L35M5	003	FWGLL12mw-128C-1549-GF	07/13/10	09:09
L35M6	004	FWGLL12mw-243C-1561-GW	07/13/10	12:17
L35M7	005	FWGLL12mw-243C-1561-GF	07/13/10	12:17
L35M8	006	FWGLL12mw-187C-1557-GW	07/13/10	13:51
L35M9	007	FWGLL12mw-187C-1557-GF	07/13/10	13:51
L35NA	008	FWGLL12mw-244C-1562-GW	07/13/10	15:49
L35NC	009	FWGLL12mw-244C-1562-GF	07/13/10	15:49
L35ND	010	FWGTEAM2-TRIP	07/13/10	08:00
L35NE	011	FWGLL12mw-186C-1556-GW	07/13/10	08:48
L35NF	012	FWGLL12mw-186C-1556-GF	07/13/10	08:48
L35NG	013	FWGLL12mw-189C-1559-GW	07/13/10	10:38
L35NH	014	FWGLL12mw-189C-1559-GF	07/13/10	10:38
L35NJ	015	FWGSCFmw-003-1517-GW	07/13/10	12:58
L35NK	016	FWGSCFmw-003-1517-GF	07/13/10	12:58
L35NP	017	FWGTEAM3-TRIP	07/13/10	08:00
L35NQ	018	FWGLL12mw-182C-1552-GW	07/13/10	09:00
L35NR	019	FWGLL12mw-182C-1552-GF	07/13/10	09:00
L35NW	020	FWGLL12mw-107C-1547-GW	07/13/10	10:10
L35NX	021	FWGLL12mw-107C-1547-GF	07/13/10	10:10
L35N0	022	FWGLL12mw-DUP4-1569-GW	07/13/10	10:30
L35N1	023	FWGLL12mw-DUP4-1569-GF	07/13/10	10:30
L35N2	024	FWGLL12mw-246C-1564-GW	07/13/10	12:40
L35N3	025	FWGLL12mw-246C-1564-GF	07/13/10	12:40
L35N4	026	FWGLL12mw-184C-1554-GW	07/13/10	14:00
L35N5	027	FWGLL12mw-184C-1554-GF	07/13/10	14:00
L35N6	028	FWGLL12mw-185C-1555-GW	07/13/10	15:50
L35N7	029	FWGLL12mw-185C-1555-GF	07/13/10	15:50
L35N8	030	FWGEQUIPRINSE3-1580-GW	07/13/10	16:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica 23
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: 1
Address: 1800 Carillon Blvd.	Telephone: 513-825-7580	Telephone: 513-825-7500	Telephone: 330-497-9396	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email:			
Phone: 513-825-7500		TAT if different from below per Sam: ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP(OH)	Method of Shipment/Carrier: Lab pickup			
Project Number: 030240.0006	Shipping/Tracking No:			
PO# 167726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Field Filtered	Lab Filtered	Analyses: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	NO2/NO3 353.2	Metals 6010/6020	Sample Specific Notes / Special Instructions: Cooler ID
FWG Team 1 - Trip	7/13/10	08:00		X						2							X									A85
FWGLL12mw-128C-1549-GW	7/13/10	09:09		X				3		9	3		27		N	G	X	X	X	X	X	X	X	X		MS/MSD 0411, 241-1033, 6080-114
FWGLL12mw-128C-1549-GF	7/13/10	09:09		X					3						Y	G									X	MS/MSD 0411, 241-1033, 6080-114
FWGLL12mw-243C-1561-GW	7/13/10	12:17		X				1		3	1		9		N	G	X	X	X	X	X	X	X	X		PH4
FWGLL12mw-243C-1561-GF	7/13/10	12:17		X					1						Y	G									X	PH4
FWGLL12mw-187C-1557-GW	7/13/10	13:15		X				1		3	1		9		N	G	X	X	X	X	X	X	X	X		R2
FWGLL12mw-187C-1557-GF	7/13/10	13:51		X					1						Y	G									X	R2
FWGLL12mw-244C-1562-GW	7/13/10	15:49		X				1		3	1		9		N	G	X	X	X	X	X	X	X	X		A85
FWGLL12mw-244C-1562-GF	7/13/10	15:49		X					1						Y	G									X	A85
									EC	7/13/10																

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Metals are field filtered

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	7/13/10 1820	[signature]	TestAmerica	7/13/10 1820
[signature]	TestAmerica	7/13/10 1915	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TA NC	Date/Time: 7/14/10 0700

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Temps may not meet requirements if sample collection is close to pick up time. ALL VOAs in cooler A85

TAL-0018 (1008)

North Canton

Chain of Custody Record

TestAmerica — Severn Trent STL — Severn Trent Laboratories, Inc.

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STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Muller	7-13-10	336187
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page / of**
1800 CARILLON BLVD	5138257500 (fax 7495)	330497396	1 of 1
City / State / Zip Code	**Site Contact**	**Lab Contact**	
CINCINNATI / OH / 45240	E. CORBIN	M. LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP Ravenna Oh	LAB PICK UP.		
Contract/Purchase Order/Quote No.			
PO 167216 PM30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC	SVOC	Pest	PCB	Explo	Metals	Cyanide	Nitrate	NO2 NO3	Special Instructions/ Conditions of Receipt
FWG Team 2 Trip	7-13-10	0800		X									X									C119
FWGLL12mw-186C-1556-GW	1	0848		X			9	1		3	1		X	X	X	X	X	X	X		X	L751
FWGLL12mw-186C-1556-GF	1	1		X					1											X		L751
FWGLL12mw-189C-1559-GW	1	1038		X			9	1		3	1		X	X	X	X	X	X	X		X	12009
FWGLL12mw-189C-1559-GF	1	1		X					1											X		12009
FWGSCFmw-003-1517-GW	1	1258		X			27	3		9	3		X	X	X	X	X	X	X		X	MS/MSD 727 C119 M12
FWGSCFmw-003-1517-GF	1	1		X					3											X		MS/MSD. 727 C119 M12
						EE			7/13/10													

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals GF were field filtered

	Relinquished By	Date	Time	Received By	Date	Time
1.	Erik Corbin EQ	7/13/10	1820	[signature]	7/13/10	1820
2.	[signature]	7/13/10	1915	[signature]	7/14/10	0700
3.						

Comments: Temps may not meet requirements if lab pickup is close to sample collection time.

All VOAs in cooler C119

North Canton

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica 25
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact					
Company Name: EQM	Client Project Manager: John Muller	Site Contact: E. Corbin	Lab Contact: M Lock	COC No: LS001	
Address: 1800 Carillon Blvd	Telephone: 513 825 7500	Telephone: 513 825 7500	Telephone: 303 497 9396	1 of 2 COCs	
City/State/Zip: Cincinnati OH 45240	Email: jmuller@eqm.com				
Phone: 513 825 7500		Analysis Turnaround Time (CALENDAR DAYS or WORK DAYS)	Analyses		
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab - Pick up	TAT if different from below ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			
Project Number: 030240.0006	Shipping/Tracking No: NA				
PO# 116724					

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Volatile Organics Compounds (8260B)	SVOC (8270C)	TEST (8081A)	CVAA (7470A)	ICP (6010B)	ICP/MS (6020)	Metals (7196A/6010B)	NO2/NO3 (353.2)	Sample Specific Notes / Special Instructions:
FWGTeam3-Trip	7/13/10	0800		X						2					X								465
FWGLL12MW182C-1552-GW	7-13-10	0900		X				1		3	1		9			X	X	X	X	X	X	X	B81
FWGLL12MW182C-1552-GF		0900		X					1					Y							X		B81
FWGLL12MW107C-1547-GW		1010		X				1		3	1		9			X	X	X	X	X	X	X	JC3
FWGLL12MW107C-1547-GF		1010		X					1					Y							X		JC3
FWGLL12MWDUP4-1569-GW		1030		X				1		3	1		9			X	X	X	X	X	X	X	465
FWGLL12MWDUP4-1569-GF		1030		X					1					Y							X		465
FWGLL12MW246C-1564-GW		1240		X				1		3	1		9			X	X	X	X	X	X	X	114
FWGLL12MW246C-1564-GF		1240		X					1					Y							X		114
FWGLL12MW184C-1554-GW	7-13-10	1400		X				1		3	1		9			X	X	X	X	X	X	X	A49

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
All Metals filtered in field
Temps may not meet requirements if sample time is close to pick up time.
* ALL VOA's IN COOLER 465 *

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Eric Corbin	EQ	7/13/10 1820		TestAmerica	7/13/10 1820
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	7/13/10 1915			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA NC	7/14/10 0700

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TAL-0018 (1008)

North Canton

Chain of Custody Record

TestAmerica 26
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: F. Corbin	Lab Contact: M. Loch	COC No: LS002
Address: 1800 Carillon Blvd.	Telephone: 513 825 7500	Telephone: 513 825 7500	Telephone: 303 457 9876	2 of 2 COCs
City/State/Zip: Cincinnati OH 45240	Email: JMiller@eqm.com			
Phone: 513 825 - 7500		TAT if different from below: ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	Analyses	
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Pick up			
Project Number: 030240.0006	Shipping/Tracking No: NA			
PO# 116726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered	VOA 8260B	SVOC 8270C	TAL Metals 6010B/7470A	PCB 8082	Explo 8330	Propellants 6850	Cyanide 9012	Metals 6010B/7470A	NO3/NO2 353.2	Sample Specific Notes / Special Instructions:
FWGLL12MW184C-1554-GF	7/13/10	1400		X					1						Y							X			COOLER ID A49
FWGLL12MW185C-1555-GW		1550		X				1		3	1		9			X	X	X	X	X	X	X		X	E-120
FWGLL12MW185C-1555-GF		1550		X					1						Y							X			E-120
FWGEQUIPRINSE3-1550GW		1620		X				1	1	3	1		9		N	X	X	X	X	X	X	X	X	X	S

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
All Metals filtered in field. EQUIPRINSE3 Not Field Filtered *ALL VOA's in COOLER 4 65*
Temps may not meet requirements & Sample time is close to pick up time

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erika Corbin	EQ	7/13/10 1820		TestAmerica	7/13/10 1820
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	7/13/10 1915			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA NC	7/14/10 0700

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TAL-0018 (1008)

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number: 240140402**
North Canton Facility

Client EQM Project RVAAP By: Adrienne Mc
Cooler Received on 7/14/10 Opened on 7/14/10 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 18 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt °C See back of form for multiple coolers/temps ☐
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot#* 051010-HNO_3; *Sulfuric Acid Lot#* 121709-H_2SO_4; *Sodium Hydroxide Lot#* 100108 -*NaOH; Hydrochloric Acid Lot#* 092006-*HCl; Sodium Hydroxide and Zinc Acetate Lot#* 100108-$(CH_3COO)_2ZN/NaOH$. What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
126C-1549	<2 <2 <2 <2 <2 <2 7 7 7 7 7 7	7/14/10	[illegible]
243C-1561	<2 <2 7 7		
187C-1557	<2 <2 7 7		
244C-1562	<2 <2 7 7		
186C-1556	<2 <2 7 7		
189C-1559	<2 <2 7 7		
003-1517	<2 <2 <2 <2 <2 <2 7 7 7 7 7 7		
182C-1552	<2 <2 7 7		

TestAmerica Multiple Cooler Receipt Form/Narrative — Lot Number: 240G140402
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
B81	1.6	IR	Ice	
IC3	4.2			
465	3.9			
114	4.0			
A49	4.3			
E-120	3.7			
8	2.9			

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1076-1547	<2 <2 >12	7/14/10	?
DUP4-1569	<2 <2 >12		
246L-1564	<2 <2 >12		
184L-1554	<2 <2 >12		
185L-1555	<2 <2 >12		
EquipRinse3-1580	<2 <2 >12		

Cooler #	Temp. °C	Method	Coolant
~~AB5~~ AB 7/14/10	~~3.2~~ C 7/14/10	IR	Wet ice
0411	3.7		
241-1033	2.9		
Le80-114	5.0		
PH4	1.2		
R2	2.3		
A85	2.9		
L751	2.4		
12009	2.1		
M12	3.7		
727	2.1		
C119	3.8		

Discrepancies Cont'd:

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 24, 2010

SDG: A0G140402 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 5.0 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3.3
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-3
7. Was the GC/MS system tuned with bromofluorobenzene (BFB)?	✓				LCG Table 1
8. Was the criteria met during each 12 hour shift (prior to ICAL and Cal Ver.)?	✓				SW846 8260B 7.3.1
9. Did the initial calibration curve consist of 5 concentration levels?	✓			Instrument A3UX11 – 6/17/10 stds – 5, 10, 25, 50, 100, 200 ng on column	LCG Table 1 R
10. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviations (%RSD) ≤ 30%?	✓				LCG Table 1 R
11. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 1
12. Were all other target analytes ≤ 15% RSD? OR Was the average RSD ≤ 15%? Was a different calibration option used?	✓			Acetone, trans-1,3-dichloropropene, dibromochloromethane and bromoform used weighted linear curves.	LCG Table 1 15% <RSD< 20% = J/UJ
13. If a linear regression curve was used, was the correlation coefficient r≥0.99?	✓			All correlation coefficients were ≥0.99. No qualifications were made since the correlation coefficients were acceptable.	LCG Table 1 R<0.99=-J/R
14. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/21/10 @1907	LCG Table 1 R
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 24, 2010

SDG: A0G140402 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Were the QC/MRL recoveries 70-130%?		✓		• The opening MRL check analyzed 7/22/10 at 1100 had methylene chloride recover above limits at 155%, acetone at 152%, 2-butanone at 140% and bromoform at 162%. • The closing MRL check analyzed 7/22/10 at 2024 had methylene chloride recover above limits at 165%, chloroethane at 145% and bromoform at 154%. The acetone result for the FWGTEAM1-Trip and the 2-butanone result for FWGLL12mw-243c-1561-GW were qualified as estimated, "J". • The opening MRL check analyzed 7/23/10 at 1226 had methylene chloride recover above limits at 185%, chloroethane at 140%, bromomethane at 140% and bromoform at 167%. • The closing MRL check analyzed 7/23/10 at 2141 had 2-butanone recover above limits at 140%, acetone at 151%, chloroethane at 142% and bromoform at 154%. The acetone results for the trip blanks and FWGSCFmw-003-1517-GW and the 2-butanone and acetone results for FWGLL12mw-244c-1562-GW and FWGEQUIPRinse3-1580-GW were qualified as estimated, "J".	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed? Were results 80-120%?	✓			6/17/10 @ 1442	LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
18. Was a CCV run every 12 hours?	✓			7/22/10 @ 1037, 7/23/10 @ 1141	LCG Table 1
19. Did the CCCs have a %Difference < 20%?	✓				LCG Table 1
20. Were the minimum RFs for the SPCCs within limits?	✓				LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓				LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 24, 2010

SDG: A0G140402 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1
26. Were target analytes detected in the method blank >1/2 the MRL?		✓		Checked by ADR. Methylene chloride was detected in the method blank (batch 0204233) at 0.76ug/L. Sample FWGEQUIPRinse3-1580-GW was qualified, "B". Methylene chloride was also detected in the method blank (batch 0203119) at 0.54ug/L, however no qualifications were made as there were no detected methylene chloride results associated with the blank.	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse3-1580-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGEQUIPRinse3-1580-GW had 2-butanone detected at 15ug/L, acetone at 9.7ug/L and methylene chloride at 1.5ug/L. • The trip blanks had acetone contamination detected from 1.5-1.7ug/L. The acetone results for samples FWGEQUIPRinse3-1580-GW, FWGSCFmw-003-1517-GW and FWGLL12mw-244-1562-GW were qualified, "B" as the results were <10x trip blank contamination and or equipment blank contamination. The 2-butanone results for samples FWGLL12mw-243-1561-GW and FWGLL12mw-244-1562-GW were qualified, "B" as the results were <10x equipment blank contamination. As there were no detected concentrations of the methylene chloride, no additional qualifications were made.	<5/10X =B
29. Was a field duplicate analyzed?	✓				
30. Were the Field duplicates RPDs within +30%?	✓			ADR checked section;	QAPP Table 3-2 RPD >30=J
31. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 1
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?	✓			ADR checked section; Carbon disulfide recovered above control limits in the LCS/LCD for batch 0203119 at 128% and 125%, however no qualifications were made as there were no detected concentrations of these analytes in the reported samples.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent sample a	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 24, 2010

SDG: A0G140402 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
Ravenna sample?					
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?	✓			ADR checked section.	LCG Table 1 Pj
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% - 50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G140402-001 **Work Order #...:** L35M11AA **Matrix.....:** WQ
Date Sampled...: 07/13/10 08:00 **Date Received..:** 07/14/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.5 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G140402-001 **Work Order #...:** L35M11AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-002 **Work Order #...:** L35M41AA **Matrix.....:** WG
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10
Prep Date.....: 07/23/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-002 **Work Order #...:** L35M41AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-004 **Work Order #...:** L35M61AA **Matrix.....:** WG
Date Sampled...: 07/13/10 12:17 **Date Received..:** 07/14/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**1.3 J**	**10**	**ug/L**	**0.57**
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-004 **Work Order #...:** L35M61AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	104	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-006 **Work Order #...:** L35M81AA **Matrix.....:** WG
Date Sampled...: 07/13/10 13:51 **Date Received..:** 07/14/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-006 Work Order #...: L35M81AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(50 - 150)
1,2-Dichloroethane-d4	104	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-008	**Work Order #...:** L35NA1AA	**Matrix.....:** WG	
Date Sampled...: 07/13/10 15:49	**Date Received..:** 07/14/10		
Prep Date.....: 07/23/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0204233			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.1 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**1.6 J**	**10**	**ug/L**	**0.57**
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	**0.22 J**	**1.0**	**ug/L**	**0.13**
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-008 **Work Order #...:** L35NA1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G140402-010 **Work Order #...:** L35ND1AA **Matrix.....:** WQ
Date Sampled...: 07/13/10 08:00 **Date Received..:** 07/14/10
Prep Date.....: 07/23/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.7 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G140402-010 **Work Order #...:** L35ND1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-011	**Work Order #...:** L35NE1AA	**Matrix.....:** WG	
Date Sampled...: 07/13/10 08:48	**Date Received..:** 07/14/10		
Prep Date.....: 07/23/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0204233			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-011 **Work Order #...:** L35NE1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-013	**Work Order #...:** L35NG1AA	**Matrix.....:** WG	
Date Sampled...: 07/13/10 10:38	**Date Received..:** 07/14/10		
Prep Date.....: 07/23/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0204233			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-013 Work Order #...: L35NG1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-015 **Work Order #...:** L35NJ1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10
Prep Date.....: 07/23/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**3.4 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-015 **Work Order #...:** L35NJ1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	99	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G140402-017 **Work Order #...:** L35NP1AA **Matrix.....:** WQ
Date Sampled...: 07/13/10 08:00 **Date Received..:** 07/14/10
Prep Date.....: 07/23/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.6 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G140402-017 **Work Order #...:** L35NP1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-018	**Work Order #...:** L35NQ1AA	**Matrix.....:** WG	
Date Sampled...: 07/13/10 09:00	**Date Received..:** 07/14/10		
Prep Date.....: 07/23/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0204233			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-018 **Work Order #...:** L35NQ1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-020	**Work Order #...:** L35NW1AA	**Matrix.....:** WG	
Date Sampled...: 07/13/10 10:10	**Date Received..:** 07/14/10		
Prep Date.....: 07/23/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0204233			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-020 Work Order #...: L35NW1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-022	**Work Order #...:** L35N01AA	**Matrix.....:** WG	
Date Sampled...: 07/13/10 10:30	**Date Received..:** 07/14/10		
Prep Date.....: 07/23/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0204233			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-022 **Work Order #...:** L35N01AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	99	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-024 **Work Order #...:** L35N21AA **Matrix.....:** WG
Date Sampled...: 07/13/10 12:40 **Date Received..:** 07/14/10
Prep Date.....: 07/23/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-024 **Work Order #...:** L35N21AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	99	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-026 **Work Order #...:** L35N41AA **Matrix.....:** WG
Date Sampled...: 07/13/10 14:00 **Date Received..:** 07/14/10
Prep Date.....: 07/23/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-026 **Work Order #...:** L35N41AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	87	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-028 **Work Order #...:** L35N61AA **Matrix.....:** WG
Date Sampled...: 07/13/10 15:50 **Date Received..:** 07/14/10
Prep Date.....: 07/23/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-028 **Work Order #...:** L35N61AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-030	**Work Order #...:** L35N81AA	**Matrix.....:** WQ	
Date Sampled...: 07/13/10 16:20	**Date Received..:** 07/14/10		
Prep Date.....: 07/23/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0204233			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	**1.5 J,B**	**2.0**	**ug/L**	**0.33**
Acetone	**9.7 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**15**	**10**	**ug/L**	**0.57**
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

GC/MS Volatiles

Lot-Sample #...: A0G140402-030 Work Order #...: L35N81AA Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	100	(50 - 150)
Toluene-d8	86	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 **Work Order #...:** L4H6J1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G220000-119

Prep Date.....: 07/22/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/22/10 **Prep Batch #...:** 0203119
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	**0.54 J**	**2.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 **Work Order #...:** L4H6J1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 **Work Order #...:** L4LL11AA **Matrix.....:** WATER
MB Lot-Sample #: A0G230000-233

Prep Date.....: 07/23/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/23/10 **Prep Batch #...:** 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	**0.76 J**	**2.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 **Work Order #...:** L4LL11AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 Work Order #...: L4H6J1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G220000-119 L4H6J1AD-LCSD
Prep Date.....: 07/22/10 Analysis Date..: 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	106	(73 - 133)			SW846 8260B
	105	(73 - 133)	0.96	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	113	(75 - 134)			SW846 8260B
	111	(75 - 134)	1.8	(0-30)	SW846 8260B
1,2-Dibromoethane	102	(75 - 127)			SW846 8260B
	102	(75 - 127)	0.69	(0-30)	SW846 8260B
Bromochloromethane	108	(75 - 127)			SW846 8260B
	106	(75 - 127)	1.8	(0-30)	SW846 8260B
m-Xylene & p-Xylene	105	(75 - 122)			SW846 8260B
	103	(75 - 122)	1.6	(0-30)	SW846 8260B
o-Xylene	107	(75 - 118)			SW846 8260B
	104	(75 - 118)	2.6	(0-30)	SW846 8260B
Chloromethane	84	(58 - 135)			SW846 8260B
	81	(58 - 135)	4.1	(0-30)	SW846 8260B
Bromomethane	108	(35 - 153)			SW846 8260B
	105	(35 - 153)	2.7	(0-30)	SW846 8260B
Vinyl chloride	81	(73 - 134)			SW846 8260B
	77	(73 - 134)	5.4	(0-30)	SW846 8260B
Chloroethane	101	(72 - 129)			SW846 8260B
	102	(72 - 129)	0.90	(0-30)	SW846 8260B
Methylene chloride	112	(69 - 118)			SW846 8260B
	102	(69 - 118)	9.5	(0-30)	SW846 8260B
Acetone	101	(51 - 157)			SW846 8260B
	109	(51 - 157)	7.6	(0-30)	SW846 8260B
Carbon disulfide	128 a	(74 - 123)			SW846 8260B
	125 a	(74 - 123)	2.3	(0-30)	SW846 8260B
1,1-Dichloroethene	109	(75 - 125)			SW846 8260B
	107	(75 - 125)	1.8	(0-30)	SW846 8260B
1,1-Dichloroethane	117	(75 - 133)			SW846 8260B
	112	(75 - 133)	4.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	110	(85 - 111)			SW846 8260B
	108	(85 - 111)	1.4	(0-30)	SW846 8260B
Chloroform	112	(74 - 127)			SW846 8260B
	108	(74 - 127)	3.4	(0-30)	SW846 8260B
1,2-Dichloroethane	117	(67 - 132)			SW846 8260B
	111	(67 - 132)	4.8	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 Work Order #...: L4H6J1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G220000-119 L4H6J1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	102	(45 - 150)			SW846 8260B
	100	(45 - 150)	1.2	(0-30)	SW846 8260B
1,1,1-Trichloroethane	107	(70 - 127)			SW846 8260B
	103	(70 - 127)	3.8	(0-30)	SW846 8260B
Carbon tetrachloride	105	(71 - 132)			SW846 8260B
	104	(71 - 132)	0.92	(0-30)	SW846 8260B
Bromodichloromethane	119	(70 - 130)			SW846 8260B
	114	(70 - 130)	4.1	(0-30)	SW846 8260B
1,2-Dichloropropane	112	(75 - 127)			SW846 8260B
	110	(75 - 127)	1.6	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	114	(73 - 132)			SW846 8260B
	109	(73 - 132)	4.1	(0-30)	SW846 8260B
Trichloroethene	100	(67 - 128)			SW846 8260B
	100	(67 - 128)	0.10	(0-30)	SW846 8260B
Dibromochloromethane	114	(74 - 145)			SW846 8260B
	110	(74 - 145)	4.0	(0-30)	SW846 8260B
1,1,2-Trichloroethane	108	(75 - 136)			SW846 8260B
	105	(75 - 136)	2.7	(0-30)	SW846 8260B
Benzene	111	(75 - 126)			SW846 8260B
	108	(75 - 126)	2.8	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	109	(74 - 131)			SW846 8260B
	106	(74 - 131)	2.9	(0-30)	SW846 8260B
Bromoform	122	(72 - 136)			SW846 8260B
	117	(72 - 136)	3.8	(0-30)	SW846 8260B
4-Methyl-2-pentanone	107	(59 - 150)			SW846 8260B
	106	(59 - 150)	0.65	(0-30)	SW846 8260B
2-Hexanone	108	(53 - 139)			SW846 8260B
	106	(53 - 139)	2.0	(0-30)	SW846 8260B
Tetrachloroethene	100	(75 - 129)			SW846 8260B
	99	(75 - 129)	0.93	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	105	(68 - 129)			SW846 8260B
	99	(68 - 129)	5.7	(0-30)	SW846 8260B
Toluene	105	(75 - 125)			SW846 8260B
	103	(75 - 125)	2.0	(0-30)	SW846 8260B
Chlorobenzene	103	(75 - 127)			SW846 8260B
	101	(75 - 127)	2.7	(0-30)	SW846 8260B
Ethylbenzene	104	(75 - 120)			SW846 8260B
	102	(75 - 120)	1.4	(0-30)	SW846 8260B
Styrene	108	(75 - 130)			SW846 8260B
	106	(75 - 130)	1.6	(0-30)	SW846 8260B
Xylenes (total)	105	(90 - 114)			SW846 8260B
	103	(90 - 114)	1.9	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 **Work Order #...:** L4H6J1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0G220000-119 L4H6J1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
	93	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
	97	(50 - 150)
Toluene-d8	94	(50 - 150)
	93	(50 - 150)
4-Bromofluorobenzene	98	(50 - 150)
	99	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 Work Order #...: L4LL11AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G230000-233 L4LL11AD-LCSD
Prep Date.....: 07/23/10 Analysis Date..: 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	99	(73 - 133)			SW846 8260B
	104	(73 - 133)	4.9	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	106	(75 - 134)			SW846 8260B
	109	(75 - 134)	3.2	(0-30)	SW846 8260B
1,2-Dibromoethane	94	(75 - 127)			SW846 8260B
	99	(75 - 127)	4.8	(0-30)	SW846 8260B
Bromochloromethane	100	(75 - 127)			SW846 8260B
	105	(75 - 127)	4.4	(0-30)	SW846 8260B
m-Xylene & p-Xylene	96	(75 - 122)			SW846 8260B
	100	(75 - 122)	4.4	(0-30)	SW846 8260B
o-Xylene	98	(75 - 118)			SW846 8260B
	103	(75 - 118)	5.1	(0-30)	SW846 8260B
Chloromethane	78	(58 - 135)			SW846 8260B
	80	(58 - 135)	3.2	(0-30)	SW846 8260B
Bromomethane	102	(35 - 153)			SW846 8260B
	101	(35 - 153)	0.86	(0-30)	SW846 8260B
Vinyl chloride	77	(73 - 134)			SW846 8260B
	75	(73 - 134)	3.2	(0-30)	SW846 8260B
Chloroethane	94	(72 - 129)			SW846 8260B
	95	(72 - 129)	1.2	(0-30)	SW846 8260B
Methylene chloride	98	(69 - 118)			SW846 8260B
	102	(69 - 118)	4.0	(0-30)	SW846 8260B
Acetone	100	(51 - 157)			SW846 8260B
	99	(51 - 157)	1.9	(0-30)	SW846 8260B
Carbon disulfide	123	(74 - 123)			SW846 8260B
	123	(74 - 123)	0.27	(0-30)	SW846 8260B
1,1-Dichloroethene	107	(75 - 125)			SW846 8260B
	106	(75 - 125)	1.2	(0-30)	SW846 8260B
1,1-Dichloroethane	105	(75 - 133)			SW846 8260B
	111	(75 - 133)	6.1	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	103	(85 - 111)			SW846 8260B
	107	(85 - 111)	4.0	(0-30)	SW846 8260B
Chloroform	102	(74 - 127)			SW846 8260B
	107	(74 - 127)	5.0	(0-30)	SW846 8260B
1,2-Dichloroethane	103	(67 - 132)			SW846 8260B
	110	(67 - 132)	7.0	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 Work Order #...: L4LL11AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G230000-233 L4LL11AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	98	(45 - 150)			SW846 8260B
	95	(45 - 150)	3.2	(0-30)	SW846 8260B
1,1,1-Trichloroethane	101	(70 - 127)			SW846 8260B
	102	(70 - 127)	1.0	(0-30)	SW846 8260B
Carbon tetrachloride	102	(71 - 132)			SW846 8260B
	99	(71 - 132)	3.0	(0-30)	SW846 8260B
Bromodichloromethane	111	(70 - 130)			SW846 8260B
	114	(70 - 130)	3.2	(0-30)	SW846 8260B
1,2-Dichloropropane	104	(75 - 127)			SW846 8260B
	108	(75 - 127)	3.6	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	105	(73 - 132)			SW846 8260B
	109	(73 - 132)	3.6	(0-30)	SW846 8260B
Trichloroethene	96	(67 - 128)			SW846 8260B
	98	(67 - 128)	2.6	(0-30)	SW846 8260B
Dibromochloromethane	102	(74 - 145)			SW846 8260B
	110	(74 - 145)	7.0	(0-30)	SW846 8260B
1,1,2-Trichloroethane	95	(75 - 136)			SW846 8260B
	103	(75 - 136)	8.4	(0-30)	SW846 8260B
Benzene	101	(75 - 126)			SW846 8260B
	106	(75 - 126)	4.7	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	100	(74 - 131)			SW846 8260B
	104	(74 - 131)	4.6	(0-30)	SW846 8260B
Bromoform	114	(72 - 136)			SW846 8260B
	116	(72 - 136)	1.5	(0-30)	SW846 8260B
4-Methyl-2-pentanone	103	(59 - 150)			SW846 8260B
	102	(59 - 150)	0.90	(0-30)	SW846 8260B
2-Hexanone	101	(53 - 139)			SW846 8260B
	103	(53 - 139)	1.7	(0-30)	SW846 8260B
Tetrachloroethene	94	(75 - 129)			SW846 8260B
	95	(75 - 129)	0.90	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	93	(68 - 129)			SW846 8260B
	98	(68 - 129)	4.7	(0-30)	SW846 8260B
Toluene	96	(75 - 125)			SW846 8260B
	101	(75 - 125)	5.6	(0-30)	SW846 8260B
Chlorobenzene	93	(75 - 127)			SW846 8260B
	100	(75 - 127)	7.3	(0-30)	SW846 8260B
Ethylbenzene	95	(75 - 120)			SW846 8260B
	102	(75 - 120)	7.5	(0-30)	SW846 8260B
Styrene	98	(75 - 130)			SW846 8260B
	104	(75 - 130)	6.7	(0-30)	SW846 8260B
Xylenes (total)	97	(90 - 114)			SW846 8260B
	101	(90 - 114)	4.6	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 **Work Order #...:** L4LL11AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0G230000-233 L4LL11AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
	95	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
	96	(50 - 150)
Toluene-d8	93	(50 - 150)
	93	(50 - 150)
4-Bromofluorobenzene	94	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 Work Order #...: L33811AC-MS Matrix.....: WATER
MS Lot-Sample #: A0G130405-006 L33811AD-MSD
Date Sampled...: 07/12/10 14:39 Date Received..: 07/13/10
Prep Date.....: 07/22/10 Analysis Date..: 07/22/10
Prep Batch #...: 0203119
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	100	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.1	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	107	(70 - 130)			SW846 8260B
	104	(70 - 130)	3.2	(0-30)	SW846 8260B
1,2-Dibromoethane	98	(70 - 130)			SW846 8260B
	94	(70 - 130)	4.4	(0-30)	SW846 8260B
Bromochloromethane	102	(70 - 130)			SW846 8260B
	96	(70 - 130)	6.6	(0-30)	SW846 8260B
m-Xylene & p-Xylene	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.0	(0-30)	SW846 8260B
o-Xylene	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.8	(0-30)	SW846 8260B
Chloromethane	77	(70 - 130)			SW846 8260B
	74	(70 - 130)	3.7	(0-30)	SW846 8260B
Bromomethane	87	(70 - 130)			SW846 8260B
	84	(70 - 130)	3.9	(0-30)	SW846 8260B
Vinyl chloride	79	(70 - 130)			SW846 8260B
	81	(70 - 130)	2.3	(0-30)	SW846 8260B
Chloroethane	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.1	(0-30)	SW846 8260B
Methylene chloride	94	(70 - 130)			SW846 8260B
	87	(70 - 130)	7.1	(0-30)	SW846 8260B
Acetone	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.65	(0-30)	SW846 8260B
Carbon disulfide	121	(70 - 130)			SW846 8260B
	119	(70 - 130)	1.1	(0-30)	SW846 8260B
1,1-Dichloroethene	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.59	(0-30)	SW846 8260B
1,1-Dichloroethane	111	(70 - 130)			SW846 8260B
	105	(70 - 130)	5.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	103	(70 - 130)			SW846 8260B
	100	(70 - 130)	3.2	(0-30)	SW846 8260B
Chloroform	105	(70 - 130)			SW846 8260B
	99	(70 - 130)	6.0	(0-30)	SW846 8260B
1,2-Dichloroethane	112	(70 - 130)			SW846 8260B
	103	(70 - 130)	8.2	(0-30)	SW846 8260B
2-Butanone	97	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.4	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 **Work Order #...:** L33811AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A0G130405-006 L33811AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.79	(0-30)	SW846 8260B
Carbon tetrachloride	102	(70 - 130)			SW846 8260B
	103	(70 - 130)	1.0	(0-30)	SW846 8260B
Bromodichloromethane	111	(70 - 130)			SW846 8260B
	105	(70 - 130)	5.8	(0-30)	SW846 8260B
1,2-Dichloropropane	106	(70 - 130)			SW846 8260B
	100	(70 - 130)	5.7	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	97	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.7	(0-30)	SW846 8260B
Trichloroethene	95	(70 - 130)			SW846 8260B
	92	(70 - 130)	2.9	(0-30)	SW846 8260B
Dibromochloromethane	106	(70 - 130)			SW846 8260B
	100	(70 - 130)	5.8	(0-30)	SW846 8260B
1,1,2-Trichloroethane	103	(70 - 130)			SW846 8260B
	96	(70 - 130)	7.3	(0-30)	SW846 8260B
Benzene	106	(70 - 130)			SW846 8260B
	100	(70 - 130)	5.5	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	101	(70 - 130)			SW846 8260B
	95	(70 - 130)	6.7	(0-30)	SW846 8260B
Bromoform	112	(70 - 130)			SW846 8260B
	105	(70 - 130)	6.2	(0-30)	SW846 8260B
4-Methyl-2-pentanone	105	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.0	(0-30)	SW846 8260B
2-Hexanone	108	(70 - 130)			SW846 8260B
	103	(70 - 130)	4.3	(0-30)	SW846 8260B
Tetrachloroethene	97	(70 - 130)			SW846 8260B
	94	(70 - 130)	3.2	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	99	(70 - 130)			SW846 8260B
	93	(70 - 130)	6.2	(0-30)	SW846 8260B
Toluene	102	(70 - 130)			SW846 8260B
	96	(70 - 130)	6.0	(0-30)	SW846 8260B
Chlorobenzene	99	(70 - 130)			SW846 8260B
	93	(70 - 130)	6.2	(0-30)	SW846 8260B
Ethylbenzene	101	(70 - 130)			SW846 8260B
	94	(70 - 130)	6.6	(0-30)	SW846 8260B
Styrene	103	(70 - 130)			SW846 8260B
	94	(70 - 130)	8.8	(0-30)	SW846 8260B
Xylenes (total)	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.0	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 **Work Order #...:** L33811AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A0G130405-006 L33811AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
	95	(50 - 150)
1,2-Dichloroethane-d4	101	(50 - 150)
	101	(50 - 150)
Toluene-d8	95	(50 - 150)
	94	(50 - 150)
4-Bromofluorobenzene	100	(50 - 150)
	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 Work Order #...: L35M41AC-MS Matrix.....: WG
MS Lot-Sample #: A0G140402-002 L35M41AD-MSD
Date Sampled...: 07/13/10 09:09 Date Received..: 07/14/10
Prep Date.....: 07/23/10 Analysis Date..: 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.36	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	108	(70 - 130)			SW846 8260B
	105	(70 - 130)	2.8	(0-30)	SW846 8260B
1,2-Dibromoethane	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.3	(0-30)	SW846 8260B
Bromochloromethane	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.0	(0-30)	SW846 8260B
m-Xylene & p-Xylene	100	(70 - 130)			SW846 8260B
	97	(70 - 130)	2.5	(0-30)	SW846 8260B
o-Xylene	102	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.27	(0-30)	SW846 8260B
Chloromethane	77	(70 - 130)			SW846 8260B
	77	(70 - 130)	0.10	(0-30)	SW846 8260B
Bromomethane	93	(70 - 130)			SW846 8260B
	91	(70 - 130)	1.9	(0-30)	SW846 8260B
Vinyl chloride	75	(70 - 130)			SW846 8260B
	73	(70 - 130)	2.6	(0-30)	SW846 8260B
Chloroethane	90	(70 - 130)			SW846 8260B
	92	(70 - 130)	2.0	(0-30)	SW846 8260B
Methylene chloride	94	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.70	(0-30)	SW846 8260B
Acetone	99	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.1	(0-30)	SW846 8260B
Carbon disulfide	122	(70 - 130)			SW846 8260B
	119	(70 - 130)	2.3	(0-30)	SW846 8260B
1,1-Dichloroethene	104	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.3	(0-30)	SW846 8260B
1,1-Dichloroethane	108	(70 - 130)			SW846 8260B
	108	(70 - 130)	0.27	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	104	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.6	(0-30)	SW846 8260B
Chloroform	103	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.0	(0-30)	SW846 8260B
1,2-Dichloroethane	105	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.39	(0-30)	SW846 8260B
2-Butanone	97	(70 - 130)			SW846 8260B
	94	(70 - 130)	2.6	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 Work Order #...: L35M41AC-MS Matrix.....: WG
MS Lot-Sample #: A0G140402-002 L35M41AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	99	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.34	(0-30)	SW846 8260B
Carbon tetrachloride	100	(70 - 130)			SW846 8260B
	98	(70 - 130)	2.4	(0-30)	SW846 8260B
Bromodichloromethane	111	(70 - 130)			SW846 8260B
	112	(70 - 130)	0.13	(0-30)	SW846 8260B
1,2-Dichloropropane	104	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.90	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	103	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.06	(0-30)	SW846 8260B
Trichloroethene	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.39	(0-30)	SW846 8260B
Dibromochloromethane	105	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.88	(0-30)	SW846 8260B
1,1,2-Trichloroethane	99	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.97	(0-30)	SW846 8260B
Benzene	104	(70 - 130)			SW846 8260B
	104	(70 - 130)	0.29	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.86	(0-30)	SW846 8260B
Bromoform	118	(70 - 130)			SW846 8260B
	115	(70 - 130)	2.6	(0-30)	SW846 8260B
4-Methyl-2-pentanone	102	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.20	(0-30)	SW846 8260B
2-Hexanone	104	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.92	(0-30)	SW846 8260B
Tetrachloroethene	97	(70 - 130)			SW846 8260B
	91	(70 - 130)	5.9	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	96	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.15	(0-30)	SW846 8260B
Toluene	100	(70 - 130)			SW846 8260B
	98	(70 - 130)	2.1	(0-30)	SW846 8260B
Chlorobenzene	98	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.6	(0-30)	SW846 8260B
Ethylbenzene	101	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.2	(0-30)	SW846 8260B
Styrene	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.4	(0-30)	SW846 8260B
Xylenes (total)	100	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.7	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 **Work Order #...:** L35M41AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-002 L35M41AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
	93	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
	94	(50 - 150)
Toluene-d8	93	(50 - 150)
	92	(50 - 150)
4-Bromofluorobenzene	98	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 Work Order #...: L35NJ1AC-MS Matrix.....: WG
MS Lot-Sample #: A0G140402-015 L35NJ1AD-MSD
Date Sampled...: 07/13/10 12:58 Date Received..: 07/14/10
Prep Date.....: 07/23/10 Analysis Date..: 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Bromochloromethane	99	(70 - 130)			SW846 8260B
	96	(70 - 130)	3.5	(0-30)	SW846 8260B
m-Xylene & p-Xylene	94	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.97	(0-30)	SW846 8260B
o-Xylene	97	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.22	(0-30)	SW846 8260B
cis-1,2-Dichloroethene	96	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.2	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.5	(0-30)	SW846 8260B
1,2-Dibromoethane	93	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.3	(0-30)	SW846 8260B
Chloromethane	72	(70 - 130)			SW846 8260B
	73	(70 - 130)	1.3	(0-30)	SW846 8260B
Bromomethane	80	(70 - 130)			SW846 8260B
	82	(70 - 130)	2.8	(0-30)	SW846 8260B
Vinyl chloride	80	(70 - 130)			SW846 8260B
	81	(70 - 130)	0.63	(0-30)	SW846 8260B
Chloroethane	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.6	(0-30)	SW846 8260B
Methylene chloride	90	(70 - 130)			SW846 8260B
	90	(70 - 130)	0.23	(0-30)	SW846 8260B
Acetone	105	(70 - 130)			SW846 8260B
	110	(70 - 130)	3.6	(0-30)	SW846 8260B
Carbon disulfide	127	(70 - 130)			SW846 8260B
	127	(70 - 130)	0.0	(0-30)	SW846 8260B
1,1-Dichloroethene	109	(70 - 130)			SW846 8260B
	109	(70 - 130)	0.50	(0-30)	SW846 8260B
1,1-Dichloroethane	105	(70 - 130)			SW846 8260B
	106	(70 - 130)	0.08	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	101	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.19	(0-30)	SW846 8260B
Chloroform	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.17	(0-30)	SW846 8260B
1,2-Dichloroethane	104	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.5	(0-30)	SW846 8260B
2-Butanone	96	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.9	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 **Work Order #...:** L35NJ1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-015 L35NJ1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	102	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.59	(0-30)	SW846 8260B
Carbon tetrachloride	104	(70 - 130)			SW846 8260B
	104	(70 - 130)	0.32	(0-30)	SW846 8260B
Bromodichloromethane	108	(70 - 130)			SW846 8260B
	107	(70 - 130)	1.0	(0-30)	SW846 8260B
1,2-Dichloropropane	102	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.2	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	95	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.88	(0-30)	SW846 8260B
Trichloroethene	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.06	(0-30)	SW846 8260B
Dibromochloromethane	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.39	(0-30)	SW846 8260B
1,1,2-Trichloroethane	95	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.0	(0-30)	SW846 8260B
Benzene	101	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.6	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.21	(0-30)	SW846 8260B
Bromoform	111	(70 - 130)			SW846 8260B
	111	(70 - 130)	0.16	(0-30)	SW846 8260B
4-Methyl-2-pentanone	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.03	(0-30)	SW846 8260B
2-Hexanone	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.6	(0-30)	SW846 8260B
Tetrachloroethene	94	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.58	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	95	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.83	(0-30)	SW846 8260B
Toluene	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.07	(0-30)	SW846 8260B
Chlorobenzene	92	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.6	(0-30)	SW846 8260B
Ethylbenzene	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.29	(0-30)	SW846 8260B
Styrene	96	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.76	(0-30)	SW846 8260B
Xylenes (total)	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.56	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G140402 **Work Order #...:** L35NJ1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-015 L35NJ1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
	94	(50 - 150)
1,2-Dichloroethane-d4	99	(50 - 150)
	98	(50 - 150)
Toluene-d8	90	(50 - 150)
	92	(50 - 150)
4-Bromofluorobenzene	96	(50 - 150)
	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

7/22/10
@ 11:00

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\UXJ0918.D
Report Date: 27-Jul-2010 22:40

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 2-8260.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\8260LLUX11.m
Misc Info: J00722A,8260LLUX11,,43582,3

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	1.135	113.47	70-130
	42 Trichloroethene	1.000	1.046	104.60	70-130
	59 Chlorobenzene	1.000	1.036	103.64	70-130
	50 Toluene	1.000	1.048	104.85	70-130
	41 Benzene	1.000	1.092	109.17	70-130
	16 Acetone	2.000	3.048	152.41*	70-130
	20 Carbon Disulfide	1.000	1.143	114.27	70-130
	9 Chloromethane	1.000	0.9279	92.79	70-130
	11 Bromomethane	1.000	1.267	126.74	70-130
	10 Vinyl Chloride	1.000	0.9069	90.69	70-130
	12 Chloroethane	1.000	1.240	124.03	70-130
	21 Methylene Chloride	1.000	1.546	154.59*	70-130
	28 1,1-Dichloroethane	1.000	1.149	114.86	70-130
M	31 1,2-Dichloroethene	2.000	2.155	107.75	70-130
	35 Chloroform	1.000	1.063	106.34	70-130
	40 1,2-Dichloroethane	1.000	1.183	118.29	70-130
	30 2-Butanone	2.000	2.792	139.58*	70-130
	37 1,1,1-Trichloroeth	1.000	1.032	103.26	70-130
	39 Carbon Tetrachlori	1.000	1.033	103.28	70-130
	46 Bromodichlorometha	1.000	1.016	101.56	70-130
	43 1,2-Dichloropropan	1.000	1.096	109.62	70-130
	48 cis-1,3-Dichloropr	1.000	0.9308	93.08	70-130
	54 1,3-Dichloropropan	1.000	1.054	105.40	70-130
	57 Dibromochlorometha	1.000	1.232	123.23	70-130
	53 1,1,2-Trichloroeth	1.000	1.082	108.25	70-130
	51 trans-1,3-Dichloro	1.000	1.194	119.44	70-130
	49 4-Methyl-2-pentano	2.000	2.076	103.80	70-130
	56 2-Hexanone	2.000	1.983	99.16	70-130
	55 Tetrachloroethene	1.000	1.052	105.15	70-130
	68 1,1,2,2-Tetrachlor	1.000	1.099	109.89	70-130
	66 Bromoform	1.000	1.621	162.10*	70-130
	61 Ethylbenzene	1.000	0.8853	88.53	70-130
	65 Styrene	1.000	0.8264	82.64	70-130
M	63 Xylenes (total)	3.000	2.634	87.82	70-130
	32 cis-1,2-dichloroet	1.000	1.038	103.78	70-130
	25 trans-1,2-Dichloro	1.000	1.117	111.72	70-130
	8 Dichlorodifluorome	1.000	0.7572	75.72	70-130
	13 Trichlorofluoromet	1.000	1.106	110.56	70-130

70 1,2,3-Trichloropro	1.000	1.124	112.41	70-130
18 Freon-113	1.000	1.239	123.93	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\UXJ0918.D
Report Date: 27-Jul-2010 22:40

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.9957	99.57	70-130
58 1,2-Dibromoethane	1.000	0.9540	95.40	70-130
67 Isopropylbenzene	1.000	0.8188	81.88	70-130
80 1,3-Dichlorobenzen	1.000	0.9870	98.70	70-130
81 1,4-Dichlorobenzen	1.000	1.066	106.56	70-130
83 1,2-Dichlorobenzen	1.000	1.048	104.81	70-130
84 1,2-Dibromo-3-chlo	1.000	1.229	122.92	70-130
85 1,2,4-Trichloroben	1.000	1.296	129.57	70-130
98 Cyclohexane	1.000	0.9074	90.74	70-130
143 Methyl Acetate	2.000	2.568	128.41	70-130
144 Methylcyclohexane	1.000	0.8452	84.52	70-130
71 Bromobenzene	1.000	0.9892	98.92	70-130
34 Bromochloromethane	1.000	1.009	100.87	70-130
82 n-Butylbenzene	1.000	0.8419	84.19	70-130
78 sec-Butylbenzene	1.000	0.8618	86.18	70-130
76 tert-Butylbenzene	1.000	0.8005	80.05	70-130
73 2-Chlorotoluene	1.000	0.9385	93.85	70-130
75 4-Chlorotoluene	1.000	0.9533	95.33	70-130
45 Dibromomethane	1.000	1.056	105.58	70-130
33 2,2-Dichloropropan	1.000	0.9808	98.08	70-130
38 1,1-Dichloropropen	1.000	1.007	100.67	70-130
86 Hexachlorobutadien	1.000	2.023	NT 202.29*	70-130
19 Iodomethane	1.000	0.8477	84.77	70-130
79 4-Isopropyltoluene	1.000	0.7973	79.73	70-130
87 Naphthalene	1.000	1.217	121.75	70-130
72 n-Propylbenzene	1.000	0.9152	91.52	70-130
60 1,1,1,2-Tetrachlor	1.000	1.003	100.30	70-130
88 1,2,3-Trichloroben	1.000	1.214	121.43	70-130
77 1,2,4-Trimethylben	1.000	0.8157	81.57	70-130
74 1,3,5-Trimethylben	1.000	0.8358	83.58	70-130
150 Vinyl Acetate-86	1.000	0.6922	NT 69.22*	70-130
62 m + p-Xylene	2.000	1.814	90.71	70-130
64 Xylene-o	1.000	0.8204	82.04	70-130
49 4-Methyl-2-pentano	2.000	2.076	103.80	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.473	94.73	73-122
$ 5 1,2-Dichloroethane	10.000	9.475	94.75	61-128
$ 6 Toluene-d8	10.000	9.292	92.92	76-110
$ 7 Bromofluorobenzene	10.000	9.074	90.74	74-116

7/22/10 @ 2024

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\UXJ0943.D
Report Date: 23-Jul-2010 08:01

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 2-8260.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\8260LLUX11.m
Misc Info: J00722A,8260LLUX11,,43582,3

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	1.129	112.92	70-130
	42 Trichloroethene	1.000	0.9901	99.01	70-130
	59 Chlorobenzene	1.000	0.9843	98.43	70-130
	50 Toluene	1.000	1.005	100.55	70-130
	41 Benzene	1.000	1.046	104.59	70-130
	16 Acetone	2.000	2.457	122.87	70-130
	20 Carbon Disulfide	1.000	1.122	112.20	70-130
	9 Chloromethane	1.000	0.9627	96.27	70-130
	11 Bromomethane	1.000	1.301	OK 130.06*	70-130
	10 Vinyl Chloride	1.000	0.9762	97.62	70-130
	12 Chloroethane	1.000	1.454	145.45*	70-130
	21 Methylene Chloride	1.000	1.651	165.09*	70-130
	28 1,1-Dichloroethane	1.000	1.105	110.51	70-130
M	31 1,2-Dichloroethene	2.000	2.095	104.77	70-130
	35 Chloroform	1.000	1.090	108.96	70-130
	40 1,2-Dichloroethane	1.000	1.112	111.17	70-130
	30 2-Butanone	2.000	2.436	121.79	70-130
	37 1,1,1-Trichloroeth	1.000	0.9966	99.66	70-130
	39 Carbon Tetrachlori	1.000	0.9894	98.94	70-130
	46 Bromodichlorometha	1.000	1.046	104.55	70-130
	43 1,2-Dichloropropan	1.000	1.044	104.40	70-130
	48 cis-1,3-Dichloropr	1.000	0.9271	92.71	70-130
	54 1,3-Dichloropropan	1.000	1.009	100.94	70-130
	57 Dibromochlorometha	1.000	1.207	120.75	70-130
	53 1,1,2-Trichloroeth	1.000	1.059	105.92	70-130
	51 trans-1,3-Dichloro	1.000	1.179	117.93	70-130
	49 4-Methyl-2-pentano	2.000	1.826	91.32	70-130
	56 2-Hexanone	2.000	1.783	89.15	70-130
	55 Tetrachloroethene	1.000	0.9770	97.70	70-130
	68 1,1,2,2-Tetrachlor	1.000	1.118	111.83	70-130
	66 Bromoform	1.000	1.539	153.88*	70-130
	61 Ethylbenzene	1.000	0.8456	84.56	70-130
	65 Styrene	1.000	0.7460	74.60	70-130
M	63 Xylenes (total)	3.000	2.443	81.44	70-130
	32 cis-1,2-dichloroet	1.000	1.002	100.23	70-130
	25 trans-1,2-Dichloro	1.000	1.093	109.31	70-130
	8 Dichlorodifluorome	1.000	0.7496	74.96	70-130
	13 Trichlorofluoromet	1.000	1.018	101.78	70-130

70	1,2,3-Trichloropro	1.000	1.207	120.73	70-130
18	Freon-113	1.000	1.052	105.18	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00722A.b\UXJ0943.D
Report Date: 23-Jul-2010 08:01

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	1.014	101.46	70-130
58 1,2-Dibromoethane	1.000	1.042	104.15	70-130
67 Isopropylbenzene	1.000	0.7380	73.80	70-130
80 1,3-Dichlorobenzen	1.000	0.9181	91.81	70-130
81 1,4-Dichlorobenzen	1.000	0.9722	97.22	70-130
83 1,2-Dichlorobenzen	1.000	0.9579	95.79	70-130
84 1,2-Dibromo-3-chlo	1.000	1.056	105.59	70-130
85 1,2,4-Trichloroben	1.000	1.251	125.06	70-130
98 Cyclohexane	1.000	0.7641	76.41	70-130
143 Methyl Acetate	2.000	2.398	119.90	70-130
144 Methylcyclohexane	1.000	0.7608	76.08	70-130
71 Bromobenzene	1.000	0.9916	99.16	70-130
34 Bromochloromethane	1.000	1.053	105.30	70-130
82 n-Butylbenzene	1.000	0.7910	79.10	70-130
78 sec-Butylbenzene	1.000	0.7488	74.88	70-130
76 tert-Butylbenzene	1.000	0.7113	71.13	70-130
73 2-Chlorotoluene	1.000	0.8302	83.02	70-130
75 4-Chlorotoluene	1.000	0.9353	93.53	70-130
45 Dibromomethane	1.000	1.042	104.16	70-130
33 2,2-Dichloropropan	1.000	0.8419	84.19	70-130
38 1,1-Dichloropropen	1.000	0.8995	89.95	70-130
86 Hexachlorobutadien	1.000	1.914	NJ 191.45*	70-130
19 Iodomethane	1.000	0.9574	95.75	70-130
79 4-Isopropyltoluene	1.000	0.7008	70.08	70-130
87 Naphthalene	1.000	1.180	118.02	70-130
72 n-Propylbenzene	1.000	0.7850	78.50	70-130
60 1,1,1,2-Tetrachlor	1.000	0.9822	98.23	70-130
88 1,2,3-Trichloroben	1.000	1.152	115.20	70-130
77 1,2,4-Trimethylben	1.000	0.7443	74.43	70-130
74 1,3,5-Trimethylben	1.000	0.7787	77.87	70-130
150 Vinyl Acetate-86	1.000	0.6024	NJ 60.25*	70-130
62 m + p-Xylene	2.000	1.664	83.18	70-130
64 Xylene-o	1.000	0.7795	77.95	70-130
49 4-Methyl-2-pentano	2.000	1.826	91.32	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.683	96.83	73-122
$ 5 1,2-Dichloroethane	10.000	9.874	98.74	61-128
$ 6 Toluene-d8	10.000	9.194	91.94	76-110
$ 7 Bromofluorobenzene	10.000	9.020	90.20	74-116

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: L4LL11AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALCAN

SDG Number:

Lab File ID: UXJ0950.D

Lot Number: A0G140402

Date Analyzed: 07/23/10

Time Analyzed: 12:49

Matrix: WATER

Date Extracted:07/23/10

GC Column: DB 624 ID: .18

Extraction Method: 5030B

Instrument ID: UX11

Level:(low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

MW 1

	CLIENT ID.	SAMPLE WORK ORDER #		LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	FWGLL12mw-128C-1549-GW	L35M41AA		UXJ0952.D	07/23/10	13:46
02	FWGLL12mw-128C-1549-GW	L35M41AC	S	UXJ0953.D	07/23/10	14:09
03	FWGLL12mw-128C-1549-GW	L35M41AD	D	UXJ0954.D	07/23/10	14:32
04	FWGLL12mw-244C-1562-GW Ace, MEK	L35NA1AA		UXJ0955.D	07/23/10	14:55
05	FWGTEAM2-TRIP Acetone	L35ND1AA		UXJ0956.D	07/23/10	15:17
06	FWGLL12mw-186C-1556-GW	L35NE1AA		UXJ0957.D	07/23/10	15:40
07	FWGLL12mw-189C-1559-GW	L35NG1AA		UXJ0958.D	07/23/10	16:02
08	FWGSCFmw-003-1517-GW Ace	L35NJ1AA		UXJ0959.D	07/23/10	16:25
09	FWGSCFmw-003-1517-GW	L35NJ1AC	S	UXJ0960.D	07/23/10	16:47
10	FWGSCFmw-003-1517-GW	L35NJ1AD	D	UXJ0961.D	07/23/10	17:10
11	FWGTEAM3-TRIP Acetone	L35NP1AA		UXJ0962.D	07/23/10	17:32
12	FWGLL12mw-182C-1552-GW	L35NQ1AA		UXJ0963.D	07/23/10	17:55
13	FWGLL12mw-107C-1547-GW	L35NW1AA		UXJ0964.D	07/23/10	18:18
14	FWGLL12mw-DUP4-1569-GW	L35N01AA		UXJ0965.D	07/23/10	18:40
15	FWGLL12mw-246C-1564-GW	L35N21AA		UXJ0966.D	07/23/10	19:03
16	FWGLL12mw-184C-1554-GW	L35N41AA		UXJ0967.D	07/23/10	19:26
17	FWGLL12mw-185C-1555-GW	L35N61AA		UXJ0968.D	07/23/10	19:48
18	FWGEQUIPRINSE3-1580-GW Acetone/MEK	L35N81AA		UXJ0969.D	07/23/10	20:11
19	CHECK SAMPLE	L4LL11AC	C	UXJ0948.D	07/23/10	12:03
20	DUPLICATE CHECK	L4LL11AD	L	UXJ0951.D	07/23/10	13:11
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COMMENTS:

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: L4H6J1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALCAN

SDG Number:

Lab File ID: UXJ0919.D

Lot Number: A0G140402

Date Analyzed: 07/22/10

Time Analyzed: 11:22

Matrix: WATER

Date Extracted:07/22/10

GC Column: DB 624 ID: .18

Extraction Method: 5030B

Instrument ID: UX11

Level:(low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	INTRA-LAB QC	L33811AA	UXJ0924.D	07/22/10	13:15
02	LAB MS/MSD	L33811AC S	UXJ0941.D	07/22/10	19:39
03	LAB MS/MSD	L33811AD D	UXJ0942.D	07/22/10	20:01
04	FWGTEAM1-TRIP	L35M11AA	UXJ0938.D	07/22/10	18:31
05	FWGLL12mw-243C-1561-GW	L35M61AA	UXJ0939.D	07/22/10	18:54
06	FWGLL12mw-187C-1557-GW	L35M81AA	UXJ0940.D	07/22/10	19:16
07	CHECK SAMPLE	L4H6J1AC C	UXJ0916.D	07/22/10	10:14
08	DUPLICATE CHECK	L4H6J1AD L	UXJ0920.D	07/22/10	11:45
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COMMENTS:

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00723A.b\UXJ0949.D
Report Date: 23-Jul-2010 13:12

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 2-8260.sub

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: MRL
Quant Type: ISTD

7/23/10 @ 1226

Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00723A.b\8260LLUX11.m
Misc Info: J00723A,8260LLUX11,,43582,3

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17 1,1-Dichloroethene	1.000	1.184	118.45	70-130
	42 Trichloroethene	1.000	1.117	111.73	70-130
	59 Chlorobenzene	1.000	1.089	108.90	70-130
	50 Toluene	1.000	1.118	111.86	70-130
	41 Benzene	1.000	1.143	114.28	70-130
	16 Acetone	2.000	1.747	87.36	70-130
	20 Carbon Disulfide	1.000	1.245	124.52	70-130
	9 Chloromethane	1.000	1.068	106.76	70-130
	11 Bromomethane	1.000	1.404	140.36*	70-130
	10 Vinyl Chloride	1.000	0.9859	98.59	70-130
	12 Chloroethane	1.000	1.401	140.07*	70-130
	21 Methylene Chloride	1.000	1.854	185.35*	70-130
	28 1,1-Dichloroethane	1.000	1.195	119.48	70-130
M	31 1,2-Dichloroethene	2.000	2.238	111.89	70-130
	35 Chloroform	1.000	1.135	113.51	70-130
	40 1,2-Dichloroethane	1.000	1.197	119.66	70-130
	30 2-Butanone	2.000	2.566	128.29	70-130
	37 1,1,1-Trichloroeth	1.000	1.076	107.65	70-130
	39 Carbon Tetrachlori	1.000	1.055	105.55	70-130
	46 Bromodichlorometha	1.000	1.121	112.09	70-130
	43 1,2-Dichloropropan	1.000	1.116	111.65	70-130
	48 cis-1,3-Dichloropr	1.000	1.009	100.91	70-130
	54 1,3-Dichloropropan	1.000	1.094	109.36	70-130
	57 Dibromochlorometha	1.000	1.304	DL 130.35*	70-130
	53 1,1,2-Trichloroeth	1.000	1.100	110.06	70-130
	51 trans-1,3-Dichloro	1.000	1.282	128.21	70-130
	49 4-Methyl-2-pentano	2.000	1.927	96.34	70-130
	56 2-Hexanone	2.000	1.834	91.70	70-130
	55 Tetrachloroethene	1.000	1.029	102.93	70-130
	68 1,1,2,2-Tetrachlor	1.000	1.098	109.76	70-130
	66 Bromoform	1.000	1.678	167.82*	70-130
	61 Ethylbenzene	1.000	0.9815	98.15	70-130
	65 Styrene	1.000	0.8906	89.06	70-130
M	63 Xylenes (total)	3.000	2.934	97.81	70-130
	32 cis-1,2-dichloroet	1.000	1.107	110.74	70-130
	25 trans-1,2-Dichloro	1.000	1.130	113.05	70-130
	8 Dichlorodifluorome	1.000	0.7024	70.24	70-130
	13 Trichlorofluoromet	1.000	1.090	108.96	70-130

70 1,2,3-Trichloropro	1.000	1.143	114.33	70-130
18 Freon-113	1.000	1.066	106.62	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00723A.b\UXJ0949.D
Report Date: 23-Jul-2010 13:12

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	1.041	104.09	70-130
58 1,2-Dibromoethane	1.000	1.069	106.87	70-130
67 Isopropylbenzene	1.000	0.8882	88.82	70-130
80 1,3-Dichlorobenzen	1.000	1.082	108.26	70-130
81 1,4-Dichlorobenzen	1.000	1.110	110.99	70-130
83 1,2-Dichlorobenzen	1.000	1.119	111.86	70-130
84 1,2-Dibromo-3-chlo	1.000	1.170	117.00	70-130
85 1,2,4-Trichloroben	1.000	1.523	152.32*	70-130
98 Cyclohexane	1.000	0.8032	80.32	70-130
143 Methyl Acetate	2.000	2.468	123.40	70-130
144 Methylcyclohexane	1.000	0.7470	74.70	70-130
71 Bromobenzene	1.000	1.102	110.15	70-130
34 Bromochloromethane	1.000	1.155	115.51	70-130
82 n-Butylbenzene	1.000	0.8810	88.10	70-130
78 sec-Butylbenzene	1.000	0.9150	91.50	70-130
76 tert-Butylbenzene	1.000	0.8626	86.26	70-130
73 2-Chlorotoluene	1.000	0.9848	98.49	70-130
75 4-Chlorotoluene	1.000	0.9814	98.14	70-130
45 Dibromomethane	1.000	1.114	111.39	70-130
33 2,2-Dichloropropan	1.000	1.045	104.54	70-130
38 1,1-Dichloropropen	1.000	1.069	106.94	70-130
86 Hexachlorobutadien	1.000	2.113	211.34*	70-130
19 Iodomethane	1.000	1.002	100.19	70-130
79 4-Isopropyltoluene	1.000	0.8812	88.12	70-130
87 Naphthalene	1.000	1.343	134.33*	70-130
72 n-Propylbenzene	1.000	0.9729	97.29	70-130
60 1,1,1,2-Tetrachlor	1.000	1.099	109.90	70-130
88 1,2,3-Trichloroben	1.000	1.436	143.64*	70-130
77 1,2,4-Trimethylben	1.000	0.8839	88.39	70-130
74 1,3,5-Trimethylben	1.000	0.9321	93.21	70-130
150 Vinyl Acetate-86	1.000	0.7467	74.67	70-130
62 m + p-Xylene	2.000	1.993	99.67	70-130
64 Xylene-o	1.000	0.9409	94.09	70-130
49 4-Methyl-2-pentano	2.000	1.927	96.34	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	9.327	93.27	73-122
$ 5 1,2-Dichloroethane	10.000	9.298	92.98	61-128
$ 6 Toluene-d8	10.000	9.138	91.38	76-110
$ 7 Bromofluorobenzene	10.000	9.028	90.28	74-116

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00723A.b\UXJ0973.D
Report Date: 24-Jul-2010 12:01

TestAmerica North Canton

7/23/10 @ 2141

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 2-8260.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00723A.b\8260LLUX11.m
Misc Info: J00723A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.215	121.51	70-130
	42	Trichloroethene	1.000	1.128	112.82	70-130
	59	Chlorobenzene	1.000	1.056	105.61	70-130
	50	Toluene	1.000	1.078	107.84	70-130
	41	Benzene	1.000	1.139	113.90	70-130
	16	Acetone	2.000	3.020	151.02*	70-130
	20	Carbon Disulfide	1.000	1.194	119.43	70-130
	9	Chloromethane	1.000	0.9376	93.76	70-130
	11	Bromomethane	1.000	1.284	128.42	70-130
	10	Vinyl Chloride	1.000	0.8837	88.37	70-130
	12	Chloroethane	1.000	1.423	142.33*	70-130
	21	Methylene Chloride	1.000	1.710	171.00*	70-130
	28	1,1-Dichloroethane	1.000	1.237	123.73	70-130
M	31	1,2-Dichloroethene	2.000	2.241	112.04	70-130
	35	Chloroform	1.000	1.219	121.91	70-130
	40	1,2-Dichloroethane	1.000	1.273	127.32	70-130
	30	2-Butanone	2.000	2.807	140.35*	70-130
	37	1,1,1-Trichloroeth	1.000	1.052	105.25	70-130
	39	Carbon Tetrachlori	1.000	1.120	111.96	70-130
	46	Bromodichlorometha	1.000	1.197	119.68	70-130
	43	1,2-Dichloropropan	1.000	1.091	109.11	70-130
	48	cis-1,3-Dichloropr	1.000	0.9861	98.61	70-130
	54	1,3-Dichloropropan	1.000	1.086	108.62	70-130
	57	Dibromochlorometha	1.000	1.259	125.93	70-130
	53	1,1,2-Trichloroeth	1.000	1.148	114.81	70-130
	51	trans-1,3-Dichloro	1.000	1.222	122.26	70-130
	49	4-Methyl-2-pentano	2.000	1.998	99.89	70-130
	56	2-Hexanone	2.000	1.789	89.44	70-130
	55	Tetrachloroethene	1.000	1.032	103.17	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.123	112.33	70-130
	66	Bromoform	1.000	1.661	166.07*	70-130
	61	Ethylbenzene	1.000	0.8207	82.07	70-130
	65	Styrene	1.000	0.7852	78.52	70-130
M	63	Xylenes (total)	3.000	2.534	84.45	70-130
	32	cis-1,2-dichloroet	1.000	1.081	108.10	70-130
	25	trans-1,2-Dichloro	1.000	1.160	115.98	70-130
	8	Dichlorodifluorome	1.000	0.7353	73.53	70-130
	13	Trichlorofluoromet	1.000	1.050	105.01	70-130

70	1,2,3-Trichloropro	1.000	1.274	127.39	70-130
18	Freon-113	1.000	1.156	115.58	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00723A.b\UXJ0973.D
Report Date: 24-Jul-2010 12:01

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.9856	98.56	70-130
58 1,2-Dibromoethane	1.000	1.065	106.52	70-130
67 Isopropylbenzene	1.000	0.7468	74.68	70-130
80 1,3-Dichlorobenzen	1.000	0.9700	97.00	70-130
81 1,4-Dichlorobenzen	1.000	1.036	103.66	70-130
83 1,2-Dichlorobenzen	1.000	0.9704	97.04	70-130
84 1,2-Dibromo-3-chlo	1.000	1.249	124.95	70-130
85 1,2,4-Trichloroben	1.000	1.170	117.03	70-130
98 Cyclohexane	1.000	0.7665	76.65	70-130
143 Methyl Acetate	2.000	2.786	139.30*	70-130
144 Methylcyclohexane	1.000	0.7303	73.03	70-130
71 Bromobenzene	1.000	0.9598	95.98	70-130
34 Bromochloromethane	1.000	1.149	114.93	70-130
82 n-Butylbenzene	1.000	0.7059	70.59	70-130
78 sec-Butylbenzene	1.000	0.7579	75.79	70-130
76 tert-Butylbenzene	1.000	0.6911	69.11*	70-130
73 2-Chlorotoluene	1.000	0.8729	87.29	70-130
75 4-Chlorotoluene	1.000	0.8849	88.49	70-130
45 Dibromomethane	1.000	1.249	124.88	70-130
33 2,2-Dichloropropan	1.000	0.9704	97.04	70-130
38 1,1-Dichloropropen	1.000	0.9942	99.42	70-130
86 Hexachlorobutadien	1.000	1.547	154.67*	70-130
19 Iodomethane	1.000	0.9487	94.87	70-130
79 4-Isopropyltoluene	1.000	0.6890	68.90*	70-130
87 Naphthalene	1.000	1.099	109.89	70-130
72 n-Propylbenzene	1.000	0.7563	75.63	70-130
60 1,1,1,2-Tetrachlor	1.000	1.039	103.93	70-130
88 1,2,3-Trichloroben	1.000	1.078	107.76	70-130
77 1,2,4-Trimethylben	1.000	0.7316	73.16	70-130
74 1,3,5-Trimethylben	1.000	0.7583	75.83	70-130
150 Vinyl Acetate-86	1.000	0.3538	35.38*	70-130
62 m + p-Xylene	2.000	1.726	86.28	70-130
64 Xylene-o	1.000	0.8080	80.80	70-130
49 4-Methyl-2-pentano	2.000	1.998	99.89	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	10.169	101.69	73-122
$ 5 1,2-Dichloroethane	10.000	10.298	102.98	61-128
$ 6 Toluene-d8	10.000	9.339	93.39	76-110
$ 7 Bromofluorobenzene	10.000	8.966	89.66	74-116

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 24, 2010

SDG: A0G140402 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 5.0 °C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP9-7/23/2010 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 2 R
12. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviation (%RSD) ≤ 30%?	✓				LCG Table 2 R
13. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 2 R
14. Was each target analyte <15 % RSD, or was the average RSD <15%?	✓				LCG Table 2 15% <RSD< 30% = J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 24, 2010

SDG: A0G140402 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			Benzoic acid, 2,4-dinitrophenol and benzo(k)fluoranthene used a quadratic fit. No qualifications were made as coefficients of determination (COD)(r) were≥0.99.	LCG Table 2 r<0.99=-J/R
16. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			6/8/10	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓			7/27/10 @0925, 1753	LCG Table 2
18. Were the QC/MRL recoveries 70-130%?		✓		Hexachlorocyclopentadiene recovered below control limits at 30.88%, 4,6-dinitro-2-methylphenol at 25%, 2,4-dinitrophenol at 9.5% and pentachlorophenol at 47% in the MRL analyzed 7/27/10 at 1753. An MDL check was analyzed with acceptable results for hexachlorocyclopentadiene and results were qualified as estimated, "J/UJ". The MDL check did not recover for 4,6-dinitro-2-methylphenol, 2,4-dinitrophenol or pentachlorophenol. The results for these targets were qualified, as unusable, "R".	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			7/23/10 @ 1330	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?	✓			7/27/10 @ 0845	LCG Table 2
21. Was the percent difference (% D) for the CCCs ≤ 20%? (see Table 1) (% drift if regression fit model used)	✓				LCG Table 2
22. Were the minimum RFs for the SPCCs met? (see Table 2)	✓				LCG Table 2
23. Was the %Difference or %Drift ≤20% for all target analytes? OR was the average %D ≤20% with no individual analyte ≥30%D?	✓				LCG Table 2 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>30% (neg) = J/R D>30% (pos) = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 24, 2010

SDG: A0G140402 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
24. Were the internal standards added to every sample?	✓				LCG Table 2
25. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point ICAL std?	✓				LCG Table 2 R
26. Did the areas of all IS compounds vary by no more than -50% to +100% from the ICAL EICP area?	✓				LCG Table 2 R
27. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 2
28. Were all target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. bis(2-Ethylhexyl) phthalate was detected in the method blank at 2.3ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate <5x contamination were qualified, "B". See Appendix 1 for list of impacted samples.	LCG Table 2 <5/10x blank = B
29. Was a field blank collected and analyzed?	✓				
30. Were all target analytes in the field blank analysis <1/2 the MRL?		✓		Checked by ADR. bis(2-ethylhexyl)phthalate was detected in FWGEQUIPRinse3-1580-GW at 8.5ug/L and di-n-butyl phthalate at 0.83ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate and di-n-butyl phthalate <5x contamination were qualified, "B". See Appendix 1 for list of impacted samples.	<5/10x blank = B
31. Was a field duplicate analyzed?	✓				
32. Were the field duplicate RPDs ≤30%?	✓			Checked by ADR. Only detected sample results above the RL were evaluated.	QAPP Table 3-2 RPD >30=J
33. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 2
34. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR. The LCS recovered below control limits for 2,4-dinitrophenol at 23% and 9.4% for benzoic acid. The 2,4-dinitrophenol and benzoic acid results were qualified as estimated, "J/UJ".	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
35. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 2
36. Was the MS/MSD parent a Ravenna sample?	✓			Samples FWGLL12mw-128c-1549-GW and FWGSCFmw-003-1517-GW were the parent MS/MSD samples from this SDG.	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 24, 2010

SDG: A0G140402 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		Several MS/MSD outliers were noted. For the FWGLL12mw-128c-1549-GW parent: • The MS and MSD recovered below control limits for 3,3'-dichorobenzidine at 33 and 37%. • Hexachlorocyclopentadiene recovered below control limits at 41% in the MS. Bis(2-Ethylhexyl)phthalate recovered above control limits in the MSD at 169% with an RPD of 65%. • The MS/MSD RPD recovered above control limits for benzo(a)anthracene at 21%, benzo(k)fluoranthene at 26%, hexachlorobenzene and hexachloroethane at 22%, hexachlorobutadiene at 32% and hexachlorocyclopentadiene at 33%. No qualifications were made for these outliers as the associated LCS recovered within limits. For the FWGSCFmw-003-1517-GW parent: • The MS and MSD recovered below control limits for 2,4-dinitrophenol at 35 and 42% and for benzoic acid at 22 and 31%. • Bis(2-Etheylhexyl)phthalate recovered above control limits in the MSD at 188% with an RPD of 68%. • The MS/MSD RPD recovered above control limits for benzoic acid at 34%. The 2,4-dinitrophenol and benzoic acid results were qualified as estimated, "UJ". No additional qualifications were made for the bis(2-Ethylhexyl)phthalate outlier as the associated LCS recovered within limits	LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?	✓				LCG Table 2 >150%=J; 10% -50%=J/UJ; <10%=J/R
39. Were reported sample concentrations within calibration range?	✓				
40. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
41. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding MS outliers and LCS outliers.	

References:

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 24, 2010

SDG: A0G140402 R0
Analysis: SW846 8270C (including PAHs)

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 2 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Table 1: CCCs *(All analytes if CCCs not included in standard)*

Base / Neutral Compunds	Acid Compounds
Acenaphthalene	4-Chloro-3-methylphenol
1,4-Dichlorobenzene	2,4-Dichlorophenol
Hexachlorobutadiene	2-Nitrophenol
N-Nitrosodiphehylamine	Phenol
Di-n-octylphthalate	Pentachlorophenol
Fluoroanthene	2,4,6-Trichlorophenol
Benzo(a)pyrene	

Table 2: SPCCs

N-Nitroso-di-n-propylamine	0.050
Hexachlorocyclopentadiene	0.050
2,4-Dinitrophenol	0.050
4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-002 **Work Order #...:** L35M41AE **Matrix.....:** WG
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.3 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-002 Work Order #...: L35M41AE Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-002 Work Order #...: L35M41AE Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	75	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	71	(50 - 150)
2,4,6-Tribromophenol	82	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-004 Work Order #...: L35M61AC Matrix.....: WG
Date Sampled...: 07/13/10 12:17 Date Received..: 07/14/10
Prep Date.....: 07/15/10 Analysis Date..: 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 Initial Wgt/Vol: 1020 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**4.4 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-004 **Work Order #...:** L35M61AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-004 **Work Order #...:** L35M61AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	83	(50 - 150)
2-Fluorobiphenyl	78	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	75	(50 - 150)
2,4,6-Tribromophenol	87	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-006 **Work Order #...:** L35M81AC **Matrix.....:** WG
Date Sampled...: 07/13/10 13:51 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.2 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-006 Work Order #...: L35M81AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-006 **Work Order #...:** L35M81AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	85	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	71	(50 - 150)
2,4,6-Tribromophenol	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-008 **Work Order #...:** L35NA1AC **Matrix.....:** WG
Date Sampled...: 07/13/10 15:49 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-008 **Work Order #...:** L35NA1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-008 **Work Order #...:** L35NA1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	76	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	78	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-011 **Work Order #...:** L35NE1AC **Matrix.....:** WG
Date Sampled...: 07/13/10 08:48 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**3.3 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.76 J**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-011 **Work Order #...:** L35NE1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-011 **Work Order #...:** L35NE1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	77	(50 - 150)
Terphenyl-d14	91	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	86	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-013 **Work Order #...:** L35NG1AC **Matrix.....:** WG
Date Sampled...: 07/13/10 10:38 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.75 J**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-013 **Work Order #...:** L35NG1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	**0.29**	**0.20**	**ug/L**	**0.10**
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-013 **Work Order #...:** L35NG1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(50 - 150)
2-Fluorobiphenyl	75	(50 - 150)
Terphenyl-d14	72	(50 - 150)
Phenol-d5	76	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	85	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-015 **Work Order #...:** L35NJ1AE **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-015 Work Order #...: L35NJ1AE Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-015 **Work Order #...:** L35NJ1AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
Terphenyl-d14	95	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-018 Work Order #...: L35NQ1AC Matrix.....: WG
Date Sampled...: 07/13/10 09:00 Date Received..: 07/14/10
Prep Date.....: 07/15/10 Analysis Date..: 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 Initial Wgt/Vol: 1000 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	**0.23**	**0.20**	**ug/L**	**0.10**
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	**0.22**	**0.20**	**ug/L**	**0.10**
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-018 **Work Order #...:** L35NQ1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzo(a)anthracene	**0.23**	**0.20**	**ug/L**	**0.10**
Benzo(b)fluoranthene	**0.22**	**0.20**	**ug/L**	**0.10**
Benzo(k)fluoranthene	**0.32**	**0.20**	**ug/L**	**0.10**
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	**0.22**	**0.20**	**ug/L**	**0.10**
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**4.9 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	**0.21**	**0.20**	**ug/L**	**0.10**
Dibenz(a,h)anthracene	**0.21**	**0.20**	**ug/L**	**0.10**
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.89 J**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
Phenol	ND	1.0	ug/L	0.60
Pyrene	**0.21**	**0.20**	**ug/L**	**0.10**
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-018 **Work Order #...:** L35NQ1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(50 - 150)
2-Fluorobiphenyl	77	(50 - 150)
Terphenyl-d14	97	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	90	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-020 **Work Order #...:** L35NW1AC **Matrix.....:** WG
Date Sampled...: 07/13/10 10:10 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**3.0 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-020 Work Order #...: L35NW1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-020 Work Order #...: L35NW1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	91	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-022 **Work Order #...:** L35N01AC **Matrix.....:** WG
Date Sampled...: 07/13/10 10:30 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**7.7 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.78 J**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-022 Work Order #...: L35N01AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-022 Work Order #...: L35N01AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(50 - 150)
2-Fluorobiphenyl	76	(50 - 150)
Terphenyl-d14	87	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	77	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-024 **Work Order #...:** L35N21AC **Matrix.....:** WG
Date Sampled...: 07/13/10 12:40 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-024 **Work Order #...:** L35N21AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	**1.4**	**0.20**	**ug/L**	**0.10**
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-024 **Work Order #...:** L35N21AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
Terphenyl-d14	89	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	78	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-026 **Work Order #...:** L35N41AC **Matrix.....:** WG
Date Sampled...: 07/13/10 14:00 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**3.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-026 Work Order #...: L35N41AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-026 **Work Order #...:** L35N41AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	89	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-028 **Work Order #...:** L35N61AC **Matrix.....:** WG
Date Sampled...: 07/13/10 15:50 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.6 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	**1.4**	**1.0**	**ug/L**	**0.80**
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.75 J**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-028 **Work Order #...:** L35N61AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-028 **Work Order #...:** L35N61AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	90	(50 - 150)
Phenol-d5	66	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	74	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-030 **Work Order #...:** L35N81AC **Matrix.....:** WQ
Date Sampled...: 07/13/10 16:20 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**8.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.83 J**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-030 Work Order #...: L35N81AC Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G140402-030 **Work Order #...:** L35N81AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	87	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	71	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L37F41AA **Matrix.....:** WATER
MB Lot-Sample #: A0G150000-051

Prep Date.....: 07/15/10 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/27/10 **Prep Batch #...:** 0196051
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzoic acid	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**2.3 J**	**10**	**ug/L**	**SW846 8270C**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L37F41AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(50 - 150)
2-Fluorobiphenyl	79	(50 - 150)
Terphenyl-d14	94	(50 - 150)
Phenol-d5	76	(50 - 150)
2-Fluorophenol	76	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L37F41AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	77	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 Work Order #...: L37F41AC Matrix.....: WATER
LCS Lot-Sample#: A0G150000-051
Prep Date.....: 07/15/10 Analysis Date..: 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	77	(30 - 120)	SW846 8270C
Acenaphthene	85	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	98	(34 - 151)	SW846 8270C
Pyrene	87	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	86	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	82	(30 - 115)	SW846 8270C
Pentachlorophenol	60	(30 - 150)	SW846 8270C
Phenol	84	(30 - 115)	SW846 8270C
2-Chlorophenol	81	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	86	(31 - 121)	SW846 8270C
4-Nitrophenol	83	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	77	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	73	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	87	(36 - 135)	SW846 8270C
4-Methylphenol	76	(31 - 115)	SW846 8270C
4-Nitroaniline	93	(30 - 140)	SW846 8270C
Acenaphthylene	87	(37 - 115)	SW846 8270C
Anthracene	87	(45 - 118)	SW846 8270C
Benzo(a)anthracene	85	(43 - 138)	SW846 8270C
Benzo(a)pyrene	78	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	92	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	98	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	99	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	90	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	84	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	85	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	104	(30 - 154)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 Work Order #...: L37F41AC Matrix.....: WATER
LCS Lot-Sample#: A0G150000-051

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	81	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	87	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	76	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	23 a	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	102	(43 - 122)	SW846 8270C
2-Chloronaphthalene	85	(35 - 115)	SW846 8270C
2-Methylnaphthalene	88	(32 - 115)	SW846 8270C
2-Methylphenol	82	(30 - 116)	SW846 8270C
2-Nitroaniline	92	(36 - 140)	SW846 8270C
2-Nitrophenol	90	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	68	(30 - 160)	SW846 8270C
3-Nitroaniline	94	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	63	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	97	(43 - 118)	SW846 8270C
4-Chloroaniline	76	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	90	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	93	(37 - 136)	SW846 8270C
Carbazole	91	(49 - 126)	SW846 8270C
Chrysene	85	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	98	(38 - 130)	SW846 8270C
Dibenzofuran	87	(40 - 115)	SW846 8270C
Diethyl phthalate	93	(43 - 132)	SW846 8270C
Dimethyl phthalate	94	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	93	(36 - 151)	SW846 8270C
Fluoranthene	91	(47 - 132)	SW846 8270C
Fluorene	88	(41 - 115)	SW846 8270C
Hexachlorobenzene	91	(42 - 123)	SW846 8270C
Hexachlorobutadiene	70	(30 - 120)	SW846 8270C
Hexachloroethane	69	(30 - 120)	SW846 8270C
Isophorone	87	(33 - 115)	SW846 8270C
Naphthalene	84	(30 - 119)	SW846 8270C
Nitrobenzene	91	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	88	(35 - 124)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L37F41AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G150000-051

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	88	(45 - 117)	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	96	(37 - 130)	**SW846 8270C**
Di-n-butyl phthalate	92	(46 - 123)	**SW846 8270C**
Hexachlorocyclopenta-diene	56	(30 - 115)	**SW846 8270C**
Benzoic acid	9.4 a	(30 - 136)	**SW846 8270C**
Benzyl alcohol	83	(29 - 115)	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	82	(50 - 150)
2-Fluorobiphenyl	79	(50 - 150)
Terphenyl-d14	98	(50 - 150)
Phenol-d5	77	(50 - 150)
2-Fluorophenol	77	(50 - 150)
2,4,6-Tribromophenol	81	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 Work Order #...: L35M41AF-MS Matrix.....: WG
MS Lot-Sample #: A0G140402-002 L35M41AG-MSD
Date Sampled...: 07/13/10 09:09 Date Received..: 07/14/10
Prep Date.....: 07/15/10 Analysis Date..: 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 Initial Wgt/Vol: 520 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	70	(45 - 135)			SW846 8270C
	83	(45 - 135)	16	(0-40)	SW846 8270C
Acenaphthene	81	(45 - 135)			SW846 8270C
	94	(45 - 135)	15	(0-40)	SW846 8270C
2,4-Dinitrotoluene	98	(45 - 135)			SW846 8270C
	109	(45 - 135)	11	(0-40)	SW846 8270C
Pyrene	76	(45 - 135)			SW846 8270C
	92	(45 - 135)	20	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	86	(45 - 135)			SW846 8270C
	96	(45 - 135)	11	(0-40)	SW846 8270C
1,4-Dichlorobenzene	76	(45 - 135)			SW846 8270C
	87	(45 - 135)	14	(0-40)	SW846 8270C
Pentachlorophenol	72	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.0	(0-40)	SW846 8270C
Phenol	85	(45 - 135)			SW846 8270C
	94	(45 - 135)	9.9	(0-40)	SW846 8270C
2-Chlorophenol	82	(45 - 135)			SW846 8270C
	90	(45 - 135)	9.6	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	85	(45 - 135)			SW846 8270C
	95	(45 - 135)	11	(0-40)	SW846 8270C
4-Nitrophenol	83	(45 - 135)			SW846 8270C
	89	(45 - 135)	7.0	(0-40)	SW846 8270C
Acenaphthylene	83	(45 - 135)			SW846 8270C
	94	(45 - 135)	12	(0-40)	SW846 8270C
Anthracene	78	(45 - 135)			SW846 8270C
	91	(45 - 135)	15	(0-40)	SW846 8270C
Benzo(a)anthracene	73	(45 - 135)			SW846 8270C
	90	(45 - 135)	21	(0-40)	SW846 8270C
Benzo(b)fluoranthene	76	(45 - 135)			SW846 8270C
	87	(45 - 135)	14	(0-40)	SW846 8270C
Benzo(k)fluoranthene	84	(45 - 135)			SW846 8270C
	110	(45 - 135)	26	(0-40)	SW846 8270C
Benzo(ghi)perylene	82	(45 - 135)			SW846 8270C
	101	(45 - 135)	20	(0-40)	SW846 8270C
Benzo(a)pyrene	66	(45 - 135)			SW846 8270C
	80	(45 - 135)	18	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L35M41AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-002 L35M41AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	89	(45 - 135)			SW846 8270C
	99	(45 - 135)	10	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	85	(45 - 135)			SW846 8270C
	93	(45 - 135)	9.3	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	84	(45 - 135)			SW846 8270C
	94	(45 - 135)	12	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	83	(45 - 135)			SW846 8270C
	169 a,p	(45 - 135)	65	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	87	(45 - 135)			SW846 8270C
	105	(45 - 135)	18	(0-40)	SW846 8270C
Butyl benzyl phthalate	83	(45 - 135)			SW846 8270C
	96	(45 - 135)	15	(0-40)	SW846 8270C
Carbazole	89	(45 - 135)			SW846 8270C
	96	(45 - 135)	8.0	(0-40)	SW846 8270C
4-Chloroaniline	71	(45 - 135)			SW846 8270C
	77	(45 - 135)	9.0	(0-40)	SW846 8270C
2-Chloronaphthalene	81	(45 - 135)			SW846 8270C
	94	(45 - 135)	15	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	83	(45 - 135)			SW846 8270C
	101	(45 - 135)	19	(0-40)	SW846 8270C
Chrysene	73	(45 - 135)			SW846 8270C
	90	(45 - 135)	20	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	82	(45 - 135)			SW846 8270C
	100	(45 - 135)	19	(0-40)	SW846 8270C
Dibenzofuran	83	(45 - 135)			SW846 8270C
	96	(45 - 135)	14	(0-40)	SW846 8270C
Di-n-butyl phthalate	85	(45 - 135)			SW846 8270C
	99	(45 - 135)	16	(0-40)	SW846 8270C
1,2-Dichlorobenzene	72	(45 - 135)			SW846 8270C
	83	(45 - 135)	14	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 Work Order #...: L35M41AF-MS Matrix.....: WG
MS Lot-Sample #: A0G140402-002 L35M41AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	66	(45 - 135)			SW846 8270C
	78	(45 - 135)	16	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	33 a	(45 - 135)			SW846 8270C
	37 a	(45 - 135)	13	(0-40)	SW846 8270C
2,4-Dichlorophenol	86	(45 - 135)			SW846 8270C
	95	(45 - 135)	9.7	(0-40)	SW846 8270C
Diethyl phthalate	92	(45 - 135)			SW846 8270C
	101	(45 - 135)	8.7	(0-40)	SW846 8270C
2,4-Dimethylphenol	80	(45 - 135)			SW846 8270C
	87	(45 - 135)	8.5	(0-40)	SW846 8270C
Dimethyl phthalate	91	(45 - 135)			SW846 8270C
	101	(45 - 135)	10	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	81	(45 - 135)			SW846 8270C
	90	(45 - 135)	10	(0-40)	SW846 8270C
2,4-Dinitrophenol	60	(45 - 135)			SW846 8270C
	63	(45 - 135)	4.8	(0-40)	SW846 8270C
2,6-Dinitrotoluene	104	(45 - 135)			SW846 8270C
	112	(45 - 135)	8.1	(0-40)	SW846 8270C
Di-n-octyl phthalate	78	(45 - 135)			SW846 8270C
	96	(45 - 135)	20	(0-40)	SW846 8270C
Fluoranthene	80	(45 - 135)			SW846 8270C
	97	(45 - 135)	19	(0-40)	SW846 8270C
Fluorene	82	(45 - 135)			SW846 8270C
	97	(45 - 135)	16	(0-40)	SW846 8270C
Hexachlorobenzene	81	(45 - 135)			SW846 8270C
	101	(45 - 135)	22	(0-40)	SW846 8270C
Hexachlorobutadiene	52	(45 - 135)			SW846 8270C
	71	(45 - 135)	32	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	41 a	(45 - 135)			SW846 8270C
	58	(45 - 135)	33	(0-40)	SW846 8270C
Hexachloroethane	58	(45 - 135)			SW846 8270C
	72	(45 - 135)	22	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	81	(45 - 135)			SW846 8270C
	99	(45 - 135)	20	(0-40)	SW846 8270C
Isophorone	86	(45 - 135)			SW846 8270C
	95	(45 - 135)	10	(0-40)	SW846 8270C
2-Methylnaphthalene	83	(45 - 135)			SW846 8270C
	95	(45 - 135)	14	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L35M41AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-002 L35M41AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	84	(45 - 135)			SW846 8270C
	91	(45 - 135)	7.7	(0-40)	SW846 8270C
4-Methylphenol	76	(45 - 135)			SW846 8270C
	84	(45 - 135)	11	(0-40)	SW846 8270C
Naphthalene	81	(45 - 135)			SW846 8270C
	94	(45 - 135)	14	(0-40)	SW846 8270C
2-Nitroaniline	90	(45 - 135)			SW846 8270C
	100	(45 - 135)	10	(0-40)	SW846 8270C
3-Nitroaniline	87	(45 - 135)			SW846 8270C
	97	(45 - 135)	11	(0-50)	SW846 8270C
4-Nitroaniline	90	(45 - 135)			SW846 8270C
	99	(45 - 135)	8.6	(0-40)	SW846 8270C
Nitrobenzene	91	(45 - 135)			SW846 8270C
	100	(45 - 135)	9.6	(0-40)	SW846 8270C
2-Nitrophenol	89	(45 - 135)			SW846 8270C
	97	(45 - 135)	9.0	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	67	(45 - 135)			SW846 8270C
	77	(45 - 135)	14	(0-40)	SW846 8270C
Phenanthrene	81	(45 - 135)			SW846 8270C
	96	(45 - 135)	16	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	86	(45 - 135)			SW846 8270C
	95	(45 - 135)	10	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	80	(45 - 135)			SW846 8270C
	90	(45 - 135)	11	(0-40)	SW846 8270C
Benzoic acid	64	(45 - 135)			SW846 8270C
	66	(45 - 135)	3.5	(0-40)	SW846 8270C
Benzyl alcohol	83	(45 - 135)			SW846 8270C
	93	(45 - 135)	11	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(50 - 150)
	90	(50 - 150)
2-Fluorobiphenyl	78	(50 - 150)
	89	(50 - 150)
Terphenyl-d14	82	(50 - 150)
	101	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L35M41AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-002 L35M41AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	77	(50 - 150)
	87	(50 - 150)
2-Fluorophenol	74	(50 - 150)
	84	(50 - 150)
2,4,6-Tribromophenol	81	(50 - 150)
	90	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 Work Order #...: L35NJ1AF-MS Matrix.....: WG
MS Lot-Sample #: A0G140402-015 L35NJ1AG-MSD
Date Sampled...: 07/13/10 12:58 Date Received..: 07/14/10
Prep Date.....: 07/15/10 Analysis Date..: 07/27/10
Prep Batch #...: 0196051
Dilution Factor: 1 Initial Wgt/Vol: 525 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	68	(45 - 135)			SW846 8270C
	76	(45 - 135)	12	(0-40)	SW846 8270C
Acenaphthene	82	(45 - 135)			SW846 8270C
	86	(45 - 135)	4.0	(0-40)	SW846 8270C
2,4-Dinitrotoluene	97	(45 - 135)			SW846 8270C
	97	(45 - 135)	0.38	(0-40)	SW846 8270C
Pyrene	81	(45 - 135)			SW846 8270C
	84	(45 - 135)	2.9	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	81	(45 - 135)			SW846 8270C
	84	(45 - 135)	2.9	(0-40)	SW846 8270C
1,4-Dichlorobenzene	71	(45 - 135)			SW846 8270C
	81	(45 - 135)	13	(0-40)	SW846 8270C
Pentachlorophenol	57	(45 - 135)			SW846 8270C
	61	(45 - 135)	5.9	(0-40)	SW846 8270C
Phenol	78	(45 - 135)			SW846 8270C
	83	(45 - 135)	7.0	(0-40)	SW846 8270C
2-Chlorophenol	80	(45 - 135)			SW846 8270C
	82	(45 - 135)	3.0	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	83	(45 - 135)			SW846 8270C
	85	(45 - 135)	2.9	(0-40)	SW846 8270C
4-Nitrophenol	75	(45 - 135)			SW846 8270C
	78	(45 - 135)	2.9	(0-40)	SW846 8270C
Acenaphthylene	83	(45 - 135)			SW846 8270C
	86	(45 - 135)	3.4	(0-40)	SW846 8270C
Anthracene	85	(45 - 135)			SW846 8270C
	85	(45 - 135)	0.01	(0-40)	SW846 8270C
Benzo(a)anthracene	81	(45 - 135)			SW846 8270C
	83	(45 - 135)	2.0	(0-40)	SW846 8270C
Benzo(b)fluoranthene	79	(45 - 135)			SW846 8270C
	86	(45 - 135)	8.9	(0-40)	SW846 8270C
Benzo(k)fluoranthene	102	(45 - 135)			SW846 8270C
	96	(45 - 135)	6.0	(0-40)	SW846 8270C
Benzo(ghi)perylene	91	(45 - 135)			SW846 8270C
	93	(45 - 135)	1.7	(0-40)	SW846 8270C
Benzo(a)pyrene	74	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.71	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L35NJ1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-015 L35NJ1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	86	(45 - 135)			SW846 8270C
	89	(45 - 135)	3.9	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	81	(45 - 135)			SW846 8270C
	86	(45 - 135)	5.9	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	82	(45 - 135)			SW846 8270C
	85	(45 - 135)	3.0	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	91	(45 - 135)			SW846 8270C
	188 a,p	(45 - 135)	68	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	94	(45 - 135)			SW846 8270C
	93	(45 - 135)	0.66	(0-40)	SW846 8270C
Butyl benzyl phthalate	86	(45 - 135)			SW846 8270C
	88	(45 - 135)	1.4	(0-40)	SW846 8270C
Carbazole	88	(45 - 135)			SW846 8270C
	88	(45 - 135)	0.15	(0-40)	SW846 8270C
4-Chloroaniline	71	(45 - 135)			SW846 8270C
	70	(45 - 135)	1.4	(0-40)	SW846 8270C
2-Chloronaphthalene	79	(45 - 135)			SW846 8270C
	84	(45 - 135)	5.5	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	87	(45 - 135)			SW846 8270C
	90	(45 - 135)	3.2	(0-40)	SW846 8270C
Chrysene	81	(45 - 135)			SW846 8270C
	83	(45 - 135)	2.3	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	91	(45 - 135)			SW846 8270C
	91	(45 - 135)	0.03	(0-40)	SW846 8270C
Dibenzofuran	84	(45 - 135)			SW846 8270C
	86	(45 - 135)	2.7	(0-40)	SW846 8270C
Di-n-butyl phthalate	90	(45 - 135)			SW846 8270C
	89	(45 - 135)	1.7	(0-40)	SW846 8270C
1,2-Dichlorobenzene	69	(45 - 135)			SW846 8270C
	76	(45 - 135)	8.9	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 Work Order #...: L35NJ1AF-MS Matrix.....: WG
MS Lot-Sample #: A0G140402-015 L35NJ1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	63	(45 - 135)			SW846 8270C
	73	(45 - 135)	15	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	69	(45 - 135)			SW846 8270C
	68	(45 - 135)	0.92	(0-40)	SW846 8270C
2,4-Dichlorophenol	82	(45 - 135)			SW846 8270C
	86	(45 - 135)	5.4	(0-40)	SW846 8270C
Diethyl phthalate	90	(45 - 135)			SW846 8270C
	91	(45 - 135)	0.89	(0-40)	SW846 8270C
2,4-Dimethylphenol	75	(45 - 135)			SW846 8270C
	76	(45 - 135)	1.9	(0-40)	SW846 8270C
Dimethyl phthalate	91	(45 - 135)			SW846 8270C
	91	(45 - 135)	0.14	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	69	(45 - 135)			SW846 8270C
	74	(45 - 135)	7.4	(0-40)	SW846 8270C
2,4-Dinitrophenol	35 a	(45 - 135)			SW846 8270C
	42 a	(45 - 135)	18	(0-40)	SW846 8270C
2,6-Dinitrotoluene	98	(45 - 135)			SW846 8270C
	100	(45 - 135)	1.2	(0-40)	SW846 8270C
Di-n-octyl phthalate	88	(45 - 135)			SW846 8270C
	88	(45 - 135)	0.25	(0-40)	SW846 8270C
Fluoranthene	88	(45 - 135)			SW846 8270C
	88	(45 - 135)	0.09	(0-40)	SW846 8270C
Fluorene	84	(45 - 135)			SW846 8270C
	87	(45 - 135)	3.4	(0-40)	SW846 8270C
Hexachlorobenzene	88	(45 - 135)			SW846 8270C
	89	(45 - 135)	1.1	(0-40)	SW846 8270C
Hexachlorobutadiene	55	(45 - 135)			SW846 8270C
	67	(45 - 135)	19	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	45	(45 - 135)			SW846 8270C
	55	(45 - 135)	19	(0-40)	SW846 8270C
Hexachloroethane	57	(45 - 135)			SW846 8270C
	66	(45 - 135)	16	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	91	(45 - 135)			SW846 8270C
	91	(45 - 135)	0.15	(0-40)	SW846 8270C
Isophorone	82	(45 - 135)			SW846 8270C
	86	(45 - 135)	4.0	(0-40)	SW846 8270C
2-Methylnaphthalene	81	(45 - 135)			SW846 8270C
	87	(45 - 135)	6.2	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 Work Order #...: L35NJ1AF-MS Matrix.....: WG
MS Lot-Sample #: A0G140402-015 L35NJ1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	82	(45 - 135)			SW846 8270C
	78	(45 - 135)	5.5	(0-40)	SW846 8270C
4-Methylphenol	74	(45 - 135)			SW846 8270C
	75	(45 - 135)	1.6	(0-40)	SW846 8270C
Naphthalene	78	(45 - 135)			SW846 8270C
	84	(45 - 135)	7.1	(0-40)	SW846 8270C
2-Nitroaniline	86	(45 - 135)			SW846 8270C
	89	(45 - 135)	3.2	(0-40)	SW846 8270C
3-Nitroaniline	89	(45 - 135)			SW846 8270C
	89	(45 - 135)	0.39	(0-50)	SW846 8270C
4-Nitroaniline	87	(45 - 135)			SW846 8270C
	90	(45 - 135)	3.0	(0-40)	SW846 8270C
Nitrobenzene	86	(45 - 135)			SW846 8270C
	90	(45 - 135)	5.5	(0-40)	SW846 8270C
2-Nitrophenol	85	(45 - 135)			SW846 8270C
	87	(45 - 135)	2.8	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	86	(45 - 135)			SW846 8270C
	85	(45 - 135)	1.7	(0-40)	SW846 8270C
Phenanthrene	85	(45 - 135)			SW846 8270C
	84	(45 - 135)	1.3	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	82	(45 - 135)			SW846 8270C
	84	(45 - 135)	2.0	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	76	(45 - 135)			SW846 8270C
	79	(45 - 135)	2.9	(0-40)	SW846 8270C
Benzoic acid	22 a	(45 - 135)			SW846 8270C
	31 a	(45 - 135)	34	(0-40)	SW846 8270C
Benzyl alcohol	78	(45 - 135)			SW846 8270C
	82	(45 - 135)	4.2	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	79	(50 - 150)
	82	(50 - 150)
2-Fluorobiphenyl	77	(50 - 150)
	81	(50 - 150)
Terphenyl-d14	95	(50 - 150)
	94	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L35NJ1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-015 L35NJ1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	76	(50 - 150)
	77	(50 - 150)
2-Fluorophenol	72	(50 - 150)
	73	(50 - 150)
2,4,6-Tribromophenol	80	(50 - 150)
	78	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

Data File: \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\9QCMRLCL.D Page 1
Report Date: 25-Aug-2010 09:44

Fails for
Hexachlorocyclopentadiene
4,6-Dinitro-2-methylphenol
2,4-Dinitrophenol
Pentachlorophenol

TestAmerica North Canton

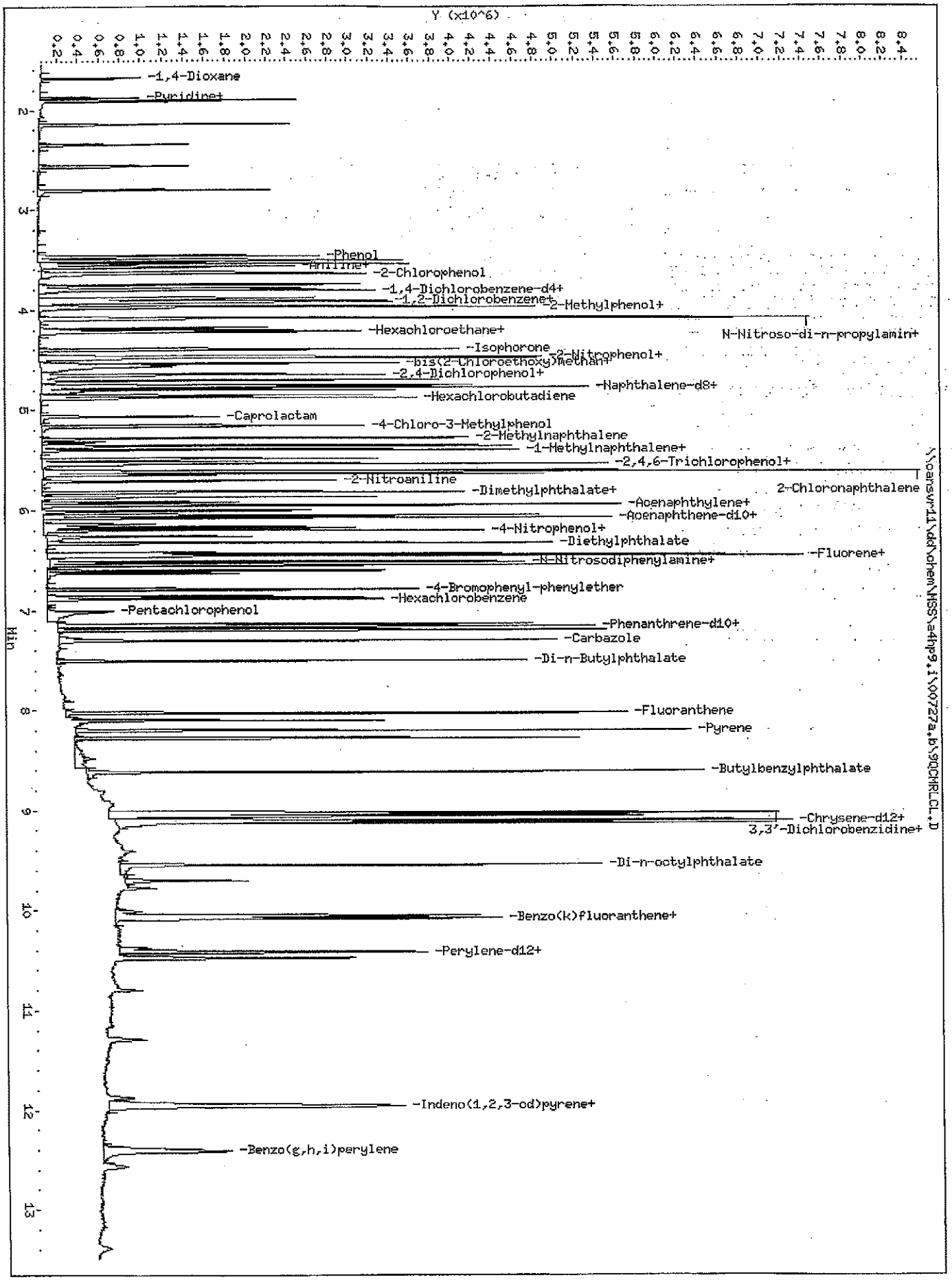
RECOVERY REPORT

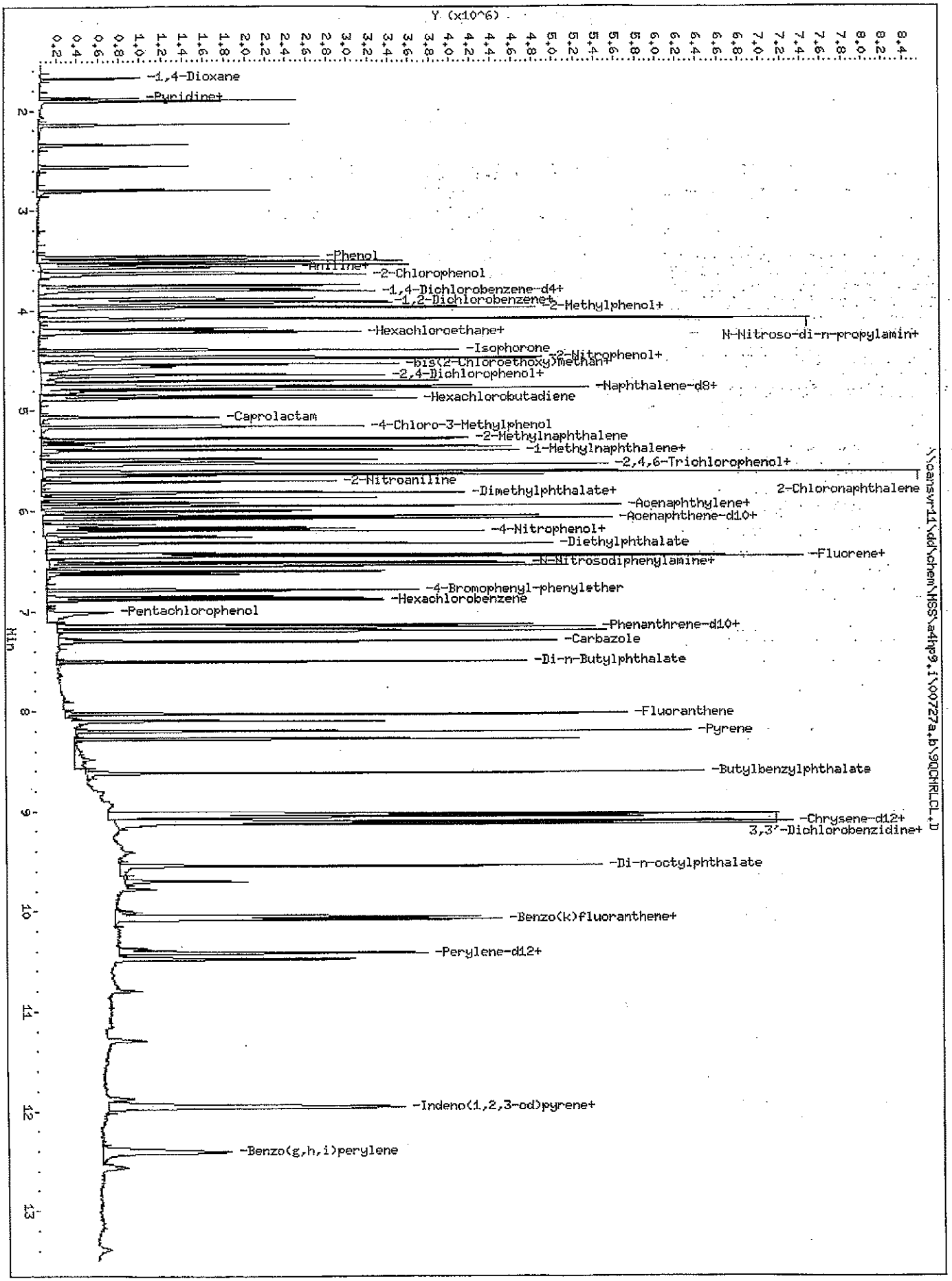
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Client SDG: SDGa00278
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: qcmrl
Level: LOW
Operator: 001574
Data Type: MS DATA
SampleType: MRL
SpikeList File: qcmrl.spk
Quant Type: ISTD
Sublist File: qcmrl.sub
Method File: \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\8270c-625.m
Misc Info:

7/27/10 @ MSS

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
82	Acenaphthene	10.000	10.208	102.08	70-130
79	Acenaphthylene	10.000	10.112	101.12	70-130
116	Anthracene	10.000	9.9891	99.89	70-130
136	Benzo(a)Anthracene	10.000	8.9140	89.14	70-130
141	Benzo(b)fluoranthe	10.000	9.0056	90.06	70-130
151	Benzo(g,h,i)peryle	10.000	10.625	106.25	70-130
146	Benzo(a)pyrene	10.000	10.126	101.26	70-130
29	Benzyl Alcohol	10.000	10.125	101.25	70-130
44	bis(2-Chloroethoxy	10.000	9.9103	99.10	70-130
23	bis(2-Chloroethyl)	10.000	9.6364	96.36	70-130
31	bis(2-Chloroisopro	10.000	9.6944	96.94	70-130
139	bis(2-ethylhexyl)P	10.000	10.637	106.37	70-130
106	4-Bromophenyl-phen	10.000	10.243	102.43	70-130
131	Butylbenzylphthala	10.000	10.631	106.31	70-130
52	4-Chloroaniline	10.000	9.3586	93.59	70-130
70	2-Chloronaphthalen	10.000	9.9099	99.10	70-130
95	4-Chlorophenyl-phe	10.000	10.162	101.62	70-130
137	Chrysene	10.000	9.3862	93.86	70-130
150	Dibenz(a,h)anthrac	10.000	10.287	102.87	70-130
86	Dibenzofuran	10.000	9.9819	99.82	70-130
120	Di-n-Butylphthalat	10.000	10.235	102.35	70-130
28	1,2-Dichlorobenzen	10.000	9.9789	99.79	70-130
26	1,3-Dichlorobenzen	10.000	10.080	100.80	70-130
27	1,4-Dichlorobenzen	10.000	9.8619	98.62	70-130
135	3,3'-Dichlorobenzi	10.000	10.054	100.54	70-130
93	Diethylphthalate	10.000	9.9914	99.91	70-130
76	Dimethylphthalate	10.000	9.9318	99.32	70-130
87	2,4-Dinitrotoluene	10.000	10.073	100.73	70-130
78	2,6-Dinitrotoluene	10.000	10.498	104.98	70-130
140	Di-n-octylphthalat	10.000	10.506	105.07	70-130
123	Fluoranthene	10.000	10.172	101.72	70-130
94	Fluorene	10.000	10.214	102.14	70-130
107	Hexachlorobenzene	10.000	9.9585	99.59	70-130
56	Hexachlorobutadien	10.000	10.356	103.56	70-130
64	Hexachlorocyclopen	10.000	3.0875	30.88*	70-130
34	Hexachloroethane	10.000	9.0067	90.07	70-130
149	Indeno(1,2,3-cd)py	10.000	10.473	104.73	70-130
41	Isophorone	10.000	9.6288	96.29	70-130
63	1-Methylnaphthalen	10.000	9.9624	99.62	70-130
62	2-Methylnaphthalen	10.000	9.8503	98.50	70-130

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
51	Naphthalene	10.000	9.7640	97.64	70-130
73	2-Nitroaniline	10.000	10.500	105.00	70-130
81	3-Nitroaniline	10.000	10.302	103.02	70-130
96	4-Nitroaniline	10.000	10.445	104.45	70-130
35	Nitrobenzene	10.000	9.6838	96.84	70-130
32	N-Nitroso-di-n-pro	10.000	9.8216	98.22	70-130
99	N-Nitrosodiphenyla	10.000	10.311	103.11	70-130
115	Phenanthrene	10.000	9.8896	98.90	70-130
125	Pyrene	10.000	9.6410	96.41	70-130
9	Pyridine	10.000	9.1030	91.03	70-130
50	1,2,4-Trichloroben	10.000	10.180	101.80	70-130
49	Benzoic Acid	20.000	15.869	79.34	70-130
59	4-Chloro-3-Methylp	10.000	9.6700	96.70	70-130
24	2-Chlorophenol	10.000	9.9723	99.72	70-130
48	2,4-Dichlorophenol	10.000	10.153	101.53	70-130
43	2,4-Dimethylphenol	10.000	9.9628	99.63	70-130
98	4,6-Dinitro-2-meth	10.000	2.5015	25.01*	70-130
83	2,4-Dinitrophenol	20.000	1.8903	9.45*	70-130
30	2-Methylphenol	10.000	10.019	100.19	70-130
192	4-Methylphenol	10.000	9.5678	95.68	70-130
42	2-Nitrophenol	10.000	10.197	101.97	70-130
85	4-Nitrophenol	10.000	7.4668	74.67	70-130
111	Pentachlorophenol	20.000	9.4292	47.15*	70-130
22	Phenol	10.000	9.2881	92.88	70-130
67	2,4,5-Trichlorophe	10.000	10.188	101.88	70-130
66	2,4,6-Trichlorophe	10.000	9.6451	96.45	70-130
119	Carbazole	10.000	10.085	100.85	70-130
142	Benzo(k)fluoranthe	10.000	11.258	112.58	70-130
198	1,4-Dioxane	10.000	8.8506	88.51	70-130
21	Aniline	10.000	9.5043	95.04	70-130
10	N-Nitrosodimethyla	10.000	8.9565	89.56	70-130


Y (x10^6)
Min
-1,4-Dioxane
-Pyridine+
-Phenol
-Aniline+
-2-Chlorophenol
-1,4-Dichlorobenzene-d4+
-1,2-Dichlorobenzene+
-2-Methylphenol+
-Hexachloroethane+
N-Nitroso-di-n-propylamin+
-Isophorone
-2-Nitrophenol+
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol+
-Naphthalene-d8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene+
-2,4,6-Trichlorophenol+
-2-Nitroaniline
2-Chloronaphthalene
-Dimethylphthalate+
-Acenaphthylene+
-Acenaphthene-d10+
-4-Nitrophenol+
-Diethylphthalate
-Fluorene+
-N-Nitrosodiphenylamine+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene-d10+
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Pyrene
-Butylbenzylphthalate
-Chrysene-d12+
3,3'-Dichlorobenzidine+
-Di-n-octylphthalate
-Benzo(k)fluoranthene+
-Perylene-d12+
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
\\oansvr1\dd\chem\MSS\a4np9.i\000727a.b\90CMRLCL.D


Y (x10^6)
Min
-1,4-Dioxane
-Pyridine+
-Phenol
-Aniline+
-2-Chlorophenol
-1,4-Dichlorobenzene-d4+
-1,2-Dichlorobenzene+
-2-Methylphenol+
N-Nitroso-di-n-propylamin+
-Hexachloroethane+
-Isophorone
-2-Nitrophenol+
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol+
-Naphthalene-d8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene+
-2,4,6-Trichlorophenol+
-2-Nitroaniline
2-Chloronaphthalene
-Dimethylphthalate+
-Acenaphthylene+
-Acenaphthene-d10+
-4-Nitrophenol+
-Diethylphthalate
-Fluorene+
-N-Nitrosodiphenylamine+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene-d10+
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Pyrene
-Butylbenzylphthalate
-Chrysene-d12+
3,3'-Dichlorobenzidine+
-Di-n-octylphthalate
-Benzo(k)fluoranthene+
-Perylene-d12+
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
\\canavr1\dd\chem\MSS\a4mp9_i\00727a.b\90CHRLCL.D

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270C-625

Data file : \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\9QCMRLCL.D
Lab Smp Id: qcmrl
Inj Date : 27-JUL-2010 17:53
Operator : 001574 Inst ID: a4hp9.i
Smp Info : qcmrl,00727a.b,8270c-625,qcmrl.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\8270c-625.m
Meth Date : 28-Jul-2010 16:42 ulmanm Quant Type: ISTD
Cal Date : 23-JUL-2010 10:33 Cal File: 9SMH0723.D
Als bottle: 29 QC Sample: MRL
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	2000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	0.50000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	
* 1	1,4-Dichlorobenzene-d4	152	3.794	3.792	(1.000)	289841	2.00000		
* 2	Naphthalene-d8	136	4.755	4.754	(1.000)	1111419	2.00000		
* 3	Acenaphthene-d10	164	6.053	6.052	(1.000)	667010	2.00000		
* 4	Phenanthrene-d10	188	7.138	7.142	(1.000)	1154700	2.00000		
* 5	Chrysene-d12	240	9.104	9.140	(1.000)	1152249	2.00000		(H)
* 6	Perylene-d12	264	10.471	10.512	(1.000)	990020	2.00000		
9	Pyridine	79	1.902	1.901	(0.502)	708681	2.27576	9.1030	
10	N-Nitrosodimethylamine	74	1.876	1.864	(0.495)	358127	2.23912	8.9565	
21	Aniline	93	3.542	3.541	(0.934)	1025618	2.37607	9.5043	
22	Phenol	94	3.510	3.498	(0.925)	831719	2.32202	9.2881	
23	bis(2-Chloroethyl)ether	93	3.569	3.568	(0.941)	665029	2.40909	9.6364	
24	2-Chlorophenol	128	3.644	3.637	(0.961)	506304	2.49308	9.9723	
26	1,3-Dichlorobenzene	146	3.751	3.755	(0.989)	489403	2.52008	10.080	
27	1,4-Dichlorobenzene	146	3.804	3.803	(1.003)	442089	2.46547	9.8619	
28	1,2-Dichlorobenzene	146	3.927	3.926	(1.035)	470919	2.49474	9.9789	
29	Benzyl Alcohol	108	3.884	3.883	(1.024)	450986	2.53121	10.125	
30	2-Methylphenol	108	3.970	3.958	(1.046)	617630	2.50467	10.019	
31	bis(2-Chloroisopropyl)ether	45	3.975	3.979	(1.048)	653581	2.42360	9.6944	(Q)
32	N-Nitroso-di-n-propylamine	70	4.077	4.081	(1.075)	535888	2.45541	9.8216	
192	4-Methylphenol	108	4.082	4.070	(1.076)	617859	2.39196	9.5678	

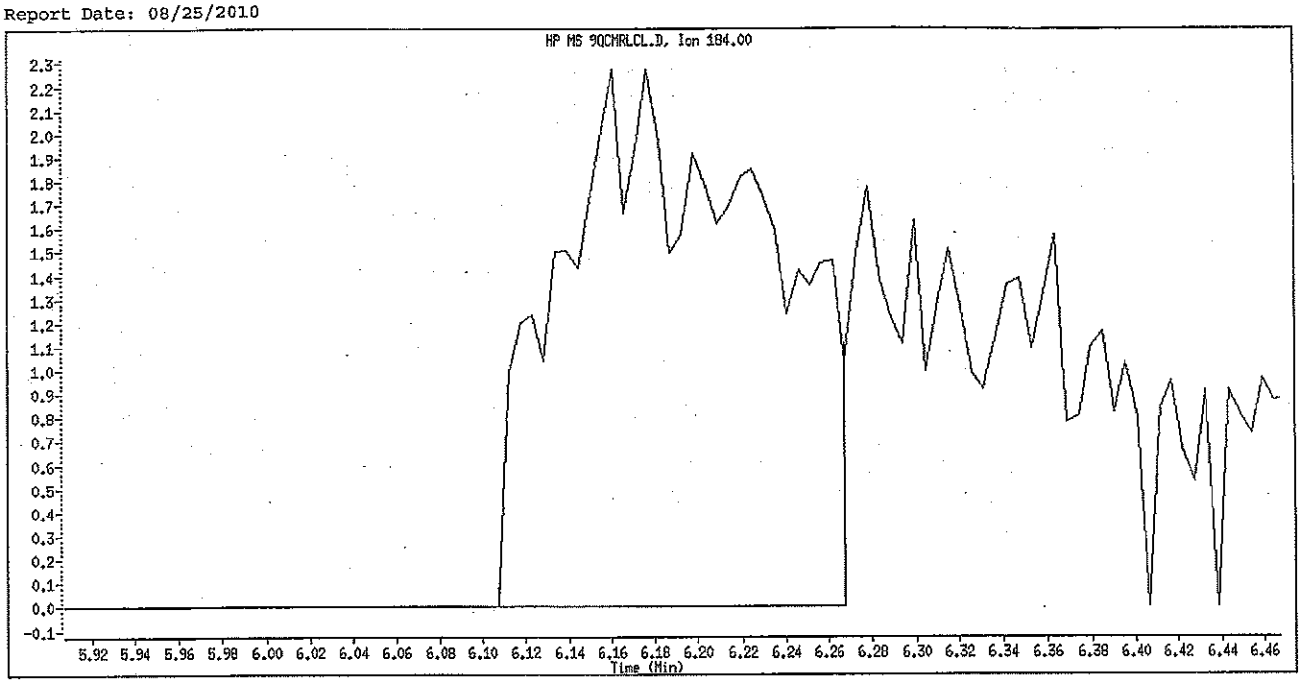
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)
34	Hexachloroethane	117	4.184	4.187	(1.103)	196086	2.25167	9.0067
35	Nitrobenzene	77	4.221	4.225	(0.888)	767476	2.42095	9.6838
41	Isophorone	82	4.397	4.396	(0.925)	1420476	2.40719	9.6288
42	2-Nitrophenol	139	4.461	4.465	(0.938)	271045	2.54936	10.197(Q)
43	2,4-Dimethylphenol	107	4.483	4.476	(0.943)	674485	2.49070	9.9628
44	bis(2-Chloroethoxy)methane	93	4.541	4.540	(0.955)	775217	2.47758	9.9103
48	2,4-Dichlorophenol	162	4.648	4.641	(0.978)	408025	2.53828	10.153
49	Benzoic Acid	122	4.568	4.561	(0.961)	611924	3.96722	15.869
50	1,2,4-Trichlorobenzene	180	4.707	4.711	(0.990)	420373	2.54504	10.180
51	Naphthalene	128	4.771	4.775	(1.003)	1458293	2.44101	9.7640
52	4-Chloroaniline	127	4.798	4.796	(1.009)	600955	2.33964	9.3586
56	Hexachlorobutadiene	225	4.857	4.860	(1.021)	240890	2.58900	10.356
210	Caprolactam	113	5.065	5.058	(1.065)	195448	2.48895	9.9558
59	4-Chloro-3-Methylphenol	107	5.161	5.149	(1.085)	552812	2.41749	9.6700
62	2-Methylnaphthalene	142	5.284	5.283	(1.111)	871348	2.46258	9.8503
63	1-Methylnaphthalene	142	5.359	5.357	(1.127)	887440	2.49059	9.9624
64	Hexachlorocyclopentadiene	237	5.396	5.400	(0.891)	84490	0.77188	3.0875(R)
66	2,4,6-Trichlorophenol	196	5.487	5.486	(0.906)	292698	2.41128	9.6451
67	2,4,5-Trichlorophenol	196	5.524	5.518	(0.913)	328891	2.54700	10.188
70	2-Chloronaphthalene	162	5.642	5.646	(0.932)	852880	2.47748	9.9099
73	2-Nitroaniline	65	5.711	5.710	(0.944)	404504	2.62500	10.500
76	Dimethylphthalate	163	5.818	5.822	(0.961)	992296	2.48296	9.9318
78	2,6-Dinitrotoluene	165	5.872	5.875	(0.970)	227312	2.62453	10.498
79	Acenaphthylene	152	5.952	5.956	(0.983)	1522829	2.52792	10.112
80	1,2-Dinitrobenzene	168	5.920	5.924	(0.978)	117296	2.51876	10.075
81	3-Nitroaniline	138	6.011	6.004	(0.993)	269128	2.57559	10.302
82	Acenaphthene	153	6.075	6.078	(1.004)	945097	2.55194	10.208(Q)
83	2,4-Dinitrophenol	184	6.176	6.078	(1.020)	24881	0.47257	1.8903(QRM)
85	4-Nitrophenol	109	6.139	6.116	(1.014)	160189	1.86671	7.4668
86	Dibenzofuran	168	6.203	6.201	(1.025)	1323049	2.49548	9.9819
87	2,4-Dinitrotoluene	165	6.171	6.169	(1.019)	300449	2.51815	10.073
93	Diethylphthalate	149	6.326	6.330	(1.045)	1051743	2.49784	9.9914
94	Fluorene	166	6.454	6.452	(1.066)	1025390	2.55355	10.214
95	4-Chlorophenyl-phenylether	204	6.433	6.436	(1.063)	493377	2.54061	10.162
96	4-Nitroaniline	138	6.454	6.452	(1.066)	289324	2.61125	10.445
98	4,6-Dinitro-2-methylphenol	198	6.491	6.474	(0.909)	54340	0.62537	2.5015(QRM)
99	N-Nitrosodiphenylamine	169	6.518	6.517	(0.913)	828449	2.57771	10.311
100	1,2-Diphenylhydrazine	77	6.550	6.549	(0.918)	1658829	2.44011	9.7604
106	4-Bromophenyl-phenylether	248	6.790	6.794	(0.951)	248041	2.56081	10.243
107	Hexachlorobenzene	284	6.860	6.864	(0.961)	221873	2.48964	9.9585
111	Pentachlorophenol	266	7.010	6.997	(0.982)	171321	2.35729	9.4292(R)
115	Phenanthrene	178	7.159	7.158	(1.003)	1510135	2.47240	9.8896
116	Anthracene	178	7.197	7.195	(1.008)	1545348	2.49729	9.9891
119	Carbazole	167	7.303	7.302	(1.023)	1490085	2.52133	10.085
120	Di-n-Butylphthalate	149	7.506	7.505	(1.052)	1775560	2.55866	10.235
123	Fluoranthene	202	8.025	8.034	(1.124)	1606664	2.54306	10.172
125	Pyrene	202	8.201	8.210	(0.901)	1713865	2.41025	9.6410
131	Butylbenzylphthalate	149	8.612	8.637	(0.946)	815345	2.65784	10.631
135	3,3'-Dichlorobenzidine	252	9.056	9.086	(0.995)	554831	2.51343	10.054(H)
136	Benzo(a)Anthracene	228	9.125	9.129	(1.002)	1479914	2.22850	8.9140(H)
137	Chrysene	228	9.125	9.161	(1.002)	1479914	2.34656	9.3862(H)
138	4,4'-Methylene bis(o-chloroan	231	9.104	9.075	(1.000)	14145	0.12714	0.50856(QH)
139	bis(2-ethylhexyl)Phthalate	149	9.024	9.059	(0.991)	1136639	2.65915	10.637(H)
140	Di-n-octylphthalate	149	9.542	9.583	(0.911)	1910312	2.62664	10.506

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
141 Benzo(b)fluoranthene	252	10.049	10.090	(0.960)	1366951	2.25141	9.0056(H)
142 Benzo(k)fluoranthene	252	10.076	10.117	(0.962)	1580416	2.81462	11.258
146 Benzo(a)pyrene	252	10.412	10.454	(0.994)	1355725	2.53161	10.126(H)
149 Indeno(1,2,3-cd)pyrene	276	11.951	11.992	(1.141)	1459757	2.61818	10.473
150 Dibenz(a,h)anthracene	278	11.956	11.992	(1.142)	1107975	2.57171	10.287
151 Benzo(g,h,i)perylene	276	12.405	12.441	(1.185)	1209403	2.65621	10.625
198 1,4-Dioxane	88	1.678	1.682	(0.442)	233121	2.21265	8.8506

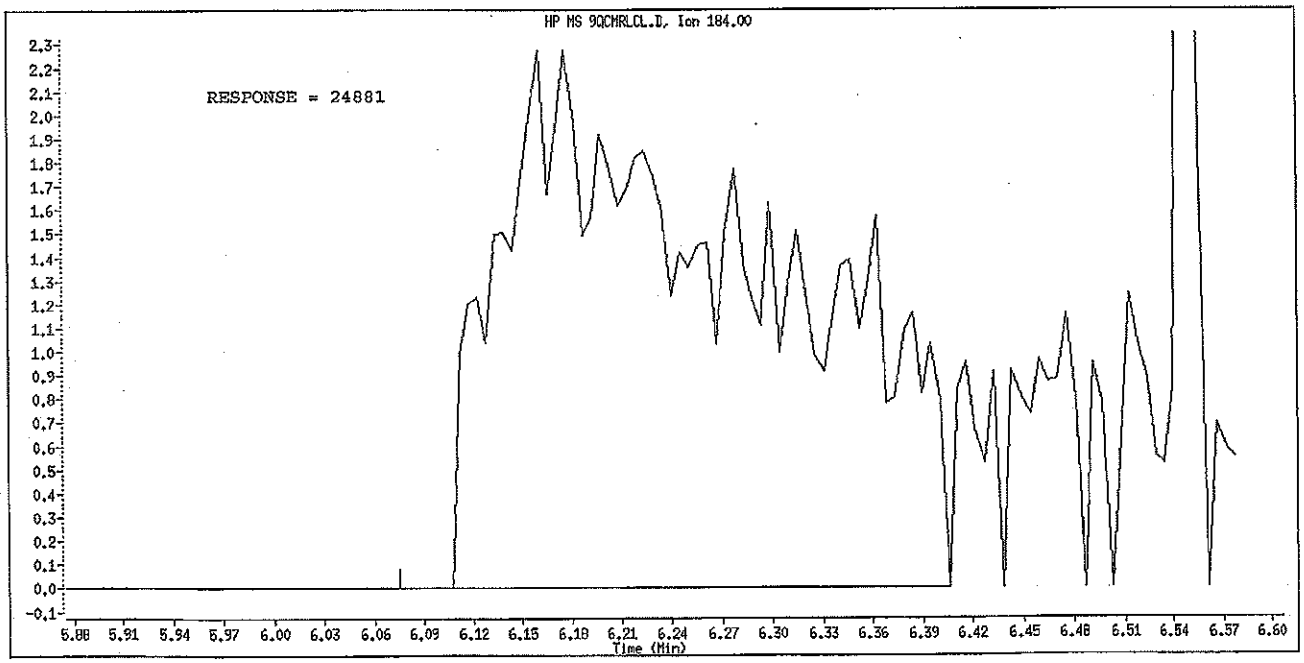
QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File Name: 9QCMRLCL.D
Inj. Date and Time: 27-JUL-2010 17:53
Instrument ID: a4hp9.i
Client ID:
Compound Name: 2,4-Dinitrophenol
CAS #: 51-28-5
Report Date: 08/25/2010



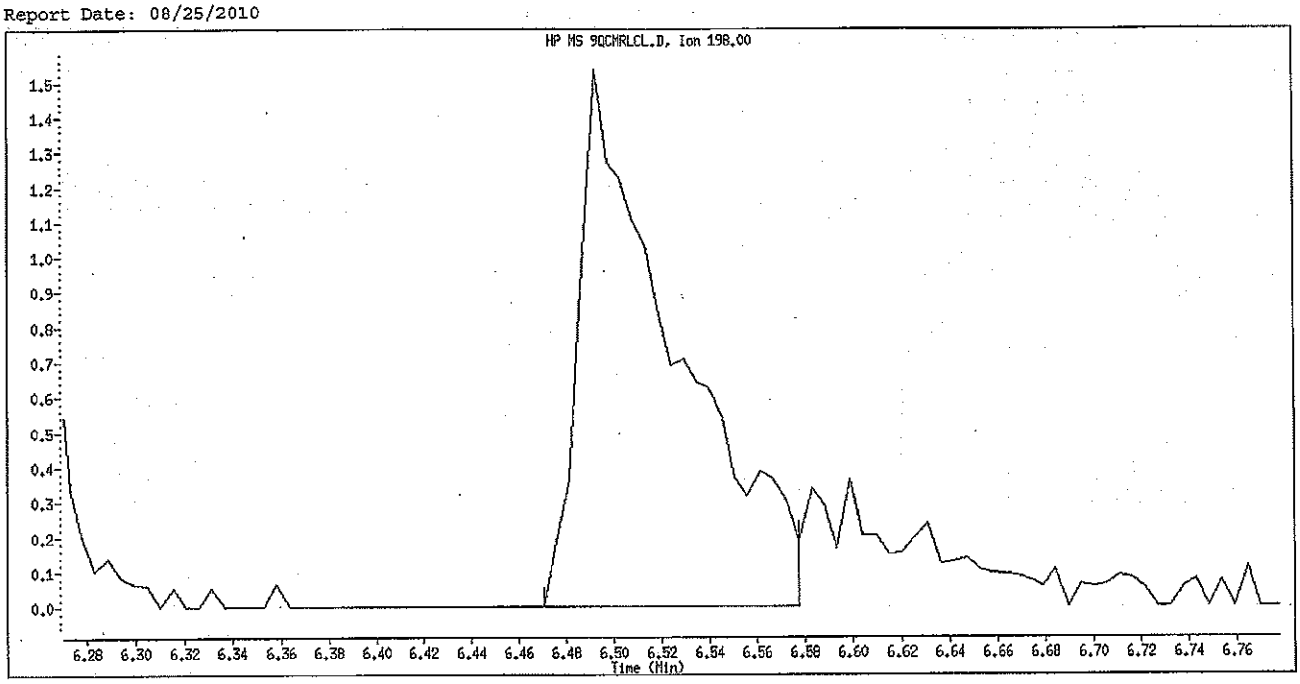
Original Integration



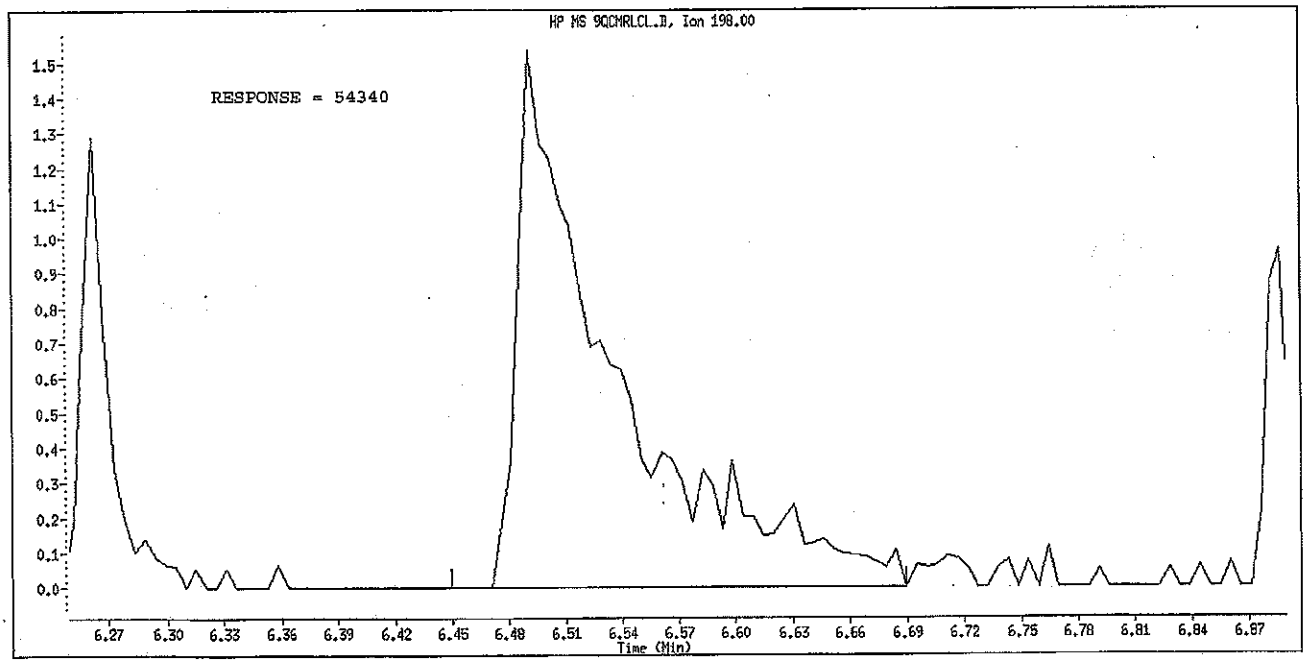
Manual Integration

Manually Integrated By: ulmanm
Manual Integration Reason: Poor Chromatography

Data File Name: 9QCMRLCL.D
Inj. Date and Time: 27-JUL-2010 17:53
Instrument ID: a4hp9.i
Client ID:
Compound Name: 4,6-Dinitro-2-methylphenol
CAS #: 534-52-1
Report Date: 08/25/2010



Original Integration



Manual Integration

Manually Integrated By: ulmanm
Manual Integration Reason: Poor Chromatography

Good for PAHs

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270C-625

Data file : \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\9QCMDLL1.D
Lab Smp Id: qcmrl
Inj Date : 27-JUL-2010 18:13
Operator : 001574 Inst ID: a4hp9.i
Smp Info : qcmrl,00727a.b,8270c-625,qcmrl.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\8270c-625.m
Meth Date : 25-Aug-2010 09:54 ulmanm Quant Type: ISTD
Cal Date : 23-JUL-2010 10:33 Cal File: 9SMH0723.D
Als bottle: 30 QC Sample: MRL
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)	
* 1	1,4-Dichlorobenzene-d4	152	3.794	3.792	(1.000)	248347	2.00000		(Q)
* 2	Naphthalene-d8	136	4.755	4.754	(1.000)	892960	2.00000		
* 3	Acenaphthene-d10	164	6.053	6.052	(1.000)	535409	2.00000		
* 4	Phenanthrene-d10	188	7.138	7.142	(1.000)	962762	2.00000		
* 5	Chrysene-d12	240	9.098	9.140	(1.000)	1060093	2.00000		(H)
* 6	Perylene-d12	264	10.466	10.512	(1.000)	930863	2.00000		(H)
9	Pyridine	79	1.913	1.901	(0.504)	14533	0.05447	0.054467	
10	N-Nitrosodimethylamine	74	1.876	1.864	(0.495)	6832	0.04985	0.049853	(QM)
21	Aniline	93	3.537	3.541	(0.932)	18801	0.05083	0.050834	
22	Phenol	94	3.510	3.498	(0.925)	16622	0.05416	0.054159	
23	bis(2-Chloroethyl)ether	93	3.564	3.568	(0.939)	12986	0.05490	0.054902	
24	2-Chlorophenol	128	3.639	3.637	(0.959)	8657	0.04975	0.049750	
26	1,3-Dichlorobenzene	146	3.751	3.755	(0.989)	8739	0.05252	0.052518	
27	1,4-Dichlorobenzene	146	3.804	3.803	(1.003)	7778	0.05062	0.050624	
28	1,2-Dichlorobenzene	146	3.927	3.926	(1.035)	8905	0.05506	0.055057	
29	Benzyl Alcohol	108	3.895	3.883	(1.027)	8001	0.05241	0.052410	(M)
30	2-Methylphenol	108	3.964	3.958	(1.045)	10736	0.05081	0.050812	(Q)
31	bis(2-Chloroisopropyl)ether	45	3.975	3.979	(1.048)	12813	0.05545	0.055451	(Q)
32	N-Nitroso-di-n-propylamine	70	4.077	4.081	(1.075)	10071	0.05385	0.053855	
192	4-Methylphenol	108	4.082	4.070	(1.076)	12203	0.05514	0.055136	
34	Hexachloroethane	117	4.183	4.187	(1.103)	2619	0.03510	0.035099	
35	Nitrobenzene	77	4.221	4.225	(0.888)	14182	0.05568	0.055681	
41	Isophorone	82	4.392	4.396	(0.924)	25542	0.05387	0.053874	
42	2-Nitrophenol	139	4.461	4.465	(0.938)	3062	0.03585	0.035846	(Q)
43	2,4-Dimethylphenol	107	4.483	4.476	(0.943)	11733	0.05393	0.053927	
44	bis(2-Chloroethoxy)methane	93	4.536	4.540	(0.954)	13894	0.05527	0.055268	
48	2,4-Dichlorophenol	162	4.648	4.641	(0.978)	4471	0.03462	0.034618	
49	Benzoic Acid	122	Compound Not Detected.						
50	1,2,4-Trichlorobenzene	180	4.707	4.711	(0.990)	7430	0.05599	0.055988	
51	Naphthalene	128	4.771	4.775	(1.003)	27425	0.05714	0.057137	
52	4-Chloroaniline	127	4.798	4.796	(1.009)	9587	0.04646	0.046455	
56	Hexachlorobutadiene	225	4.857	4.860	(1.021)	4266	0.05707	0.057066	
210	Caprolactam	113	5.038	5.058	(1.060)	2528	0.04007	0.040069	(Q)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)
59 4-Chloro-3-Methylphenol	107	5.156	5.149	(1.084)	9868	0.05371	0.053711
62 2-Methylnaphthalene	142	5.279	5.283	(1.110)	15909	0.05596	0.055961
63 1-Methylnaphthalene	142	5.353	5.357	(1.126)	16069	0.05613	0.056130
64 Hexachlorocyclopentadiene	237	Compound Not Detected.					
66 2,4,6-Trichlorophenol	196	5.492	5.486	(0.907)	3494	0.03586	0.035859
67 2,4,5-Trichlorophenol	196	5.530	5.518	(0.914)	4578	0.04417	0.044167
70 2-Chloronaphthalene	162	5.642	5.646	(0.932)	14412	0.05215	0.052155
73 2-Nitroaniline	65	5.706	5.710	(0.943)	6568	0.05310	0.053099
76 Dimethylphthalate	163	5.818	5.822	(0.961)	18649	0.05813	0.058134
78 2,6-Dinitrotoluene	165	5.866	5.875	(0.969)	2549	0.03666	0.036664(Q)
79 Acenaphthylene	152	5.952	5.956	(0.983)	26147	0.05407	0.054073
80 1,2-Dinitrobenzene	168	5.914	5.924	(0.977)	1010	0.02702	0.027019(Q)
81 3-Nitroaniline	138	6.005	6.004	(0.992)	3987	0.04753	0.047535
82 Acenaphthene	153	6.075	6.078	(1.004)	17437	0.05866	0.058656(Q)
83 2,4-Dinitrophenol	184	Compound Not Detected.					
85 4-Nitrophenol	109	Compound Not Detected.					
86 Dibenzofuran	168	6.197	6.201	(1.024)	24549	0.05768	0.057684
87 2,4-Dinitrotoluene	165	6.171	6.169	(1.019)	3291	0.03436	0.034362(Q)
93 Diethylphthalate	149	6.326	6.330	(1.045)	22167	0.06559	0.065586
94 Fluorene	166	6.449	6.452	(1.065)	18793	0.05830	0.058304
95 4-Chlorophenyl-phenylether	204	6.433	6.436	(1.063)	8802	0.05647	0.056466
96 4-Nitroaniline	138	6.459	6.452	(1.067)	4072	0.04578	0.045784(Q)
98 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99 N-Nitrosodiphenylamine	169	6.518	6.517	(0.913)	14734	0.05498	0.054984
100 1,2-Diphenylhydrazine	77	6.550	6.549	(0.918)	29155	0.05144	0.051436
106 4-Bromophenyl-phenylether	248	6.790	6.794	(0.951)	4189	0.05187	0.051870
107 Hexachlorobenzene	284	6.860	6.864	(0.961)	4456	0.05997	0.059969
111 Pentachlorophenol	266	Compound Not Detected.					
115 Phenanthrene	178	7.154	7.158	(1.002)	32771	0.06435	0.064349
116 Anthracene	178	7.191	7.195	(1.007)	30660	0.05942	0.059424
119 Carbazole	167	7.303	7.302	(1.023)	30486	0.06187	0.061868
120 Di-n-Butylphthalate	149	7.501	7.505	(1.051)	44486	0.07689	0.076887
123 Fluoranthene	202	8.024	8.034	(1.124)	35214	0.06685	0.066849
125 Pyrene	202	8.195	8.210	(0.901)	40490	0.06189	0.061892
131 Butylbenzylphthalate	149	8.607	8.637	(0.946)	42348	0.15005	0.15004
135 3,3'-Dichlorobenzidine	252	9.045	9.086	(0.994)	12401	0.06106	0.061061(H)
136 Benzo(a)Anthracene	228	9.114	9.129	(1.002)	43695	0.07152	0.071517(H)
137 Chrysene	228	9.114	9.161	(1.002)	43695	0.07531	0.075306(H)
138 4,4'-Methylene bis(o-chloroan	231	9.034	9.075	(0.993)	8191	0.08002	0.080023
139 bis(2-ethylhexyl)Phthalate	149	9.018	9.059	(0.991)	34622	0.08804	0.088039(H)
140 Di-n-octylphthalate	149	9.531	9.583	(0.911)	53950	0.07889	0.078894(H)
141 Benzo(b)fluoranthene	252	10.060	10.090	(0.961)	41682	0.07301	0.073014(H)
142 Benzo(k)fluoranthene	252	10.060	10.117	(0.961)	41682	0.09414	0.094139(H)
146 Benzo(a)pyrene	252	10.396	10.454	(0.993)	37013	0.07351	0.073508(H)
149 Indeno(1,2,3-cd)pyrene	276	11.924	11.992	(1.139)	38733	0.07389	0.073885
150 Dibenz(a,h)anthracene	278	11.930	11.992	(1.140)	31011	0.07655	0.076554
151 Benzo(g,h,i)perylene	276	12.384	12.441	(1.183)	32147	0.07509	0.075091(H)
198 1,4-Dioxane	88	1.689	1.682	(0.445)	5566	0.06166	0.061656

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

TestAmerica North Canton

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: a4hp9.i
Lab File ID: 9QCMDLL1.D
Lab Smp Id: qcmrl
Analysis Type: SV
Quant Type: ISTD
Operator: 001574
Method File: \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\8270c-625.m
Misc Info:

Calibration Date: 27-JUL-2010
Calibration Time: 08:45
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 1,4-Dichlorobenze	207745	103873	415490	248347	19.54
2 Naphthalene-d8	743392	371696	1486784	892960	20.12
3 Acenaphthene-d10	437162	218581	874324	535409	22.47
4 Phenanthrene-d10	750353	375177	1500706	962762	28.31
5 Chrysene-d12	718593	359297	1437186	1060093	47.52
6 Perylene-d12	615980	307990	1231960	930863	51.12

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 1,4-Dichlorobenze	3.79	3.29	4.29	3.79	0.04
2 Naphthalene-d8	4.75	4.25	5.25	4.76	0.03
3 Acenaphthene-d10	6.05	5.55	6.55	6.05	0.02
4 Phenanthrene-d10	7.14	6.64	7.64	7.14	-0.05
5 Chrysene-d12	9.14	8.64	9.64	9.10	-0.45
6 Perylene-d12	10.51	10.01	11.01	10.47	-0.44

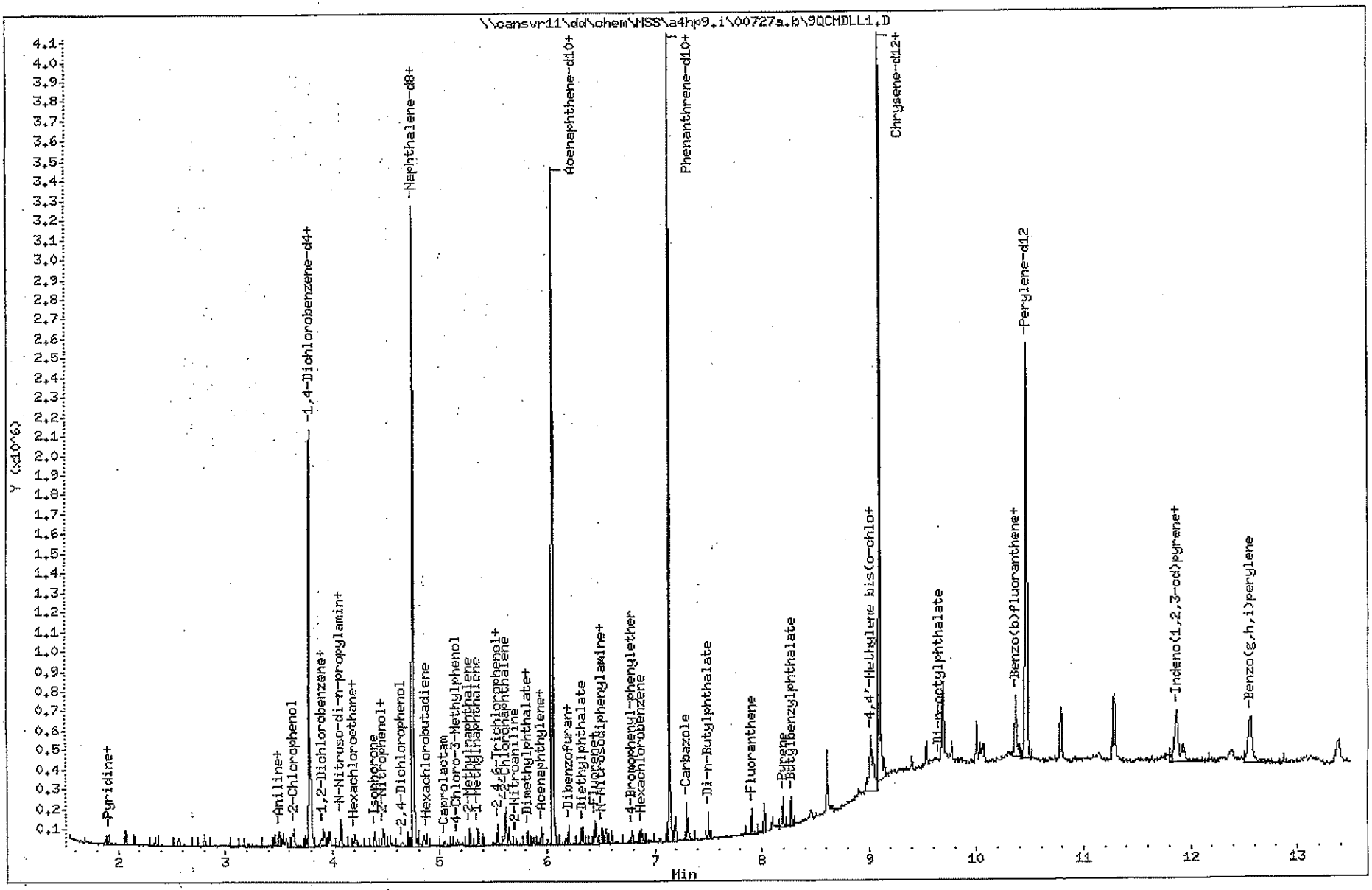
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AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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Date : 27-JUL-2010 18:13
Client ID:
Sample Info: qcmrl,00727a.b,8270c-625,qcmrl,sub

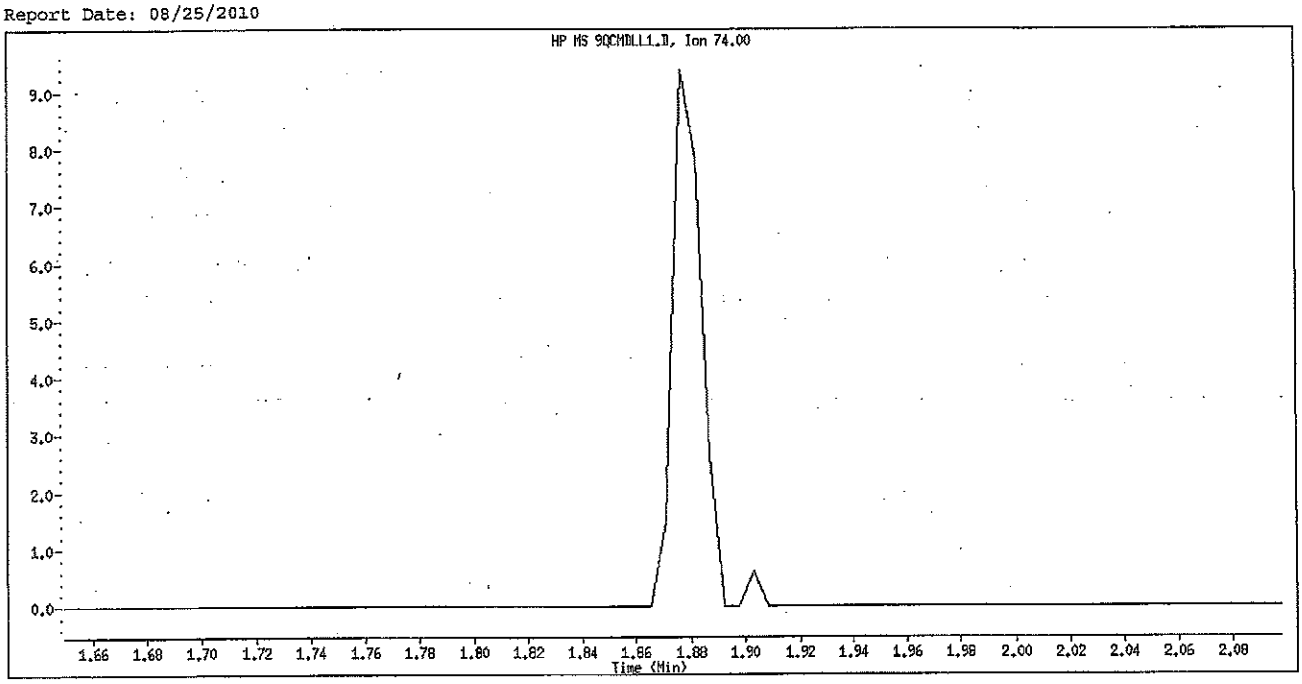
Instrument: a4hp9.i

Operator: 001574
Column diameter: 0.32

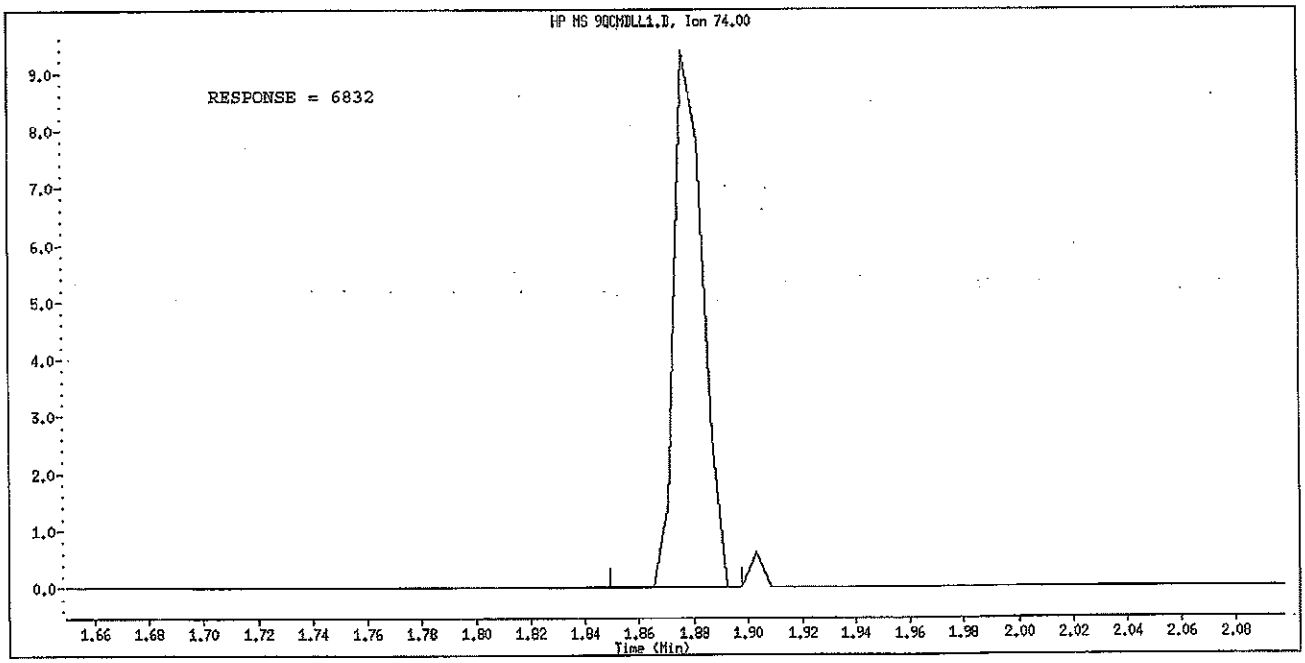
Column phase: db5.625



Data File Name: 9QCMDLL1.D
Inj. Date and Time: 27-JUL-2010 18:13
Instrument ID: a4hp9.i
Client ID:
Compound Name: N-Nitrosodimethylamine
CAS #: 62-75-9
Report Date: 08/25/2010



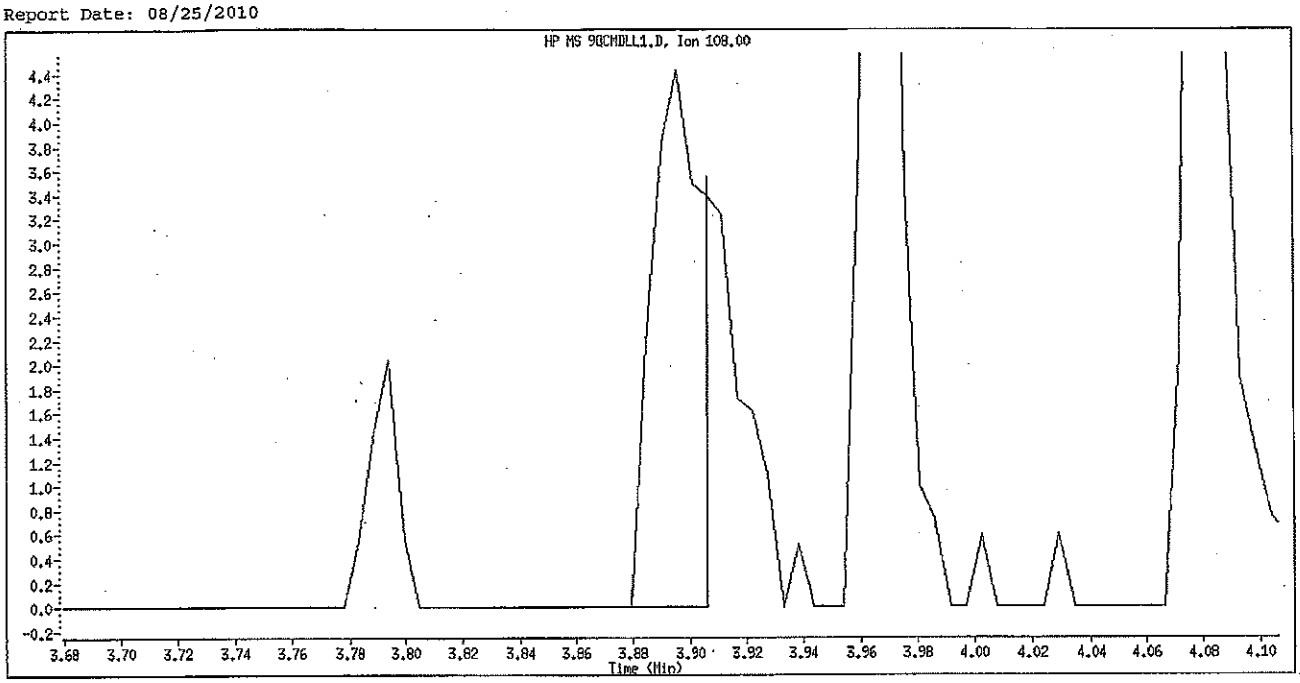
Original Integration



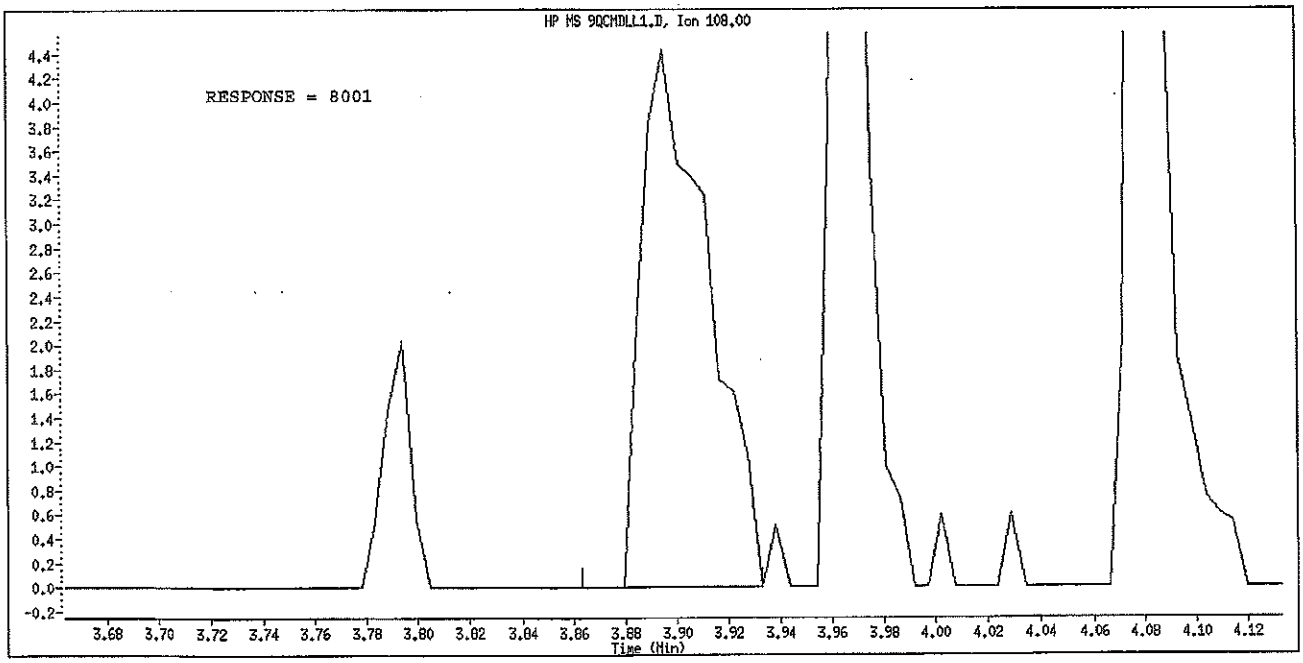
Manual Integration

Manually Integrated By: ulmanm
Manual Integration Reason: Peak not found

Data File Name: 9QCMDLL1.D
Inj. Date and Time: 27-JUL-2010 18:13
Instrument ID: a4hp9.i
Client ID:
Compound Name: Benzyl Alcohol
CAS #: 100-51-6
Report Date: 08/25/2010



Original Integration



Manual Integration

Manually Integrated By: ulmanm
Manual Integration Reason: Peak not found

Good for all other compounds except: Hexachlorocyclopentadiene, Benzoic Acid, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol + Pentachlorophenol

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270C-625

Data file : \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\9QCMDLL2.D
Lab Smp Id: qcmrl
Inj Date : 27-JUL-2010 18:32
Operator : 001574 Inst ID: a4hp9.i
Smp Info : qcmrl,00727a.b,8270c-625,qcmrl.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\8270c-625.m
Meth Date : 25-Aug-2010 09:54 ulmanm Quant Type: ISTD
Cal Date : 23-JUL-2010 10:33 Cal File: 9SMH0723.D
Als bottle: 31 QC Sample: MRL
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)
* 1	1,4-Dichlorobenzene-d4	152	3.789	3.792	(1.000)	286562	2.00000	(Q)
* 2	Naphthalene-d8	136	4.756	4.754	(1.000)	1063057	2.00000	
* 3	Acenaphthene-d10	164	6.054	6.052	(1.000)	638431	2.00000	
* 4	Phenanthrene-d10	188	7.139	7.142	(1.000)	1131465	2.00000	
* 5	Chrysene-d12	240	9.094	9.140	(1.000)	1215958	2.00000	
* 6	Perylene-d12	264	10.461	10.512	(1.000)	1072950	2.00000	
9	Pyridine	79	1.909	1.901	(0.504)	75308	0.24460	0.24460
10	N-Nitrosodimethylamine	74	1.871	1.864	(0.494)	39217	0.24800	0.24800
21	Aniline	93	3.538	3.541	(0.934)	100562	0.23564	0.23564
22	Phenol	94	3.506	3.498	(0.925)	85039	0.24013	0.24013
23	bis(2-Chloroethyl)ether	93	3.565	3.568	(0.941)	63874	0.23403	0.23403
24	2-Chlorophenol	128	3.639	3.637	(0.961)	47804	0.23808	0.23808
26	1,3-Dichlorobenzene	146	3.752	3.755	(0.990)	48131	0.25068	0.25068
27	1,4-Dichlorobenzene	146	3.805	3.803	(1.004)	44594	0.25154	0.25154
28	1,2-Dichlorobenzene	146	3.923	3.926	(1.035)	48166	0.25808	0.25808
29	Benzyl Alcohol	108	3.885	3.883	(1.025)	42171	0.23940	0.23940
30	2-Methylphenol	108	3.965	3.958	(1.047)	60297	0.24732	0.24732
31	bis(2-Chloroisopropyl)ether	45	3.976	3.979	(1.049)	66033	0.24766	0.24766(Q)
32	N-Nitroso-di-n-propylamine	70	4.072	4.081	(1.075)	52254	0.24216	0.24216
192	4-Methylphenol	108	4.078	4.070	(1.076)	65149	0.25510	0.25510
34	Hexachloroethane	117	4.184	4.187	(1.104)	16566	0.19241	0.19240
35	Nitrobenzene	77	4.222	4.225	(0.888)	74431	0.24547	0.24547
41	Isophorone	82	4.393	4.396	(0.924)	138827	0.24596	0.24596
42	2-Nitrophenol	139	4.462	4.465	(0.938)	20824	0.20477	0.20477
43	2,4-Dimethylphenol	107	4.478	4.476	(0.942)	60894	0.23510	0.23510
44	bis(2-Chloroethoxy)methane	93	4.537	4.540	(0.954)	73256	0.24478	0.24478
48	2,4-Dichlorophenol	162	4.649	4.641	(0.978)	33714	0.21927	0.21927
49	Benzoic Acid	122	Compound Not Detected.					
50	1,2,4-Trichlorobenzene	180	4.708	4.711	(0.990)	40221	0.25459	0.25459
51	Naphthalene	128	4.772	4.775	(1.003)	148382	0.25967	0.25967
52	4-Chloroaniline	127	4.799	4.796	(1.009)	57704	0.23487	0.23487
56	Hexachlorobutadiene	225	4.852	4.860	(1.020)	23982	0.26948	0.26948
210	Caprolactam	113	5.034	5.058	(1.058)	16150	0.21502	0.21502(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (NG)
59	4-Chloro-3-Methylphenol	107	5.157	5.149	(1.084)	51324	0.23465	0.23465
62	2-Methylnaphthalene	142	5.280	5.283	(1.110)	87481	0.25848	0.25848
63	1-Methylnaphthalene	142	5.354	5.357	(1.126)	87385	0.25640	0.25640
64	Hexachlorocyclopentadiene	237	Compound Not Detected.					
66	2,4,6-Trichlorophenol	196	5.488	5.486	(0.906)	22876	0.19689	0.19689
67	2,4,5-Trichlorophenol	196	5.531	5.518	(0.914)	30455	0.24641	0.24641
70	2-Chloronaphthalene	162	5.643	5.646	(0.932)	80124	0.24317	0.24317
73	2-Nitroaniline	65	5.707	5.710	(0.943)	35817	0.24284	0.24284
76	Dimethylphthalate	163	5.819	5.822	(0.961)	96291	0.25173	0.25173
78	2,6-Dinitrotoluene	165	5.867	5.875	(0.969)	17003	0.20510	0.20510
79	Acenaphthylene	152	5.953	5.956	(0.983)	147599	0.25598	0.25598
80	1,2-Dinitrobenzene	168	5.915	5.924	(0.977)	7975	0.17892	0.17892
81	3-Nitroaniline	138	6.006	6.004	(0.992)	22996	0.22993	0.22993
82	Acenaphthene	153	6.075	6.078	(1.004)	93547	0.26390	0.26390(Q)
83	2,4-Dinitrophenol	184	Compound Not Detected.					
85	4-Nitrophenol	109	6.150	6.116	(1.016)	9846	0.11987	0.11987(QM)
86	Dibenzofuran	168	6.198	6.201	(1.024)	131083	0.25831	0.25831
87	2,4-Dinitrotoluene	165	6.166	6.169	(1.019)	22917	0.20067	0.20067
93	Diethylphthalate	149	6.321	6.330	(1.044)	105005	0.26055	0.26054
94	Fluorene	166	6.449	6.452	(1.065)	100117	0.26048	0.26048
95	4-Chlorophenyl-phenylether	204	6.433	6.436	(1.063)	47601	0.25609	0.25609
96	4-Nitroaniline	138	6.455	6.452	(1.066)	23522	0.22180	0.22180
98	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99	N-Nitrosodiphenylamine	169	6.514	6.517	(0.912)	79543	0.25258	0.25258
100	1,2-Diphenylhydrazine	77	6.546	6.549	(0.917)	154671	0.23219	0.23219
106	4-Bromophenyl-phenylether	248	6.791	6.794	(0.951)	23909	0.25191	0.25191
107	Hexachlorobenzene	284	6.861	6.864	(0.961)	22002	0.25195	0.25195
111	Pentachlorophenol	266	Compound Not Detected.					
115	Phenanthrene	178	7.155	7.158	(1.002)	154005	0.25732	0.25732
116	Anthracene	178	7.192	7.195	(1.007)	152240	0.25107	0.25107
119	Carbazole	167	7.299	7.302	(1.022)	149163	0.25758	0.25758
120	Di-n-Butylphthalate	149	7.502	7.505	(1.051)	173165	0.25466	0.25466
123	Fluoranthene	202	8.025	8.034	(1.124)	159044	0.25691	0.25691
125	Pyrene	202	8.196	8.210	(0.901)	170790	0.22760	0.22760
131	Butylbenzylphthalate	149	8.608	8.637	(0.947)	115115	0.35559	0.35559
135	3,3'-Dichlorobenzidine	252	9.040	9.086	(0.994)	55067	0.23639	0.23639
136	Benzo(a)Anthracene	228	9.083	9.129	(0.999)	165959	0.23681	0.23681(H)
137	Chrysene	228	9.115	9.161	(1.002)	172884	0.25976	0.25976
138	4,4'-Methylene bis(o-chloroan	231	9.035	9.075	(0.994)	27968	0.23821	0.23821
139	bis(2-ethylhexyl)Phthalate	149	9.019	9.059	(0.992)	119868	0.26574	0.26574
140	Di-n-octylphthalate	149	9.532	9.583	(0.911)	203391	0.25804	0.25804
141	Benzo(b)fluoranthene	252	10.034	10.090	(0.959)	165980	0.25224	0.25224(H)
142	Benzo(k)fluoranthene	252	10.061	10.117	(0.962)	158975	0.27192	0.27192
146	Benzo(a)pyrene	252	10.397	10.454	(0.994)	147069	0.25340	0.25340(H)
149	Indeno(1,2,3-cd)pyrene	276	11.925	11.992	(1.140)	153006	0.25322	0.25322
150	Dibenz(a,h)anthracene	278	11.930	11.992	(1.140)	119613	0.25617	0.25617
151	Benzo(g,h,i)perylene	276	12.379	12.441	(1.183)	128233	0.25987	0.25987
198	1,4-Dioxane	88	1.684	1.682	(0.445)	27742	0.26632	0.26632

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

TestAmerica North Canton

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: a4hp9.i
Lab File ID: 9QCMDLL2.D
Lab Smp Id: qcmrl
Analysis Type: SV
Quant Type: ISTD
Operator: 001574
Method File: \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\8270c-625.m
Misc Info:

Calibration Date: 27-JUL-2010
Calibration Time: 08:45
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 1,4-Dichlorobenze	207745	103873	415490	286562	37.94
2 Naphthalene-d8	743392	371696	1486784	1063057	43.00
3 Acenaphthene-d10	437162	218581	874324	638431	46.04
4 Phenanthrene-d10	750353	375177	1500706	1131465	50.79
5 Chrysene-d12	718593	359297	1437186	1215958	69.21
6 Perylene-d12	615980	307990	1231960	1072950	74.19

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 1,4-Dichlorobenze	3.79	3.29	4.29	3.79	-0.08
2 Naphthalene-d8	4.75	4.25	5.25	4.76	0.05
3 Acenaphthene-d10	6.05	5.55	6.55	6.05	0.04
4 Phenanthrene-d10	7.14	6.64	7.64	7.14	-0.04
5 Chrysene-d12	9.14	8.64	9.64	9.09	-0.50
6 Perylene-d12	10.51	10.01	11.01	10.46	-0.49

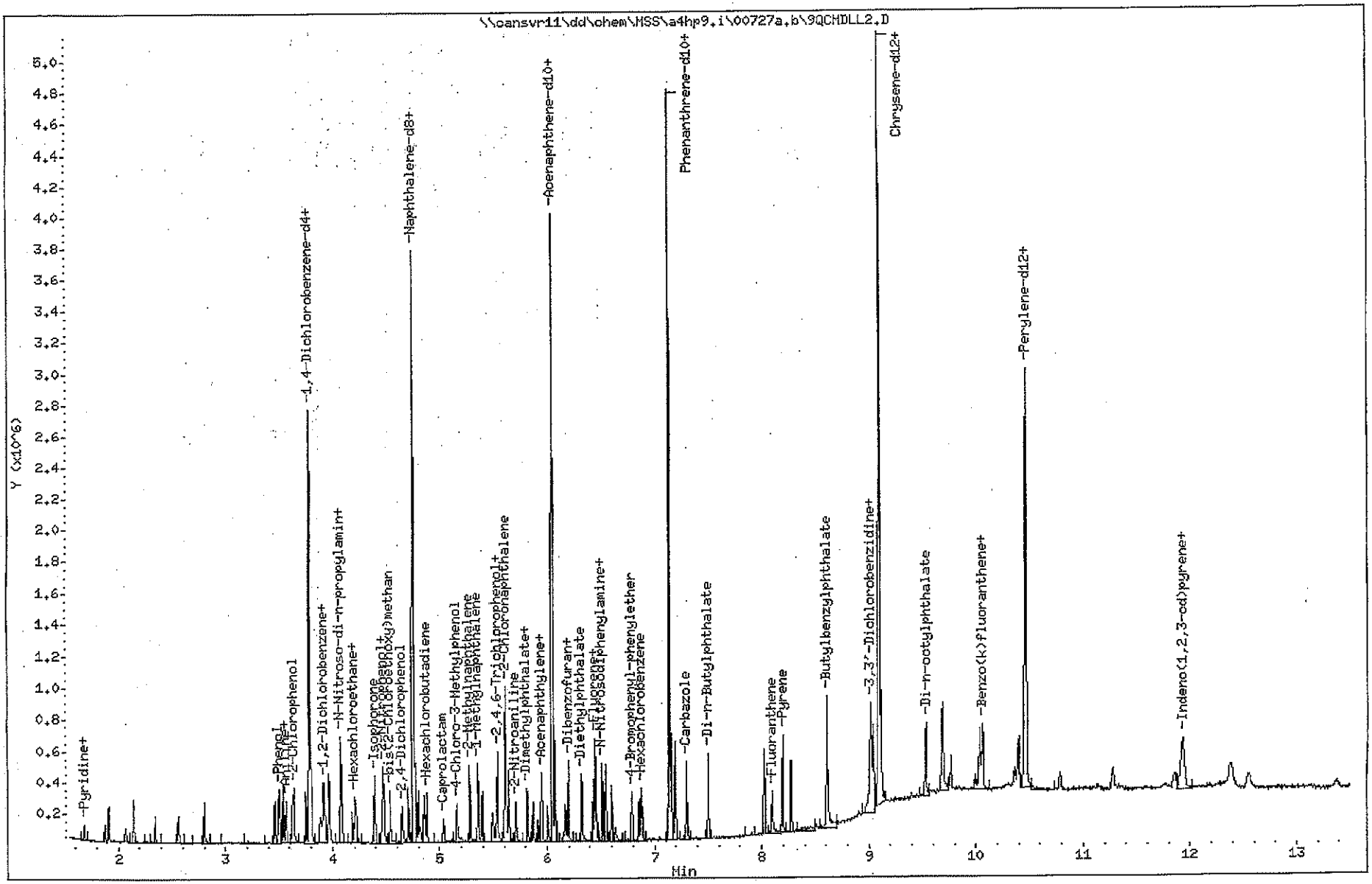
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AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\9QCMDLL2.D
Date : 27-JUL-2010 18:32
Client ID:
Sample Info: qcmr1,00727a,b,8270c-625,qcmr1.sub

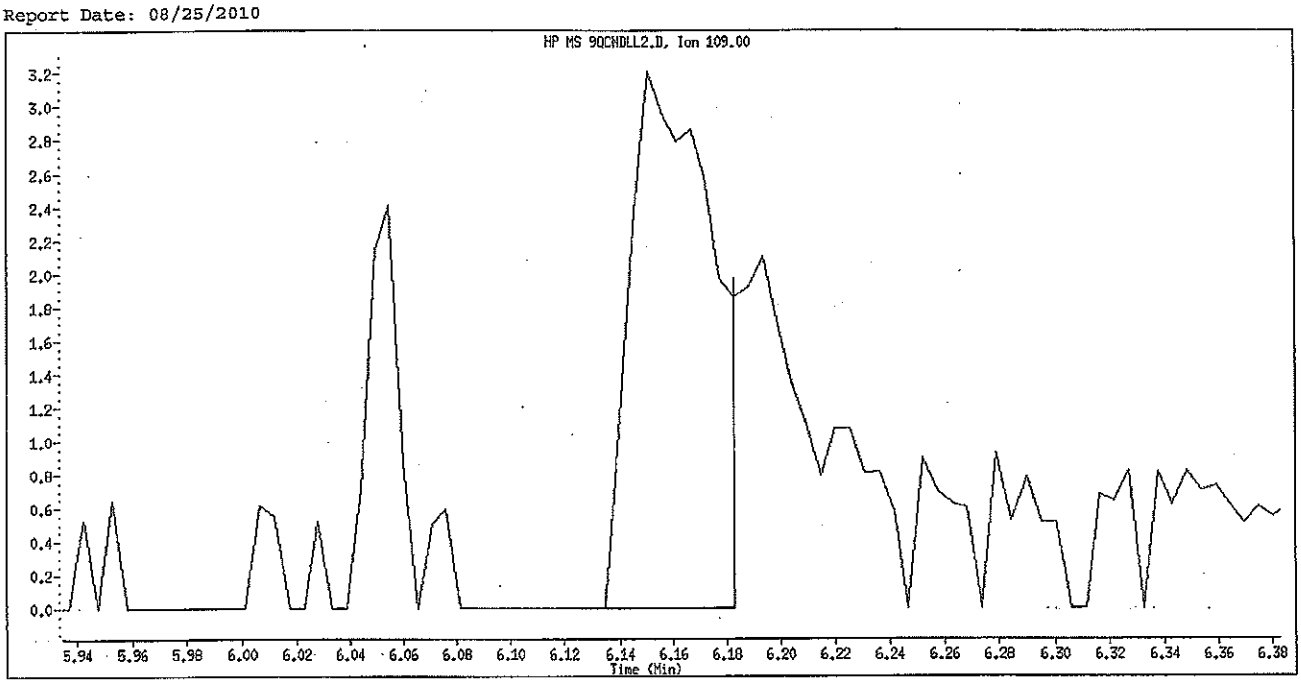
Column phase: db5.625

Instrument: a4hp9.i

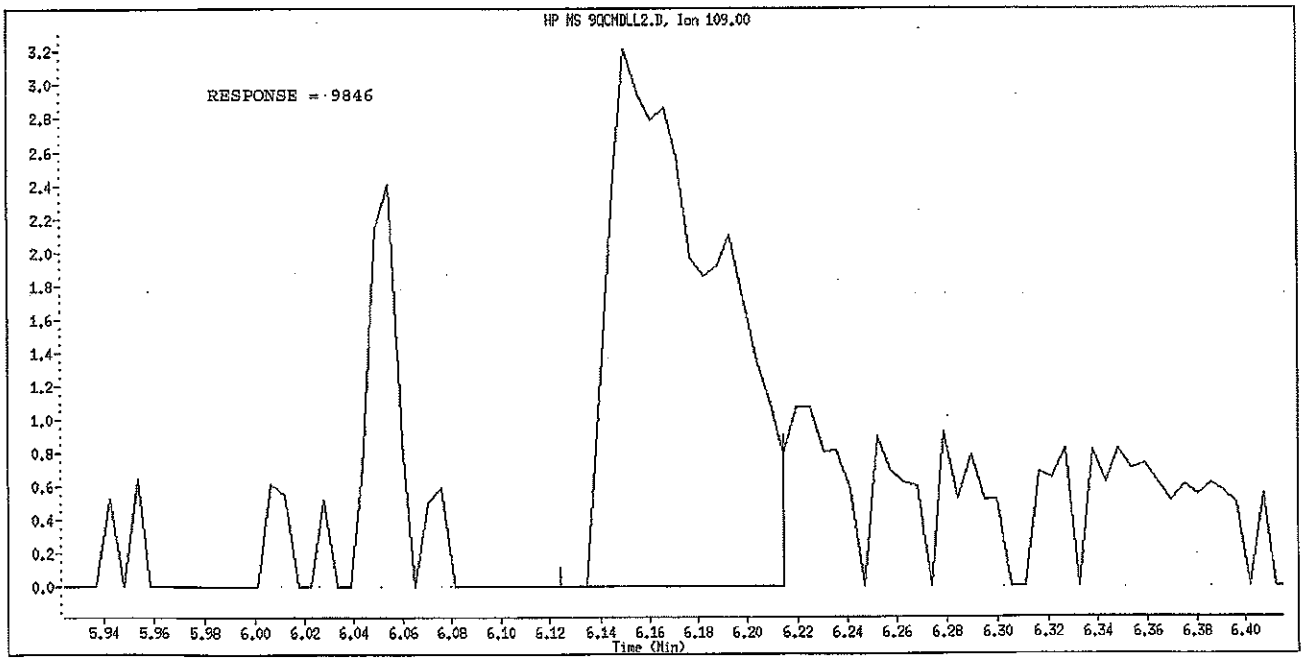
Operator: 001574
Column diameter: 0.32



Data File Name: 9QCMDLL2.D
Inj. Date and Time: 27-JUL-2010 18:32
Instrument ID: a4hp9.i
Client ID:
Compound Name: 4-Nitrophenol
CAS #: 100-02-7
Report Date: 08/25/2010



Original Integration



Manual Integration

Manually Integrated By: ulmanm
Manual Integration Reason: Poor Chromatography

Good for:
Benzoic acid
Hexachlorocyclopentadiene

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270C-625

Fails for:
2,4-Dinitrophenol
4,6-Dinitro-2-methylphenol
Pentachlorophenol

Data file : \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\9QCMDLL3.D
Lab Smp Id: qcmrl
Inj Date : 27-JUL-2010 18:51
Operator : 001574 Inst ID: a4hp9.i
Smp Info : qcmrl,00727a.b,8270c-625,qcmrl.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\8270c-625.m
Meth Date : 25-Aug-2010 09:54 ulmanm Quant Type: ISTD
Cal Date : 23-JUL-2010 10:33 Cal File: 9SMH0723.D
Als bottle: 32 QC Sample: MRL
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)
* 1	1,4-Dichlorobenzene-d4	152	3.792	3.792	(1.000)	280887	2.00000	(Q)
* 2	Naphthalene-d8	136	4.754	4.754	(1.000)	1031063	2.00000	
* 3	Acenaphthene-d10	164	6.052	6.052	(1.000)	625281	2.00000	
* 4	Phenanthrene-d10	188	7.136	7.142	(1.000)	1094883	2.00000	
* 5	Chrysene-d12	240	9.097	9.140	(1.000)	1151794	2.00000	
* 6	Perylene-d12	264	10.464	10.512	(1.000)	1009755	2.00000	
9	Pyridine	79	1.912	1.901	(0.504)	142369	0.47176	0.47176
10	N-Nitrosodimethylamine	74	1.874	1.864	(0.494)	78706	0.50778	0.50778
21	Aniline	93	3.541	3.541	(0.934)	198484	0.47449	0.47449
22	Phenol	94	3.509	3.498	(0.925)	165763	0.47754	0.47754
23	bis(2-Chloroethyl)ether	93	3.568	3.568	(0.941)	126761	0.47383	0.47383
24	2-Chlorophenol	128	3.642	3.637	(0.961)	97948	0.49768	0.49768
26	1,3-Dichlorobenzene	146	3.755	3.755	(0.990)	93665	0.49768	0.49768
27	1,4-Dichlorobenzene	146	3.803	3.803	(1.003)	91994	0.52939	0.52939
28	1,2-Dichlorobenzene	146	3.926	3.926	(1.035)	91560	0.50051	0.50051
29	Benzyl Alcohol	108	3.888	3.883	(1.025)	81559	0.47235	0.47235
30	2-Methylphenol	108	3.963	3.958	(1.045)	118973	0.49785	0.49785
31	bis(2-Chloroisopropyl)ether	45	3.974	3.979	(1.048)	125742	0.48114	0.48114(Q)
32	N-Nitroso-di-n-propylamine	70	4.075	4.081	(1.075)	101605	0.48039	0.48039
192	4-Methylphenol	108	4.081	4.070	(1.076)	119643	0.47795	0.47795
34	Hexachloroethane	117	4.182	4.187	(1.103)	33825	0.40080	0.40080
35	Nitrobenzene	77	4.219	4.225	(0.888)	143849	0.48913	0.48912
41	Isophorone	82	4.390	4.396	(0.924)	270862	0.49479	0.49479
42	2-Nitrophenol	139	4.460	4.465	(0.938)	45548	0.46180	0.46180(Q)
43	2,4-Dimethylphenol	107	4.481	4.476	(0.943)	123312	0.49085	0.49085
44	bis(2-Chloroethoxy)methane	93	4.540	4.540	(0.955)	139904	0.48198	0.48198
48	2,4-Dichlorophenol	162	4.647	4.641	(0.978)	70624	0.47358	0.47358
49	Benzoic Acid	122	4.551	4.561	(0.957)	33729	0.56798	0.56798(QM)
50	1,2,4-Trichlorobenzene	180	4.706	4.711	(0.990)	78723	0.51375	0.51375
51	Naphthalene	128	4.770	4.775	(1.003)	284750	0.51379	0.51378
52	4-Chloroaniline	127	4.796	4.796	(1.009)	120746	0.50673	0.50672
56	Hexachlorobutadiene	225	4.855	4.860	(1.021)	46593	0.53979	0.53979
210	Caprolactam	113	5.031	5.058	(1.058)	34623	0.47527	0.47527(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (NG)
59	4-Chloro-3-Methylphenol	107	5.154	5.149	(1.084)	102582	0.48356	0.48356
62	2-Methylnaphthalene	142	5.283	5.283	(1.111)	170233	0.51860	0.51860
63	1-Methylnaphthalene	142	5.357	5.357	(1.127)	169976	0.51421	0.51421
64	Hexachlorocyclopentadiene	237	5.395	5.400	(0.891)	3748	0.03653	0.036526 (M)
66	2,4,6-Trichlorophenol	196	5.491	5.486	(0.907)	47000	0.41303	0.41303
67	2,4,5-Trichlorophenol	196	5.523	5.518	(0.913)	61903	0.51138	0.51138
70	2-Chloronaphthalene	162	5.640	5.646	(0.932)	160075	0.49602	0.49602
73	2-Nitroaniline	65	5.705	5.710	(0.943)	72550	0.50223	0.50223
76	Dimethylphthalate	163	5.817	5.822	(0.961)	189869	0.50680	0.50680
78	2,6-Dinitrotoluene	165	5.870	5.875	(0.970)	39694	0.48889	0.48889
79	Acenaphthylene	152	5.950	5.956	(0.983)	279822	0.49551	0.49551
80	1,2-Dinitrobenzene	168	5.918	5.924	(0.978)	19333	0.44285	0.44285
81	3-Nitroaniline	138	6.004	6.004	(0.992)	49267	0.50296	0.50296
82	Acenaphthene	153	6.073	6.078	(1.004)	184615	0.53176	0.53176 (Q)
83	2,4-Dinitrophenol	184	Compound Not Detected.					
85	4-Nitrophenol	109	6.143	6.116	(1.015)	19154	0.23810	0.23810 (Q)
86	Dibenzofuran	168	6.201	6.201	(1.025)	254815	0.51270	0.51270
87	2,4-Dinitrotoluene	165	6.169	6.169	(1.019)	49590	0.44337	0.44336
93	Diethylphthalate	149	6.324	6.330	(1.045)	201427	0.51031	0.51030
94	Fluorene	166	6.447	6.452	(1.065)	194121	0.51569	0.51568
95	4-Chlorophenyl-phenylether	204	6.431	6.436	(1.063)	91083	0.50033	0.50033
96	4-Nitroaniline	138	6.452	6.452	(1.066)	50322	0.48448	0.48448
98	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99	N-Nitrosodiphenylamine	169	6.517	6.517	(0.913)	154652	0.50749	0.50749
100	1,2-Diphenylhydrazine	77	6.549	6.549	(0.918)	303210	0.47038	0.47038
106	4-Bromophenyl-phenylether	248	6.789	6.794	(0.951)	47549	0.51772	0.51772
107	Hexachlorobenzene	284	6.858	6.864	(0.961)	42938	0.50813	0.50813
111	Pentachlorophenol	266	Compound Not Detected.					
115	Phenanthrene	178	7.152	7.158	(1.002)	294589	0.50865	0.50865
116	Anthracene	178	7.190	7.195	(1.007)	296483	0.50529	0.50529
119	Carbazole	167	7.302	7.302	(1.023)	284165	0.50710	0.50710
120	Di-n-Butylphthalate	149	7.499	7.505	(1.051)	328006	0.49849	0.49849
123	Fluoranthene	202	8.023	8.034	(1.124)	300273	0.50124	0.50124
125	Pyrene	202	8.194	8.210	(0.901)	318706	0.44838	0.44838
131	Butylbenzylphthalate	149	8.605	8.637	(0.946)	145713	0.47518	0.47518
135	3,3'-Dichlorobenzidine	252	9.043	9.086	(0.994)	104146	0.47198	0.47198
136	Benzo(a)Anthracene	228	9.086	9.129	(0.999)	309303	0.46594	0.46594 (H)
137	Chrysene	228	9.118	9.161	(1.002)	305449	0.48451	0.48451
138	4,4'-Methylene bis(o-chloroan	231	9.038	9.075	(0.994)	53844	0.48415	0.48415
139	bis(2-ethylhexyl)Phthalate	149	9.017	9.059	(0.991)	206847	0.48411	0.48411
140	Di-n-octylphthalate	149	9.535	9.583	(0.911)	369579	0.49823	0.49823
141	Benzo(b)fluoranthene	252	10.037	10.090	(0.959)	302431	0.48838	0.48838 (H)
142	Benzo(k)fluoranthene	252	10.064	10.117	(0.962)	293731	0.51817	0.51817
146	Benzo(a)pyrene	252	10.400	10.454	(0.994)	276933	0.50702	0.50702
149	Indeno(1,2,3-cd)pyrene	276	11.928	11.992	(1.140)	288683	0.50765	0.50765
150	Dibenz(a,h)anthracene	278	11.933	11.992	(1.140)	225065	0.51219	0.51219
151	Benzo(g,h,i)perylene	276	12.388	12.441	(1.184)	240058	0.51693	0.51693
198	1,4-Dioxane	88	1.687	1.682	(0.445)	49941	0.48912	0.48912

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

TestAmerica North Canton

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: a4hp9.i
Lab File ID: 9QCMDLL3.D
Lab Smp Id: qcmrl
Analysis Type: SV
Quant Type: ISTD
Operator: 001574
Method File: \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\8270c-625.m
Misc Info:

Calibration Date: 27-JUL-2010
Calibration Time: 08:45
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 1,4-Dichlorobenze	207745	103873	415490	280887	35.21
2 Naphthalene-d8	743392	371696	1486784	1031063	38.70
3 Acenaphthene-d10	437162	218581	874324	625281	43.03
4 Phenanthrene-d10	750353	375177	1500706	1094883	45.92
5 Chrysene-d12	718593	359297	1437186	1151794	60.28
6 Perylene-d12	615980	307990	1231960	1009755	63.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 1,4-Dichlorobenze	3.79	3.29	4.29	3.79	-0.00
2 Naphthalene-d8	4.75	4.25	5.25	4.75	-0.00
3 Acenaphthene-d10	6.05	5.55	6.55	6.05	-0.00
4 Phenanthrene-d10	7.14	6.64	7.64	7.14	-0.08
5 Chrysene-d12	9.14	8.64	9.64	9.10	-0.47
6 Perylene-d12	10.51	10.01	11.01	10.46	-0.46

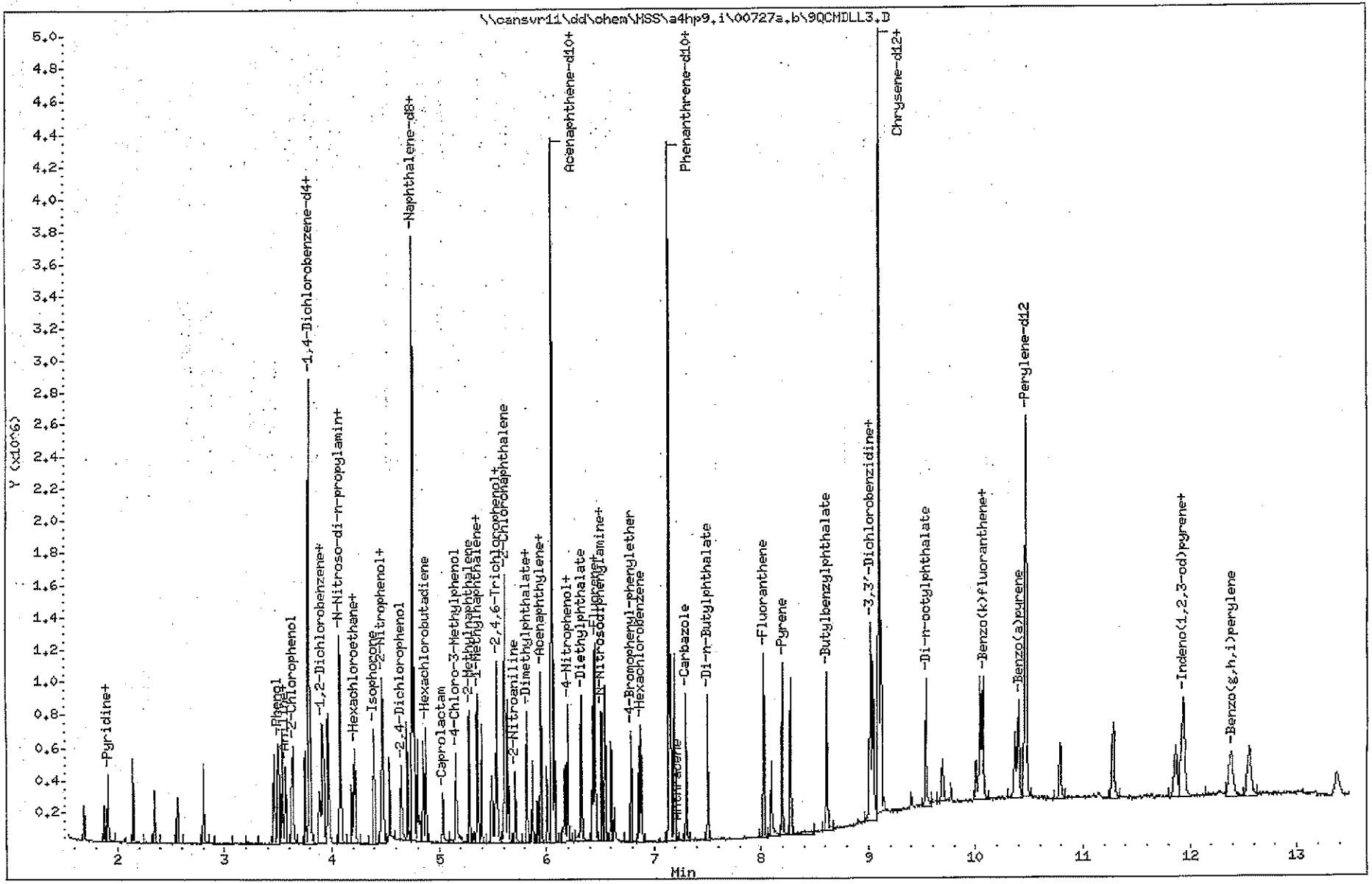
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\cansvr11\dd\chem\MSS\a4hp9.i\00727a.b\9QCMDLL3.D
Date : 27-JUL-2010 18:51
Client ID:
Sample Info: qcmrl,00727a.b,8270c-625,qcmrl.sub

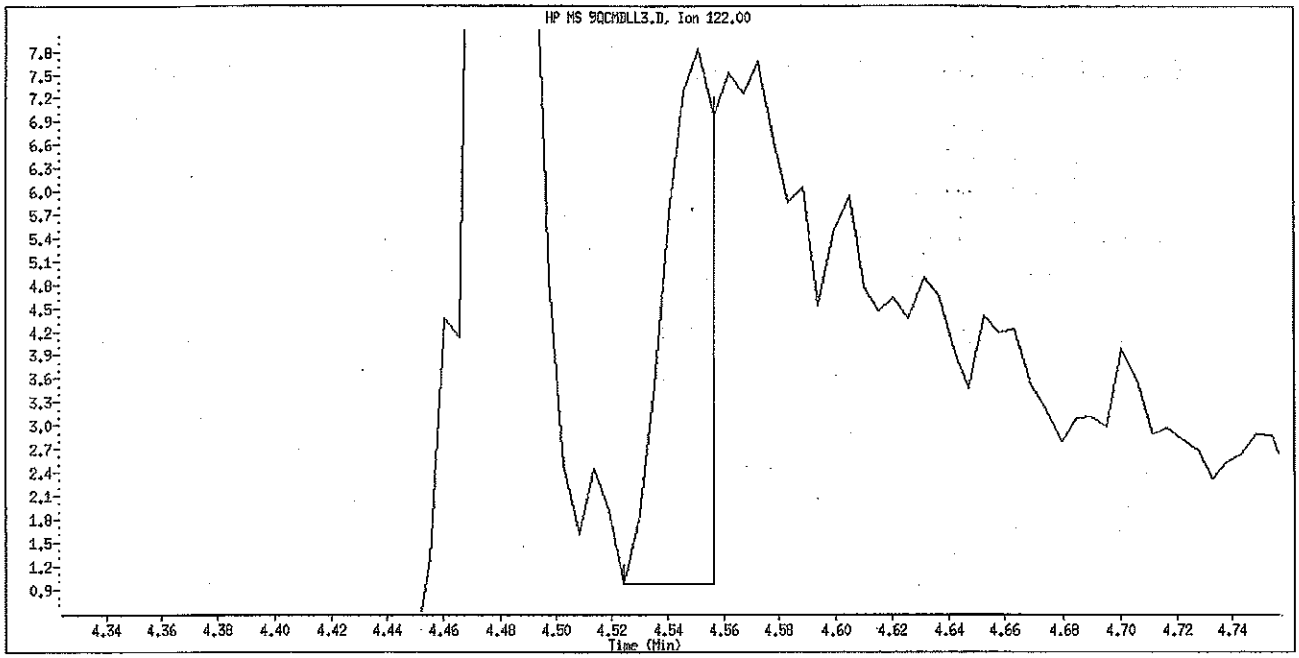
Instrument: a4hp9.i

Operator: 001574
Column diameter: 0.32

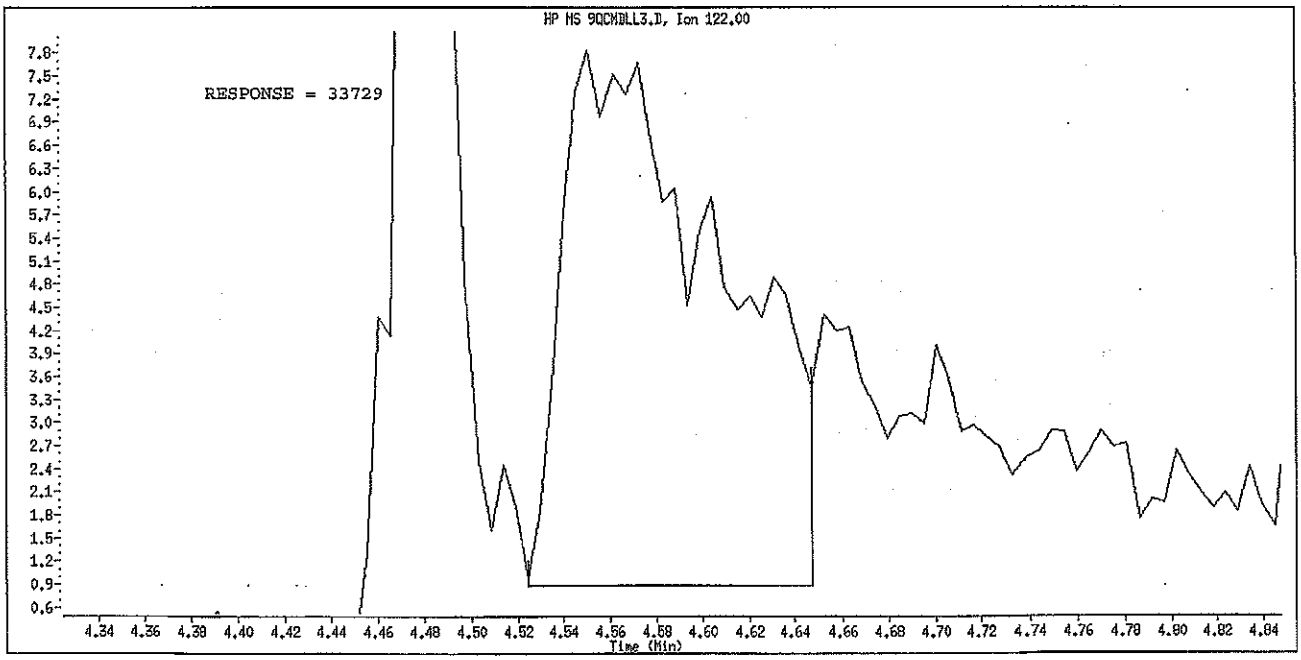
Column phase: db5.625



Data File Name: 9QCMDLL3.D
Inj. Date and Time: 27-JUL-2010 18:51
Instrument ID: a4hp9.i
Client ID:
Compound Name: Benzoic Acid
CAS #: 65-85-0
Report Date: 08/25/2010



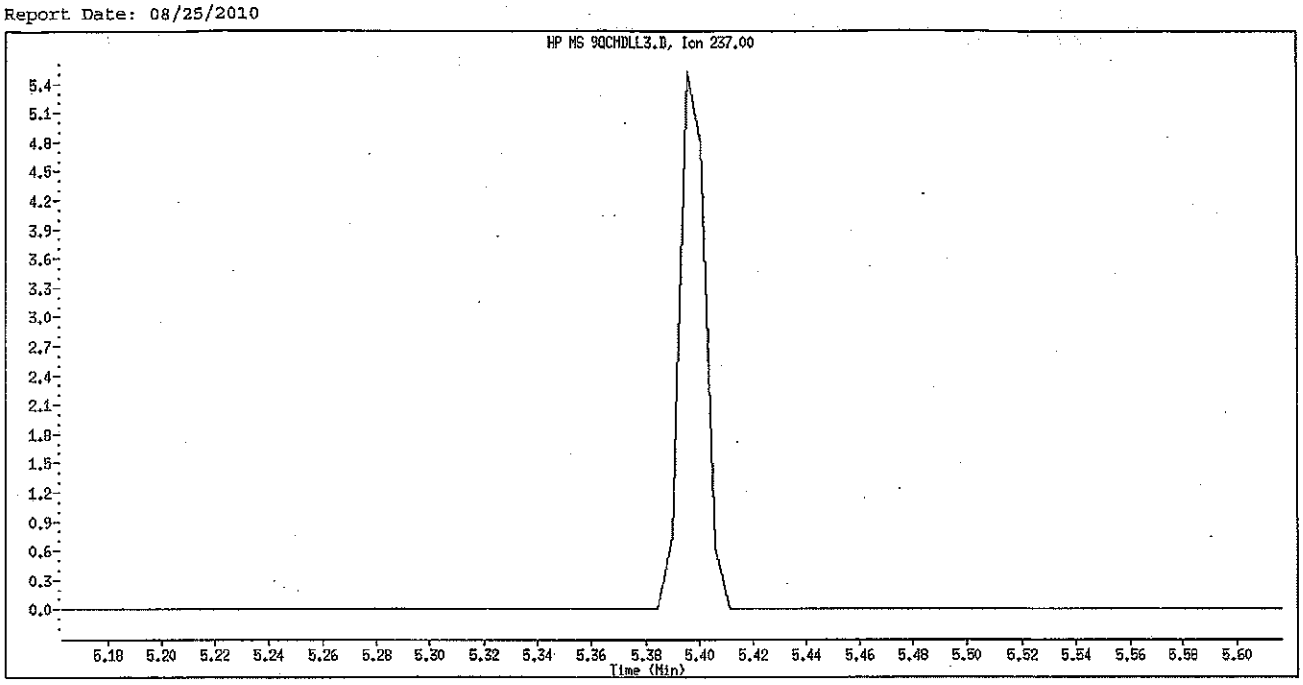
Original Integration



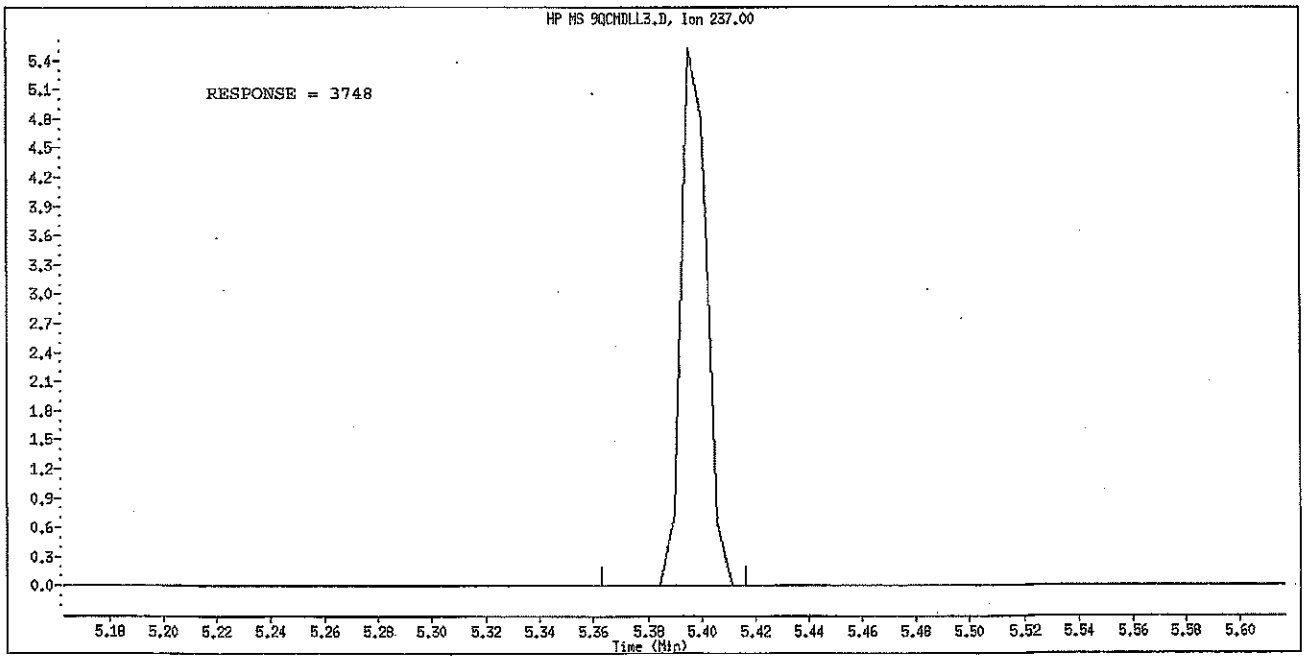
Manual Integration

Manually Integrated By: ulmanm
Manual Integration Reason: Poor Chromatography

Data File Name: 9QCMDLL3.D
Inj. Date and Time: 27-JUL-2010 18:51
Instrument ID: a4hp9.i
Client ID:
Compound Name: Hexachlorocyclopentadiene
CAS #: 77-47-4
Report Date: 08/25/2010



Original Integration



Manual Integration

Manually Integrated By: ulmanm
Manual Integration Reason: Peak not found

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 25, 2010

SDG: A0G140402 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 5.0 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Was a DDT standard analyzed every 12 hours? Was the DDT %breakdown < 15%?	✓				LCG Table 4 >15%=J/R
8. Was an endrin standard analyzed every 12 hours? Was endrin %breakdown <15%?	✓				LCG Table 4 >15%=J/R
9. Does the initial calibration curve consist of 5 concentration levels?	✓			Instrument A2HP3 7/26/10 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 4 R
10. Were the %RSDs for each analyte ≤ 20%? OR was the average %RSD ≤ 20% with the r^2 >0.990?	✓				LCG Table 4 RSD>20% or r<0.99=J/R
11. Was a blank run prior to the initial calibration?			✓	No data provided to evaluate.	
12. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			4/14/10 @ 2010	LCG Table 4 R
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?	✓			7/28/10 @ 0609, 1546	LCG Table 4 >130%=J; 65-70%%=J/UJ; <65%=J/R
14. Was a second source (ICV) verification analyzed after the ICAL? Were results 85-115%?	✓			7/26/10 @ 2007	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 25, 2010

SDG: A0G140402 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a CCV run every 12 hours?	✓			7/28/10 @ 0520, 0544,1455, 1520 7/28/10	LCG Table 4
16. Was the %D for all target analytes ≤15%? OR was the average %D ≤ 15% with no individual analyte >30%?	✓			For the CCV analyzed 7/27 @ 1632 (both front and back) targets had a %D >15%, but no qualification was made as the average %D was ≤15%.	LCG Table 4 D>30% (neg) =J/R D>30% (pos) = J
17. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 4
18. Were target analytes < ½ the MRL?	✓				LCG Table 4 <5x=B
19. Was a field blank collected and analyzed?	✓				
20. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓				<5x =B
21. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 4
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 50-150% and RPD ≤20%?	✓			Checked by ADR.	*Was QAPP Table 3-2*, Pj
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in sample FWGLL12mw-107c-1547-GW at 49%, FWGLL12mw-128c-1549-GW at 30%, FWGLL12mw-182c-1552-GW at 49%, FWGLL12mw-185c-1555-GW at 38%, FWGLL12mw-186c-1556-GW at 40%, FWGLL12mw-189c-1559-GW at 31%, FWGLL12mw-243c-1561-GW at 31% and FWGLL12mw-244c-1562-GW at 22%. The associated results were qualified as estimated, "J/UJ".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Only sample results above the RL were evaluated.	QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPD's ≤ 40?	✓			Only the primary column was evaluated as there were no detected concentrations reported above the RL.	LCG Table 4 >40 RPD=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006.28
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 25, 2010

SDG: A0G140402 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Were reported sample concentrations within calibration range?	✓				
30. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
31. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 4 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-002 **Work Order #...:** L35M41AH **Matrix.....:** WG
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	30 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-004 **Work Order #...:** L35M61AD **Matrix.....:** WG
Date Sampled...: 07/13/10 12:17 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.012 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	100	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-006 **Work Order #...:** L35M81AD **Matrix.....:** WG
Date Sampled...: 07/13/10 13:51 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(50 - 150)
Decachlorobiphenyl	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-008 **Work Order #...:** L35NA1AD **Matrix.....:** WG
Date Sampled...: 07/13/10 15:49 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	22 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-011 **Work Order #...:** L35NE1AD **Matrix.....:** WG
Date Sampled...: 07/13/10 08:48 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.013 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	**0.0091 J**	**0.030**	**ug/L**	**0.0078**
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-013	**Work Order #...:** L35NG1AD	**Matrix.....:** WG	
Date Sampled...: 07/13/10 10:38	**Date Received..:** 07/14/10		
Prep Date.....: 07/15/10	**Analysis Date..:** 07/28/10		
Prep Batch #...: 0196036			
Dilution Factor: 1	**Initial Wgt/Vol:** 930 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.014 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-015 **Work Order #...:** L35NJ1AH **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.0092 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	64	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-018 **Work Order #...:** L35NQ1AD **Matrix.....:** WG
Date Sampled...: 07/13/10 09:00 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	49 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GW

GC Semivolatiles

Lot-Sample #...:	A0G140402-020	**Work Order #...:**	L35NW1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/10 10:10	**Date Received..:**	07/14/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/28/10		
Prep Batch #...:	0196036				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.018 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	49 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-022 **Work Order #...:** L35N01AD **Matrix.....:** WG
Date Sampled...: 07/13/10 10:30 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	57	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-024 **Work Order #...:** L35N21AD **Matrix.....:** WG
Date Sampled...: 07/13/10 12:40 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 980 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-026 **Work Order #...:** L35N41AD **Matrix.....:** WG
Date Sampled...: 07/13/10 14:00 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
Decachlorobiphenyl	53	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-028 **Work Order #...:** L35N61AD **Matrix.....:** WG
Date Sampled...: 07/13/10 15:50 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	38 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-030 **Work Order #...:** L35N81AD **Matrix.....:** WQ
Date Sampled...: 07/13/10 16:20 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	78	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L37FJ1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G150000-036

Prep Date.....: 07/15/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/28/10 **Prep Batch #...:** 0196036
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
alpha-BHC	ND	0.030	ug/L	SW846 8081A
beta-BHC	ND	0.030	ug/L	SW846 8081A
delta-BHC	ND	0.030	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.030	ug/L	SW846 8081A
Heptachlor	ND	0.030	ug/L	SW846 8081A
Aldrin	ND	0.030	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.030	ug/L	SW846 8081A
Endosulfan I	ND	0.025	ug/L	SW846 8081A
Dieldrin	ND	0.030	ug/L	SW846 8081A
4,4'-DDE	ND	0.030	ug/L	SW846 8081A
Endrin	ND	0.030	ug/L	SW846 8081A
Endosulfan II	ND	0.025	ug/L	SW846 8081A
4,4'-DDD	ND	0.030	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.030	ug/L	SW846 8081A
4,4'-DDT	ND	0.030	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Endrin ketone	ND	0.030	ug/L	SW846 8081A
Endrin aldehyde	ND	0.030	ug/L	SW846 8081A
alpha-Chlordane	ND	0.030	ug/L	SW846 8081A
gamma-Chlordane	ND	0.030	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	68	(50 - 150)
Decachlorobiphenyl	89	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G140402 Work Order #...: L37FJ1AC Matrix.....: WATER
LCS Lot-Sample#: A0G150000-036
Prep Date.....: 07/15/10 Analysis Date..: 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	102	(44 - 137)	**SW846 8081A**
beta-BHC	92	(50 - 135)	**SW846 8081A**
delta-BHC	108	(58 - 160)	**SW846 8081A**
gamma-BHC (Lindane)	97	(58 - 127)	**SW846 8081A**
Heptachlor	80	(48 - 150)	**SW846 8081A**
Aldrin	96	(53 - 128)	**SW846 8081A**
Heptachlor epoxide	97	(50 - 127)	**SW846 8081A**
Endosulfan I	64	(50 - 160)	**SW846 8081A**
Dieldrin	89	(50 - 124)	**SW846 8081A**
4,4'-DDE	94	(50 - 130)	**SW846 8081A**
Endrin	90	(50 - 137)	**SW846 8081A**
Endosulfan II	68	(50 - 144)	**SW846 8081A**
4,4'-DDD	110	(50 - 137)	**SW846 8081A**
Endosulfan sulfate	92	(50 - 160)	**SW846 8081A**
4,4'-DDT	78	(50 - 145)	**SW846 8081A**
Methoxychlor	83	(50 - 160)	**SW846 8081A**
Endrin ketone	80	(50 - 150)	**SW846 8081A**
Endrin aldehyde	64	(30 - 160)	**SW846 8081A**
alpha-Chlordane	97	(50 - 122)	**SW846 8081A**
gamma-Chlordane	96	(50 - 130)	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G140402 Work Order #...: L35M41AJ-MS Matrix.....: WG
MS Lot-Sample #: A0G140402-002 L35M41AK-MSD
Date Sampled...: 07/13/10 09:09 Date Received..: 07/14/10
Prep Date.....: 07/15/10 Analysis Date..: 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 2 Initial Wgt/Vol: 525 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	106	(50 - 150)			SW846 8081A
	116	(50 - 150)	9.1	(0-50)	SW846 8081A
beta-BHC	109	(50 - 150)			SW846 8081A
	115	(50 - 150)	5.7	(0-50)	SW846 8081A
delta-BHC	116	(50 - 150)			SW846 8081A
	132	(50 - 150)	12	(0-50)	SW846 8081A
gamma-BHC (Lindane)	99	(50 - 150)			SW846 8081A
	115	(50 - 150)	15	(0-50)	SW846 8081A
Heptachlor	77	(50 - 150)			SW846 8081A
	92	(50 - 150)	18	(0-50)	SW846 8081A
Aldrin	99	(50 - 150)			SW846 8081A
	110	(50 - 150)	11	(0-50)	SW846 8081A
Heptachlor epoxide	105	(50 - 150)			SW846 8081A
	120	(50 - 150)	13	(0-50)	SW846 8081A
Endosulfan I	68	(50 - 150)			SW846 8081A
	78	(50 - 150)	14	(0-50)	SW846 8081A
Dieldrin	95	(50 - 150)			SW846 8081A
	107	(50 - 150)	12	(0-50)	SW846 8081A
4,4'-DDE	95	(50 - 150)			SW846 8081A
	104	(50 - 150)	9.4	(0-50)	SW846 8081A
Endrin	98	(50 - 150)			SW846 8081A
	111	(50 - 150)	12	(0-50)	SW846 8081A
Endosulfan II	77	(50 - 150)			SW846 8081A
	84	(50 - 150)	8.1	(0-50)	SW846 8081A
4,4'-DDD	113	(50 - 150)			SW846 8081A
	121	(50 - 150)	6.8	(0-50)	SW846 8081A
Endosulfan sulfate	98	(50 - 150)			SW846 8081A
	110	(50 - 150)	11	(0-50)	SW846 8081A
4,4'-DDT	54	(50 - 150)			SW846 8081A
	66	(50 - 150)	20	(0-50)	SW846 8081A
Methoxychlor	79	(50 - 150)			SW846 8081A
	92	(50 - 150)	16	(0-50)	SW846 8081A
Endrin ketone	84	(50 - 150)			SW846 8081A
	96	(50 - 150)	13	(0-50)	SW846 8081A
Endrin aldehyde	68	(50 - 150)			SW846 8081A
	76	(50 - 150)	12	(0-50)	SW846 8081A
alpha-Chlordane	100	(50 - 150)			SW846 8081A
	114	(50 - 150)	13	(0-50)	SW846 8081A
gamma-Chlordane	98	(50 - 150)			SW846 8081A
	112	(50 - 150)	13	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L35M41AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-002 L35M41AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
	88	(50 - 150)
Decachlorobiphenyl	46 *	(50 - 150)
	51	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G140402 Work Order #...: L35NJ1AJ-MS Matrix.....: WG
MS Lot-Sample #: A0G140402-015 L35NJ1AK-MSD
Date Sampled...: 07/13/10 12:58 Date Received..: 07/14/10
Prep Date.....: 07/15/10 Analysis Date..: 07/28/10
Prep Batch #...: 0196036
Dilution Factor: 2 Initial Wgt/Vol: 490 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	95	(50 - 150)			SW846 8081A
	108	(50 - 150)	13	(0-50)	SW846 8081A
beta-BHC	99	(50 - 150)			SW846 8081A
	99	(50 - 150)	0.34	(0-50)	SW846 8081A
delta-BHC	114	(50 - 150)			SW846 8081A
	114	(50 - 150)	0.34	(0-50)	SW846 8081A
gamma-BHC (Lindane)	96	(50 - 150)			SW846 8081A
	102	(50 - 150)	6.6	(0-50)	SW846 8081A
Heptachlor	81	(50 - 150)			SW846 8081A
	80	(50 - 150)	1.3	(0-50)	SW846 8081A
Aldrin	92	(50 - 150)			SW846 8081A
	99	(50 - 150)	6.7	(0-50)	SW846 8081A
Heptachlor epoxide	106	(50 - 150)			SW846 8081A
	106	(50 - 150)	0.46	(0-50)	SW846 8081A
Endosulfan I	70	(50 - 150)			SW846 8081A
	70	(50 - 150)	0.14	(0-50)	SW846 8081A
Dieldrin	99	(50 - 150)			SW846 8081A
	95	(50 - 150)	3.9	(0-50)	SW846 8081A
4,4'-DDE	108	(50 - 150)			SW846 8081A
	100	(50 - 150)	7.0	(0-50)	SW846 8081A
Endrin	106	(50 - 150)			SW846 8081A
	97	(50 - 150)	8.5	(0-50)	SW846 8081A
Endosulfan II	83	(50 - 150)			SW846 8081A
	76	(50 - 150)	8.6	(0-50)	SW846 8081A
4,4'-DDD	128	(50 - 150)			SW846 8081A
	120	(50 - 150)	6.0	(0-50)	SW846 8081A
Endosulfan sulfate	108	(50 - 150)			SW846 8081A
	95	(50 - 150)	12	(0-50)	SW846 8081A
4,4'-DDT	95	(50 - 150)			SW846 8081A
	79	(50 - 150)	18	(0-50)	SW846 8081A
Methoxychlor	100	(50 - 150)			SW846 8081A
	87	(50 - 150)	14	(0-50)	SW846 8081A
Endrin ketone	96	(50 - 150)			SW846 8081A
	85	(50 - 150)	12	(0-50)	SW846 8081A
Endrin aldehyde	73	(50 - 150)			SW846 8081A
	67	(50 - 150)	9.2	(0-50)	SW846 8081A
alpha-Chlordane	104	(50 - 150)			SW846 8081A
	101	(50 - 150)	3.1	(0-50)	SW846 8081A
gamma-Chlordane	104	(50 - 150)			SW846 8081A
	102	(50 - 150)	2.5	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L35NJ1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-015 L35NJ1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	63	(50 - 150)
	93	(50 - 150)
Decachlorobiphenyl	87	(50 - 150)
	78	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 25, 2010

SDG: A0G140402 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 5.0 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Does the initial calibration curve consist of 5 concentration levels of Aroclors 1016 and 1260?	✓			Instrument A2HP13; ICAL on 7/20/10 Stds = 0.05, 0.1, 0.2, 0.5, 1.0, 2.0	LCG Table 3 R
8. Was the % RSD ≤ 20%? Were the r^2s >0.990?	✓				LCG Table 3 RSD>20% or r<0.99= J/R
9. Was a MDL Level Verification performed once per quarter? Were all target analytes detected?	✓			No data provided for evaluation.	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			7/21/10@ 0320	LCG Table 3 >115%=J; 80-85%=J/UJ; <80%=J/R
12. Were single standards of the other five Aroclors run to aid in pattern recognition and to determine a single point calibration factor?	✓				Method 8082 Section 5.6.2
13. Was a CCV run every 12 hours?	✓				LCG Table 3

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 25, 2010

SDG: A0G140402 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the % D ≤ 15 % for each analyte or the average %D across all analytes ≤ 15% with a maximum %D for each target analyte ≤30%?	✓				LCG Table 3 D>30% (neg) =J/R D>30% (pos) =J
15. Was a method blank prepared and analyzed with each batch?	✓			Section checked by ADR	LCG Table 5
16. Were target analytes <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was an equipment blank collected and analyzed?	✓				
18. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓			Section checked by ADR	<5x = B
19. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 3
20. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C >UL=J; LL-30%=J/UJ; <30%=J/R
21. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?	✓				
23. Were MS/MSD recoveries 50-150% and RPD ≤20%?		✓		Checked by ADR. The MS for Aroclor 1260 recovered below limits at 37%. The Aroclor 1016 MS/MSD RPD was above limits at 24% and 53% for Aroclor 1260. No qualifications were made as the LCS recovered within limits.	QAPP Table 3-2 Pj
24. Was the surrogate spiked into all samples?	✓				
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in sample FWGLL12mw-128c-1549-GW at 40%, FWGLL12mw-189c-1559-GW at 36%, FWGLL12mw-243c-1561-GW at 33% and FWGLL12mw-244c-1562-GW at 29%. The associated results were qualified as estimated, "UJ".	LCG Table 3 >150%=J; 10-50%=J/UJ; <10%=R
26. Was a field duplicate analyzed? Were the RPDs <30%?	✓				QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 25, 2010

SDG: A0G140402 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
27. Were all positive results verified by a second dissimilar column confirmation? Was the RPD ≤ 40?			✓	No detected concentrations were reported.	LCG Table 3 RPD>40=J
28. Were reported sample concentrations within calibration range?			✓	No detected concentrations were reported.	
29. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.	✓			See narrative for surrogate outliers.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 3 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-002	Work Order #...: L35M41AT	Matrix.....: WG	
Date Sampled...: 07/13/10 09:09	Date Received..: 07/14/10		
Prep Date.....: 07/15/10	Analysis Date..: 07/23/10		
Prep Batch #...: 0196037			
Dilution Factor: 1	Initial Wgt/Vol: 1050 mL	Final Wgt/Vol..: 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(50 - 150)
Decachlorobiphenyl	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-004 Work Order #...: L35M61AG Matrix.....: WG
Date Sampled...: 07/13/10 12:17 Date Received..: 07/14/10
Prep Date.....: 07/15/10 Analysis Date..: 07/23/10
Prep Batch #...: 0196037
Dilution Factor: 1 Initial Wgt/Vol: 1050 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	33 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GW

GC Semivolatiles

Lot-Sample #...:	A0G140402-006	**Work Order #...:**	L35M81AG	**Matrix.....:**	WG
Date Sampled...:	07/13/10 13:51	**Date Received..:**	07/14/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0196037				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(50 - 150)
Decachlorobiphenyl	74	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GW

GC Semivolatiles

Lot-Sample #...:	A0G140402-008	**Work Order #...:**	L35NA1AG	**Matrix.....:**	WG
Date Sampled...:	07/13/10 15:49	**Date Received..:**	07/14/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0196037				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	75	(50 - 150)
Decachlorobiphenyl	29 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GW

GC Semivolatiles

Lot-Sample #...:	A0G140402-011	**Work Order #...:**	L35NE1AG	**Matrix.....:**	WG
Date Sampled...:	07/13/10 08:48	**Date Received..:**	07/14/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0196037				
Dilution Factor:	1	**Initial Wgt/Vol:**	950 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	53	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-013 **Work Order #...:** L35NG1AG **Matrix.....:** WG
Date Sampled...: 07/13/10 10:38 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0196037
Dilution Factor: 1 **Initial Wgt/Vol:** 930 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	36 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-015	Work Order #...: L35NJ1AT	Matrix.....: WG	
Date Sampled...: 07/13/10 12:58	Date Received..: 07/14/10		
Prep Date.....: 07/15/10	Analysis Date..: 07/23/10		
Prep Batch #...: 0196037			
Dilution Factor: 1	Initial Wgt/Vol: 960 mL	Final Wgt/Vol..: 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	75	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-018 **Work Order #...:** L35NQ1AG **Matrix.....:** WG
Date Sampled...: 07/13/10 09:00 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0196037
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-020	**Work Order #...:** L35NW1AG		**Matrix.....:** WG
Date Sampled...: 07/13/10 10:10	**Date Received..:** 07/14/10		
Prep Date.....: 07/15/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0196037			
Dilution Factor: 1	**Initial Wgt/Vol:** 1050 mL		**Final Wgt/Vol..:** 5 mL
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	54	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-022 **Work Order #...:** L35N01AG **Matrix.....:** WG
Date Sampled...: 07/13/10 10:30 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0196037
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	75	(50 - 150)
Decachlorobiphenyl	64	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-024 **Work Order #...:** L35N21AG **Matrix.....:** WG
Date Sampled...: 07/13/10 12:40 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0196037
Dilution Factor: 1 **Initial Wgt/Vol:** 980 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	53	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GW

GC Semivolatiles

Lot-Sample #...: A0G140402-026	**Work Order #...:** L35N41AG		**Matrix.....:** WG
Date Sampled...: 07/13/10 14:00	**Date Received..:** 07/14/10		
Prep Date.....: 07/15/10	**Analysis Date..:** 07/23/10		
Prep Batch #...: 0196037			
Dilution Factor: 1	**Initial Wgt/Vol:** 1000 mL		**Final Wgt/Vol..:** 5 mL
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	68	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GW

GC Semivolatiles

Lot-Sample #...:	A0G140402-028	**Work Order #...:**	L35N61AG	**Matrix.....:**	WG
Date Sampled...:	07/13/10 15:50	**Date Received..:**	07/14/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0196037				
Dilution Factor:	1	**Initial Wgt/Vol:**	1040 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	50	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

GC Semivolatiles

Lot-Sample #...:	A0G140402-030	**Work Order #...:**	L35N81AG	**Matrix.....:**	WQ
Date Sampled...:	07/13/10 16:20	**Date Received..:**	07/14/10		
Prep Date.....:	07/15/10	**Analysis Date..:**	07/23/10		
Prep Batch #...:	0196037				
Dilution Factor:	1	**Initial Wgt/Vol:**	1040 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	69	(50 - 150)
Decachlorobiphenyl	106	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L37FK1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G150000-037

Prep Date.....: 07/15/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/23/10 **Prep Batch #...:** 0196037
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/L	SW846 8082
Aroclor 1221	ND	0.50	ug/L	SW846 8082
Aroclor 1232	ND	0.50	ug/L	SW846 8082
Aroclor 1242	ND	0.50	ug/L	SW846 8082
Aroclor 1248	ND	0.50	ug/L	SW846 8082
Aroclor 1254	ND	0.50	ug/L	SW846 8082
Aroclor 1260	ND	0.50	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	67	(50 - 150)
Decachlorobiphenyl	94	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L37FK1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G150000-037
Prep Date.....: 07/15/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0196037
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**76**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**81**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	71	(50 - 150)
Decachlorobiphenyl	73	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L35M41AU-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-002 L35M41AV-MSD
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0196037
Dilution Factor: 2 **Initial Wgt/Vol:** 525 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**62**	**(50 - 150)**			**SW846 8082**
	79	**(50 - 150)**	24	(0-50)	**SW846 8082**
Aroclor 1260	**37 a**	**(50 - 150)**			**SW846 8082**
	63 p	**(50 - 150)**	53	(0-50)	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	56	(50 - 150)
	80	(50 - 150)
Decachlorobiphenyl	26 *	(50 - 150)
	48 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G140402 **Work Order #...:** L35NJ1AU-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140402-015 L35NJ1AV-MSD
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10
Prep Date.....: 07/15/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0196037
Dilution Factor: 2 **Initial Wgt/Vol:** 480 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**87**	**(50 - 150)**			**SW846 8082**
	83	**(50 - 150)**	**4.4**	**(0-50)**	**SW846 8082**
Aroclor 1260	**90**	**(50 - 150)**			**SW846 8082**
	85	**(50 - 150)**	**5.8**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
	82	(50 - 150)
Decachlorobiphenyl	96	(50 - 150)
	90	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August 25, 2010

SDG: A0G140402 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 5.0 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			ICP- 5/17/10 ICPMS-7/16/2010	LCG Table 7 R
11. Was a MRL Level Verification performed at the beginning of the daily sequence? Were results 70-130%?	✓				LCG Table 7 >130%=J; 65-70%=J/UJ; <65%=J/R
12. Was the ICV (second source verification) analyzed after the ICAL?	✓				LCG Table 7
13. Were all analytes within 90-110% in the ICV?	✓				LCG Table 7 J>110%=J; 90-85%=J/UJ; <85%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG**: A0G140402 R0
Sample Event: July 2010 **Analysis**: SW846 6010B/6020
Data Reviewer/Date: Angye Dragotta / August 25, 2010

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		ICP The ICB analyzed 7/15/10 had detected potassium at 152ug/L. No qualifications were made as there were no detected potassium concentrations <5x contamination. ICPMS The ICB analyzed 7/30/10 had thallium detected at 0.23ug/L. The thallium results for samples FWGLL12mw-128c-1549-GF, FWGLL12mw-243c-1561-GF, FWGLL12mw-187c-1557-GF and FWGLL12mw-244c-1562-GF were <5x the ICB contamination and were qualified, "U". No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U
15. Were CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 7
16. Were CCV results within 90 to 110%?		✓		ICP The CCV analyzed 7/15/2010 at 2112 had a vanadium recovery below control limits at 111%. No qualifications were made as there were no reported vanadium results for the bracketed samples. ICPMS The CCVs analyzed 7/30/2010 at 1831 and at 2141 had recoveries above control limits for beryllium at 111%. No qualifications were made as there were no detected beryllium concentrations reported for the bracketed samples.	LCG Table 7 >110%=J 90-85%=J/UJ; <85%=J/R
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICP The CCBs analyzed 7/15/10 had detected potassium from 159ug/L to 164ug/L No qualifications were made as there were no detected potassium concentrations <5x contamination. ICPMS The CCBs analyzed 7/30/2010 had beryllium detected from 0.017 to 0.02ug/L, cadmium at 0.012-0.028ug/L, iron from 3.5ug/L to 8.5ug/L and thallium from 0.24ug/L to 0.28ug/L. No additional thallium qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all bracketed detected contaminants were >5x the blank contamination. The CCBs analyzed 8/2/2010 had detected iron from 3.2 to 3.5ug/L. Contaminants in the calibration blanks did not require qualification of the data as all detected sample results >5x the blank contamination.	LCG Table 7 <5x = U
18. Was an Interelement Check Standard run at the beginning of the analytical sequence?	✓				LCG Table 7

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August 25, 2010

SDG: A0G140402 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
19. Was the ICS recovery within 80 to 120% of true value for each element of interest?	✓				LCG Table 7 >120%=J; 50-79%=J/UJ; <50%=Pj/R
21. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 7
22. Were target analytes <1/2 the MRL in the method blank?	✓			ADR checked section;	LCG Table 7 <5x = B
23. Was a field blank collected and analyzed?	✓				
24. Were target analytes reported in the field blank analyses >1/2 the MRL?		✓		ADR checked section;	<5x=B
25. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 7
26. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 60%-LL= J/UJ; <60%=J/R
27. Was a MS prepared with each batch?	✓				LCG Table 7
28. Was the MS and Lab Duplicate parent a Ravenna sample?	✓				
29. Were the MS recoveries within 75-125%?	✓			Checked by ADR.	LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤20%?		✓		Checked by ADR. Only detected results above RL were evaluated. The lab duplicate RPD for zinc analyzed on sample FWGLL12mw-128C-1549-GF was above control limits at 39%. All detected zinc results were qualified as estimated, "J".	LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	Not evaluated as the MS/MSD results were acceptable.	LCG Table 7 >125%=J; 30-75%=J/UJ; <30%=R
32. Was a serial dilution performed as needed?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August 25, 2010

SDG: A0G140402 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
33. Was the 4 fold dilution within ± 10% of the original result?		✓		The serial dilution %D for potassium analyzed on sample FWGLL12mw-128C-1549-GF was above control limits at 10.5% and at 15.9% for iron. All detected iron and potassium results were qualified as estimated, "J".	LCG Table 7 >10%=J
34. Was a field duplicate analyzed? Were the RPDs ± 30%?		✓		Checked by ADR. Only results where both sample results were detected above the RL were evaluated.	QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				
36. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
37. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 7 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 26, 2010

SDG: A0G140402 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 5.0 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 26, 2010

SDG: A0G140402 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Were the CCBs analyzed every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?	✓			No qualifications were made for due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
16. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 9
17. Were target analytes detected in the method blank <1/2 the MRL?	✓				LCG Table 9 <5x = B
18. Was a field blank collected and analyzed?	✓				
19. Were target analytes reported in the field blank analyses at <1/2 the MRL?	✓				<5x=B
20. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 9
21. Were the LCS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 J>120%=J; 50-79%=J/UJ; <50%=R
22. Was a MS prepared with each batch?	✓				LCG Table 9
23. Was the MS and Lab Duplicate parent sample a Ravenna sample?	✓				
24. Were the MS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 >125% = J 30% - 75% = J/UJ <30% = J/R
25. Was the Matrix Duplicate RPD ± 20%?	✓				LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR.	QAPP Table 3-2
27. Were sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 26, 2010

SDG: A0G140402 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 9 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GF

TOTAL Metals

Lot-Sample #...: A0G140402-003 **Matrix.....:** WG
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M51CA
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**1960**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35M51AA**
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**47.5**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M51A1**
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**61.3**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M51CE**
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35M51AE
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**183000**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M51CH**
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35M51AH
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**2.8 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M51CL**
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	**2.8 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M51CP**
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M51CT
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GF

TOTAL Metals

Lot-Sample #...: A0G140402-003 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**6890 E**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35M51AL**
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35M51DH
		Dilution Factor: 1		Analysis Time..: 18:33	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**2770 E**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M51CW**
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**109000**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M51C1**
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**242**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M51C4**
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**22100**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M51C7**
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**4.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M51DA**
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	**2.3 B**	**3.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M51A4**
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.16 B**	**2.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35M51AP**
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M51A7
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GF

TOTAL Metals

Lot-Sample #...: A0G140402-003 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	0.25 B	1.0	ug/L	SW846 6020	07/15-07/30/10	L35M51AW
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	2.5 B	10.0	ug/L	SW846 6010B	07/15/10	L35M51DE
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	19.8	10.0	ug/L	SW846 6020	07/15-07/30/10	L35M51AT
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

E Matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GF

TOTAL Metals

Lot-Sample #...: A0G140402-005 **Matrix.....:** WG
Date Sampled...: 07/13/10 12:17 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M71AQ
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35M71AE
		Dilution Factor: 1		Analysis Time..: 17:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**6.5**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M71AA**
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**27.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M71AR**
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35M71AF
		Dilution Factor: 1		Analysis Time..: 17:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**124000**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M71AT**
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35M71AG
		Dilution Factor: 1		Analysis Time..: 17:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.5 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M71AU**
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M71AV
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M71AW
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GF

TOTAL Metals

Lot-Sample #...: A0G140402-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35M71AH
		Dilution Factor: 1		Analysis Time..: 17:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35M71A2
		Dilution Factor: 1		Analysis Time..: 18:51	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**3320**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M71AX**
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**81500**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M71AM**
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**281**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M71AN**
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**22800**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M71AP**
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**2.7 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M71A0**
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35M71AC
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.63 B**	**2.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35M71AJ**
		Dilution Factor: 1		Analysis Time..: 17:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M71AD
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GF

TOTAL Metals

Lot-Sample #...: A0G140402-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.27 B**	**1.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35M71AL**
		Dilution Factor: 1		Analysis Time..: 17:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15/10	L35M71A1
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L35M71AK
		Dilution Factor: 1		Analysis Time..: 17:46	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GF

TOTAL Metals

Lot-Sample #...: A0G140402-007 **Matrix.....:** WG
Date Sampled...: 07/13/10 13:51 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M91AQ
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35M91AE
		Dilution Factor: 1		Analysis Time..: 17:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M91AA
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**281**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M91AR**
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35M91AF
		Dilution Factor: 1		Analysis Time..: 17:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**960000**	**5000**	**ug/L**	**SW846 6010B**	**07/15-07/21/10**	**L35M91AT**
		Dilution Factor: 5		Analysis Time..: 13:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3170		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35M91AG
		Dilution Factor: 1		Analysis Time..: 17:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**10.2**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M91AU**
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M91AV
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M91AW
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GF

TOTAL Metals

Lot-Sample #...: A0G140402-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35M91AH
		Dilution Factor: 1		Analysis Time..: 17:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35M91A2
		Dilution Factor: 1		Analysis Time..: 18:57	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**54200**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M91AX**
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**301000**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M91AM**
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**2020**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M91AN**
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**35600**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M91AP**
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**15.3**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35M91A0**
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35M91AC
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/30/10	L35M91AJ
		Dilution Factor: 1		Analysis Time..: 17:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35M91AD
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G140402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A0G150000-015 **Prep Batch #...:** 0196015					
Aluminum	97	(80 - 120)	SW846 6020	07/15-07/30/10	L37ED1A3
		Dilution Factor: 1	Analysis Time..: 17:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	94	(80 - 120)	SW846 6020	07/15-07/31/10	L37ED1A4
		Dilution Factor: 1	Analysis Time..: 17:14	Analyst ID.....: 001576	
		Instrument ID..: I8			
Cadmium	100	(80 - 120)	SW846 6020	07/15-07/30/10	L37ED1A5
		Dilution Factor: 1	Analysis Time..: 17:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	95	(80 - 120)	SW846 6020	07/15-08/02/10	L37ED1A6
		Dilution Factor: 1	Analysis Time..: 16:46	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	95	(80 - 120)	SW846 6020	07/15-07/30/10	L37ED1A7
		Dilution Factor: 1	Analysis Time..: 17:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	107	(80 - 120)	SW846 6020	07/15-07/30/10	L37ED1A8
		Dilution Factor: 1	Analysis Time..: 17:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	93	(80 - 120)	SW846 6020	07/15-07/30/10	L37ED1A9
		Dilution Factor: 1	Analysis Time..: 17:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Arsenic	96	(80 - 120)	SW846 6010B	07/15/10	L37ED1CA
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Lead	97	(80 - 120)	SW846 6010B	07/15/10	L37ED1CC
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Selenium	98	(80 - 120)	SW846 6010B	07/15/10	L37ED1CD
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G140402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	93	(80 - 120)	SW846 6010B	07/15/10	L37ED1CE
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Barium	94	(80 - 120)	SW846 6010B	07/15/10	L37ED1CF
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Calcium	95	(80 - 120)	SW846 6010B	07/15/10	L37ED1CG
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Cobalt	92	(80 - 120)	SW846 6010B	07/15/10	L37ED1CH
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Chromium	94	(80 - 120)	SW846 6010B	07/15/10	L37ED1CJ
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Copper	96	(80 - 120)	SW846 6010B	07/15/10	L37ED1CK
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Potassium	94	(80 - 120)	SW846 6010B	07/15/10	L37ED1CL
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Magnesium	98	(80 - 120)	SW846 6010B	07/15/10	L37ED1CM
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Manganese	96	(80 - 120)	SW846 6010B	07/15/10	L37ED1CN
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Sodium	92	(80 - 120)	SW846 6010B	07/15/10	L37ED1CP
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Nickel	99	(80 - 120)	SW846 6010B	07/15/10	L37ED1CQ
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G140402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	91	(80 - 120)	SW846 6010B	07/15/10	L37ED1CR
		Dilution Factor: 1	Analysis Time..: 18:38	Analyst ID.....: 001637	
		Instrument ID..: I5			
Mercury	95	(80 - 120)	SW846 7470A	07/15/10	L37ED1CT
		Dilution Factor: 1	Analysis Time..: 18:22	Analyst ID.....: 001576	
		Instrument ID..: H4			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G140402 **Matrix.....:** WG
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A0G140402-003 **Prep Batch #...:** 0196015					
Aluminum	97	(75 - 125)	SW846 6020	07/15-07/30/10	L35M51AC
		Dilution Factor: 1	Analysis Time..: 17:13	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	92	(75 - 125)	SW846 6020	07/15-07/30/10	L35M51AQ
		Dilution Factor: 1	Analysis Time..: 17:13	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	92	(75 - 125)	SW846 6010B	07/15/10	L35M51A2
		Dilution Factor: 1	Analysis Time..: 18:44	Instrument ID..: I5	
		Analyst ID.....: 001637			
Barium	95	(75 - 125)	SW846 6010B	07/15/10	L35M51CF
		Dilution Factor: 1	Analysis Time..: 18:44	Instrument ID..: I5	
		Analyst ID.....: 001637			
Beryllium	100	(75 - 125)	SW846 6020	07/15-07/30/10	L35M51AF
		Dilution Factor: 1	Analysis Time..: 17:13	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	95	(75 - 125)	SW846 6020	07/15-07/30/10	L35M51AJ
		Dilution Factor: 1	Analysis Time..: 17:13	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	84	(75 - 125)	SW846 6010B	07/15/10	L35M51CJ
		Dilution Factor: 1	Analysis Time..: 18:44	Instrument ID..: I5	
		Analyst ID.....: 001637			
Chromium	88	(75 - 125)	SW846 6010B	07/15/10	L35M51CQ
		Dilution Factor: 1	Analysis Time..: 18:44	Instrument ID..: I5	
		Analyst ID.....: 001637			
Cobalt	85	(75 - 125)	SW846 6010B	07/15/10	L35M51CM
		Dilution Factor: 1	Analysis Time..: 18:44	Instrument ID..: I5	
		Analyst ID.....: 001637			
Copper	96	(75 - 125)	SW846 6010B	07/15/10	L35M51CU
		Dilution Factor: 1	Analysis Time..: 18:44	Instrument ID..: I5	
		Analyst ID.....: 001637			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G140402 **Matrix.....:** WG
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	110	(75 - 125)	SW846 6020	07/15-07/30/10	L35M51AM
		Dilution Factor: 1	Analysis Time..: 17:13		Instrument ID..: I8
		Analyst ID.....: 000079			
Lead	88	(75 - 125)	SW846 6010B	07/15/10	L35M51A5
		Dilution Factor: 1	Analysis Time..: 18:44		Instrument ID..: I5
		Analyst ID.....: 001637			
Magnesium	89	(75 - 125)	SW846 6010B	07/15/10	L35M51C2
		Dilution Factor: 1	Analysis Time..: 18:44		Instrument ID..: I5
		Analyst ID.....: 001637			
Manganese	91	(75 - 125)	SW846 6010B	07/15/10	L35M51C5
		Dilution Factor: 1	Analysis Time..: 18:44		Instrument ID..: I5
		Analyst ID.....: 001637			
Mercury	108	(80 - 120)	SW846 7470A	07/15/10	L35M51DJ
		Dilution Factor: 1	Analysis Time..: 18:33		Instrument ID..: H4
		Analyst ID.....: 001576			
Nickel	91	(75 - 125)	SW846 6010B	07/15/10	L35M51DC
		Dilution Factor: 1	Analysis Time..: 18:44		Instrument ID..: I5
		Analyst ID.....: 001637			
Potassium	101	(75 - 125)	SW846 6010B	07/15/10	L35M51CX
		Dilution Factor: 1	Analysis Time..: 18:44		Instrument ID..: I5
		Analyst ID.....: 001637			
Selenium	92	(75 - 125)	SW846 6010B	07/15/10	L35M51A8
		Dilution Factor: 1	Analysis Time..: 18:44		Instrument ID..: I5
		Analyst ID.....: 001637			
Silver	92	(75 - 125)	SW846 6010B	07/15/10	L35M51CC
		Dilution Factor: 1	Analysis Time..: 18:44		Instrument ID..: I5
		Analyst ID.....: 001637			
Sodium	93	(75 - 125)	SW846 6010B	07/15/10	L35M51C8
		Dilution Factor: 1	Analysis Time..: 18:44		Instrument ID..: I5
		Analyst ID.....: 001637			
Thallium	87	(75 - 125)	SW846 6020	07/15-07/30/10	L35M51AX
		Dilution Factor: 1	Analysis Time..: 17:13		Instrument ID..: I8
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G140402 **Matrix.....:** WG
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	87	(75 - 125)	SW846 6010B	07/15/10	L35M51DF
		Dilution Factor: 1	Analysis Time..: 18:44		Instrument ID..: I5
		Analyst ID.....: 001637			
Zinc	84	(75 - 125)	SW846 6020	07/15-07/30/10	L35M51AU
		Dilution Factor: 1	Analysis Time..: 17:13		Instrument ID..: I8
		Analyst ID.....: 000079			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G140402 **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A0G140402-016 **Prep Batch #...:** 0196015					
Aluminum	101	(75 - 125)	SW846 6020	07/15-07/30/10	L35NK1AM
		Dilution Factor: 1	Analysis Time..: 18:10	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	101	(75 - 125)	SW846 6020	07/15-07/30/10	L35NK1A2
		Dilution Factor: 1	Analysis Time..: 18:10	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	97	(75 - 125)	SW846 6010B	07/15/10	L35NK1AC
		Dilution Factor: 1	Analysis Time..: 19:49	Instrument ID..: I5	
		Analyst ID.....: 001637			
Barium	96	(75 - 125)	SW846 6010B	07/15/10	L35NK1CQ
		Dilution Factor: 1	Analysis Time..: 19:49	Instrument ID..: I5	
		Analyst ID.....: 001637			
Beryllium	114	(75 - 125)	SW846 6020	07/15-07/30/10	L35NK1AQ
		Dilution Factor: 1	Analysis Time..: 18:10	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	104	(75 - 125)	SW846 6020	07/15-07/30/10	L35NK1AU
		Dilution Factor: 1	Analysis Time..: 18:10	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	89	(75 - 125)	SW846 6010B	07/15/10	L35NK1CU
		Dilution Factor: 1	Analysis Time..: 19:49	Instrument ID..: I5	
		Analyst ID.....: 001637			
Chromium	95	(75 - 125)	SW846 6010B	07/15/10	L35NK1C2
		Dilution Factor: 1	Analysis Time..: 19:49	Instrument ID..: I5	
		Analyst ID.....: 001637			
Cobalt	93	(75 - 125)	SW846 6010B	07/15/10	L35NK1CX
		Dilution Factor: 1	Analysis Time..: 19:49	Instrument ID..: I5	
		Analyst ID.....: 001637			
Copper	97	(75 - 125)	SW846 6010B	07/15/10	L35NK1C5
		Dilution Factor: 1	Analysis Time..: 19:49	Instrument ID..: I5	
		Analyst ID.....: 001637			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G140402 **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	80	(75 - 125)	SW846 6020	07/15-07/30/10	L35NK1AX
		Dilution Factor: 1	Analysis Time..: 18:10		Instrument ID..: I8
		Analyst ID.....: 000079			
Lead	97	(75 - 125)	SW846 6010B	07/15/10	L35NK1AF
		Dilution Factor: 1	Analysis Time..: 19:49		Instrument ID..: I5
		Analyst ID.....: 001637			
Magnesium	98	(75 - 125)	SW846 6010B	07/15/10	L35NK1CC
		Dilution Factor: 1	Analysis Time..: 19:49		Instrument ID..: I5
		Analyst ID.....: 001637			
Manganese	94	(75 - 125)	SW846 6010B	07/15/10	L35NK1CF
		Dilution Factor: 1	Analysis Time..: 19:49		Instrument ID..: I5
		Analyst ID.....: 001637			
Mercury	106	(80 - 120)	SW846 7470A	07/15/10	L35NK1DJ
		Dilution Factor: 1	Analysis Time..: 18:24		Instrument ID..: H4
		Analyst ID.....: 001576			
Nickel	101	(75 - 125)	SW846 6010B	07/15/10	L35NK1DC
		Dilution Factor: 1	Analysis Time..: 19:49		Instrument ID..: I5
		Analyst ID.....: 001637			
Potassium	98	(75 - 125)	SW846 6010B	07/15/10	L35NK1C8
		Dilution Factor: 1	Analysis Time..: 19:49		Instrument ID..: I5
		Analyst ID.....: 001637			
Selenium	99	(75 - 125)	SW846 6010B	07/15/10	L35NK1AJ
		Dilution Factor: 1	Analysis Time..: 19:49		Instrument ID..: I5
		Analyst ID.....: 001637			
Silver	97	(75 - 125)	SW846 6010B	07/15/10	L35NK1CM
		Dilution Factor: 1	Analysis Time..: 19:49		Instrument ID..: I5
		Analyst ID.....: 001637			
Sodium	93	(75 - 125)	SW846 6010B	07/15/10	L35NK1CJ
		Dilution Factor: 1	Analysis Time..: 19:49		Instrument ID..: I5
		Analyst ID.....: 001637			
Thallium	97	(75 - 125)	SW846 6020	07/15-07/30/10	L35NK1A8
		Dilution Factor: 1	Analysis Time..: 18:10		Instrument ID..: I8
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G140402 **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	91	(75 - 125)	SW846 6010B	07/15/10	L35NK1DF
		Dilution Factor: 1	Analysis Time..: 19:49		Instrument ID..: I5
		Analyst ID.....: 001637			
Zinc	102	(75 - 125)	SW846 6020	07/15-07/30/10	L35NK1A5
		Dilution Factor: 1	Analysis Time..: 18:10		Instrument ID..: I8
		Analyst ID.....: 000079			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A0G140402 **Work Order #...:** L35M5-SMP L35M5-DUP **Matrix.....:** WG

Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A0G140402-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #: A0G140402-003		
	1960	1940	ug/L	1.1	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #: A0G140402-003		
	47.5	48.7	ug/L	2.5	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Barium						SD Lot-Sample #: A0G140402-003		
	61.3	62.3	ug/L	1.5	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #: A0G140402-003		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #: A0G140402-003		
	183000	185000	ug/L	1.3	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #: A0G140402-003		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #: A0G140402-003		
	2.8 B	2.9 B	ug/L	2.3	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #: A0G140402-003		
	2.8 B	2.5 B	ug/L	13	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G140402-000 **Work Order #...:** L35M5-SMP L35M5-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A0G140402-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A0G140402-003		
	6890 E	6920	ug/L	0.38	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A0G140402-003		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:33	Analyst ID.....: 001576	
		Instrument ID..: H4						
Potassium						SD Lot-Sample #: A0G140402-003		
	2770 E	2810	ug/L	1.5	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A0G140402-003		
	109000	111000	ug/L	1.4	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A0G140402-003		
	242	245	ug/L	1.4	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A0G140402-003		
	22100	22200	ug/L	0.48	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Nickel						SD Lot-Sample #: A0G140402-003		
	4.8 B	4.9 B	ug/L	2.4	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A0G140402-003		
	2.3 B	2.2 B	ug/L	4.9	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G140402-000 **Work Order #...:** L35M5-SMP L35M5-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A0G140402-003		
	0.16 B	ND	ug/L	200	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8						
Selenium						SD Lot-Sample #: A0G140402-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Thallium						SD Lot-Sample #: A0G140402-003		
	0.25 B	ND	ug/L	200	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8						
Vanadium						SD Lot-Sample #: A0G140402-003		
	2.5 B	2.6 B	ug/L	6.1	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:44	Analyst ID.....: 001637	
		Instrument ID..: I5						
Zinc						SD Lot-Sample #: A0G140402-003		
	19.8	13.3	ug/L	39	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

E Matrix interference.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A0G140402 **Work Order #...:** L35NK-SMP L35NK-DUP **Matrix.....:** WG

Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Barium						SD Lot-Sample #: A0G140402-016		
	75.2	73.9	ug/L	1.7	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #: A0G140402-016		
	71100	69900	ug/L	1.8	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G140402-000 **Work Order #...:** L35NK-SMP L35NK-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A0G140402-016		
	390	399	ug/L	2.4	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:24	Analyst ID.....: 001576	
		Instrument ID..: H4						
Potassium						SD Lot-Sample #: A0G140402-016		
	1420	1410	ug/L	0.80	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A0G140402-016		
	29000	28500	ug/L	1.9	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A0G140402-016		
	237	233	ug/L	2.0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A0G140402-016		
	6860	6680	ug/L	2.6	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Nickel						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G140402-000 **Work Order #...:** L35NK-SMP L35NK-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8						
Selenium						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Thallium						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8						
Vanadium						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/15/10	0196015
		Dilution Factor: 1				Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5						
Zinc						SD Lot-Sample #: A0G140402-016		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/15-07/30/10	0196015
		Dilution Factor: 1				Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8						

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50715A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 7/15/2010 10:59 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	4.4	U								
Barium	493.409	10	0.3	U								
Calcium	317.933	1000	8.2	U								
Chromium	267.716	5	1.4	U								
Cobalt	228.616	5	1.3	U								
Copper	324.753	5	2.1	U								
Lead	220.353	3	1.5	U								
Magnesium	279.078	1000	14.8	U								
Manganese	257.61	10	0.3	U								
Nickel	231.604	10	2.3	U								
Potassium	766.491	1000	**152.0**	**B**								
Selenium	196.026	5	3.4	U								
Silver	328.068	5	1.3	U								
Sodium	330.232	1000	750.0	U								
Vanadium	292.402	10	2.0	U								

K < 760 ug/L

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50715A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 7/15/2010 11:54 AM Found	Q	CCB 7/15/2010 6:20 PM Found	Q	CCB 7/15/2010 7:31 PM Found	Q	CCB 7/15/2010 8:42 PM Found	Q	CCB 7/15/2010 9:18 PM Found	Q
Arsenic	189.042	5	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
Barium	493.409	10	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Calcium	317.933	1000	8.2	U	**-17.0**	**B**	**-19.0**	**B**	**-19.0**	**B**	**-23.0**	**B**
Chromium	267.716	5	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Cobalt	228.616	5	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
Copper	324.753	5	2.1	U	**-2.5**	**B**	**-3.2**	**B**	**-3.7**	**B**	**-4.1**	**B**
Lead	220.353	3	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Magnesium	279.078	1000	14.8	U	14.8	U	14.8	U	14.8	U	14.8	U
Manganese	257.61	10	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Nickel	231.604	10	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U
Potassium	766.491	1000	**160.0**	**B**	**161.0**	**B**	**164.0**	**B**	**159.0**	**B**	**161.0**	**B**
Selenium	196.026	5	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U
Silver	328.068	5	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
Sodium	330.232	1000	750.0	U	750.0	U	750.0	U	750.0	U	750.0	U
Vanadium	292.402	10	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST **Units:** ug/L

Chart Number: I50715A.ARC **Acceptable Range:** 90% - 110%

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	True Conc	CCV 7/15/2010 11:48 AM Found	% Rec	CCV 7/15/2010 6:14 PM Found	% Rec	CCV 7/15/2010 7:25 PM Found	% Rec	CCV 7/15/2010 8:36 PM Found	% Rec	CCV 7/15/2010 9:12 PM Found	% Rec
Arsenic	189.042	500.0	536.07	**107.2**	510.33	**102.1**	494.03	**98.8**	499.08	**99.8**	491.12	**98.2**
Barium	493.409	2000.0	2024.82	**101.2**	1941.23	**97.1**	1987.08	**99.4**	1922.69	**96.1**	1899.26	**95.0**
Calcium	317.933	50000.0	52119.42	**104.2**	50736.20	**101.5**	49044.68	**98.1**	50301.53	**100.6**	49758.54	**99.5**
Chromium	267.716	2000.0	2001.14	**100.1**	1938.41	**96.9**	1884.58	**94.2**	1917.58	**95.9**	1897.71	**94.9**
Cobalt	228.616	2000.0	2000.08	**100.0**	1912.13	**95.6**	1841.97	**92.1**	1890.64	**94.5**	1874.64	**93.7**
Copper	324.753	2000.0	2027.68	**101.4**	1978.78	**98.9**	2010.08	**100.5**	1971.35	**98.6**	1955.59	**97.8**
Lead	220.353	500.0	532.99	**106.6**	508.75	**101.8**	487.65	**97.5**	505.48	**101.1**	500.62	**100.1**
Magnesium	279.078	50000.0	52469.91	**104.9**	51241.99	**102.5**	48626.61	**97.3**	50747.85	**101.5**	50011.56	**100.0**
Manganese	257.61	2000.0	2053.30	**102.7**	1968.55	**98.4**	1911.86	**95.6**	1918.19	**95.9**	1898.02	**94.9**
Nickel	231.604	2000.0	2024.96	**101.2**	2029.81	**101.5**	1967.31	**98.4**	2073.34	**103.7**	2094.30	**104.7**
Potassium	766.491	50000.0	49962.82	**99.9**	49525.23	**99.1**	52142.45	**104.3**	50186.44	**100.4**	50161.15	**100.3**
Selenium	196.026	500.0	524.47	**104.9**	502.07	**100.4**	487.74	**97.5**	496.24	**99.2**	493.27	**98.7**
Silver	328.068	1000.0	938.98	**93.9**	954.76	**95.5**	967.47	**96.7**	969.39	**96.9**	967.23	**96.7**
Sodium	330.232	50000.0	49208.41	**98.4**	46588.55	**93.2**	47091.89	**94.2**	45977.17	**92.0**	45335.55	**90.7**
Vanadium	292.402	2000.0	2029.06	**101.5**	1889.47	**94.5**	1846.52	**92.3**	1825.28	**91.3**	1787.42	**89.4**

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 7/30/2010 11:16 AM Found	Q	CCB 5 7/30/2010 4:31 PM Found	Q	CCB 6 7/30/2010 5:34 PM Found	Q	CCB 7 7/30/2010 6:38 PM Found	Q	CCB 8 7/30/2010 7:40 PM Found	Q
Aluminum	27	50	4.2	U	4.2	U	4.2	U	4.2	U	4.2	U
Antimony	121	2	0.038	U	0.038	U	0.038	U	0.038	U	0.038	U
Beryllium	9	1	0.0076	U	0.0076	U	0.0076	U	**0.017**	**B**	**0.02**	**B**
Cadmium	111	0.5	**0.012**	**B**	**0.017**	**B**	**0.021**	**B**	**0.013**	**B**	**0.028**	**B**
Iron	56	50	3.2	U	**3.5**	**B**	**4.5**	**B**	**5.2**	**B**	**8.5**	**B**
Thallium	205	1	**0.27**	**B**	**0.25**	**B**	**0.24**	**B**	**0.28**	**B**	**0.26**	**B**
Zinc	66	10	10.1	U	10.1	U	10.1	U	10.1	U	10.1	U

Be < 0.1 NQ

Cd < 0.14 NQ

Fe < 42.5 NQ

Tl < 1.4

1549
1550
1557
1562

5.04.5

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 7/30/2010 10:47 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	4.2	U								
Antimony	121	2	0.038	U								
Beryllium	9	1	0.0076	U								
Cadmium	111	0.5	0.0074	U								
Iron	56	50	3.2	U								
Thallium	205	1	**0.23**	**B**								
Zinc	66	10	10.1	U								

TI < 1.15 ug/L.

1549
1541
1557
1562

5.04.5

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80802B.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 8/2/2010 3:32 PM Found	Q	CCB 1 8/2/2010 4:19 PM Found	Q	CCB 2 8/2/2010 5:06 PM Found	Q	Found	Q	Found	Q
Iron	56	50	3.2	U	**3.5**	**B**	**3.2**	**B**				

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

A0G140402	019	L35NR	TOTAL	H4	07/15/10	18:54
	HG					
A0G140402	019	L35NR	TOTAL	H4	07/15/10	18:54
	HG					
A0G140402	014	L35NH	TOTAL	H4	07/15/10	18:55
	HG					
A0G140402	014	L35NH	TOTAL	H4	07/15/10	18:55
	HG					
A0G140402	007	L35M9	TOTAL	H4	07/15/10	18:57
	HG					
A0G140402	007	L35M9	TOTAL	H4	07/15/10	18:57
	HG					
A0G140402	025	L35N3	TOTAL	H4	07/15/10	18:59
	HG					
A0G140402	025	L35N3	TOTAL	H4	07/15/10	18:59
	HG					
A0G150000	015	L37ED	TOTAL	I5	07/15/10	18:32
MB	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					
A0G150000	015	L37ED	TOTAL	I5	07/15/10	18:32
MB	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					
A0G150000	015	L37ED	TOTAL	I5	07/15/10	18:38
LCS	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					
A0G150000	015	L37ED	TOTAL	I5	07/15/10	18:38
LCS	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					
A0G140402	003	L35M5	TOTAL	I5	07/15/10	18:44
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G140402	003	L35M5	TOTAL	I5	07/15/10	18:44
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G140402	003	L35M5	TOTAL	I5	07/15/10	18:56
DUP	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					
A0G140402	003	L35M5	TOTAL	I5	07/15/10	18:56
DUP	*AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*					

A0G140402 003 L35M5 TOTAL I5 07/15/10 19:02
MS *AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*

A0G140402 003 L35M5 TOTAL I5 07/15/10 19:02
MS *AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*

A0G140402 005 L35M7 TOTAL I5 07/15/10 19:07
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 005 L35M7 TOTAL I5 07/15/10 19:07
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 007 L35M9 TOTAL I5 07/15/10 19:13
AG AS BA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 007 L35M9 TOTAL I5 07/15/10 19:13
AG AS BA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 009 L35NC TOTAL I5 07/15/10 19:19
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 009 L35NC TOTAL I5 07/15/10 19:19
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 012 L35NF TOTAL I5 07/15/10 19:37
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 012 L35NF TOTAL I5 07/15/10 19:37
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 014 L35NH TOTAL I5 07/15/10 19:43
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 014 L35NH TOTAL I5 07/15/10 19:43
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 016 L35NK TOTAL I5 07/15/10 19:49
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 016 L35NK TOTAL I5 07/15/10 19:49
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 016 L35NK TOTAL I5 07/15/10 20:01
DUP *AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*

A0G140402 016 L35NK TOTAL I5 07/15/10 20:01
DUP *AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*

A0G140402 016 L35NK TOTAL I5 07/15/10 20:07
MS *AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*

A0G140402 016 L35NK TOTAL I5 07/15/10 20:07
MS *AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX*

A0G140402 019 L35NR TOTAL I5 07/15/10 20:13
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 019 L35NR TOTAL I5 07/15/10 20:13
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 021 L35NX TOTAL I5 07/15/10 20:18
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 021 L35NX TOTAL I5 07/15/10 20:18
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 023 L35N1 TOTAL I5 07/15/10 20:24
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 023 L35N1 TOTAL I5 07/15/10 20:24
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 025 L35N3 TOTAL I5 07/15/10 20:30
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 025 L35N3 TOTAL I5 07/15/10 20:30
AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G140402 027 L35N5 TOTAL I5 07/15/10 20:48
AG AS BA CA CO CR CU KX MG MN NA NI PB SE

A0G140402 027 L35N5 TOTAL I5 07/15/10 20:48
AG AS BA CA CO CR CU KX MG MN NA NI PB SE

A0G140402 029 L35N7 TOTAL I5 07/15/10 20:54
AG AS BA CO CR CU KX MG MN NA NI PB SE

A0G140402 029 L35N7 TOTAL I5 07/15/10 20:54
AG AS BA CO CR CU KX MG MN NA NI PB SE

A0G140402 030 L35N8 TOTAL I5 07/15/10 21:00
AG AS BA CA CO CR CU KX MG MN NA NI PB SE

A0G140402 030 L35N8 TOTAL I5 07/15/10 21:00
AG AS BA CA CO CR CU KX MG MN NA NI PB SE

Metals Run Log
Additional Information

A0G140402	007 L35M9 *CA*	TOTAL	I5	07/21/10	13:27
A0G140402	007 L35M9 *CA*	TOTAL	I5	07/21/10	13:27
A0G140402	027 L35N5 *VX*	TOTAL	I5	07/21/10	13:33
A0G140402	027 L35N5 *VX*	TOTAL	I5	07/21/10	13:33
A0G140402	029 L35N7 *VX*	TOTAL	I5	07/21/10	13:39
A0G140402	029 L35N7 *VX*	TOTAL	I5	07/21/10	13:39
A0G140402	029 L35N7 *CA*	TOTAL	I5	07/21/10	13:45
A0G140402	029 L35N7 *CA*	TOTAL	I5	07/21/10	13:45
A0G140402	030 L35N8 *VX*	TOTAL	I5	07/21/10	13:51
A0G140402	030 L35N8 *VX*	TOTAL	I5	07/21/10	13:51
A0G140402	007 L35M9 *BE*	TOTAL	I8	07/15/10	17:51
A0G150000 MB	015 L37ED *AL CD FE SB TL ZN*	TOTAL	I8	07/30/10	17:01
A0G150000 MB	015 L37ED *AL CD FE SB TL ZN*	TOTAL	I8	07/30/10	17:01
A0G150000 LCS	015 L37ED *AL CD SB TL ZN*	TOTAL	I8	07/30/10	17:06
A0G150000 LCS	015 L37ED *AL CD SB TL ZN*	TOTAL	I8	07/30/10	17:06
A0G140402	003 L35M5 *AL BE CD FE SB TL ZN*	TOTAL	I8	07/30/10	17:13

A0G140402	003 L35M5 TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	17:13	
A0G140402 DUP	003 L35M5 TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	17:23	
A0G140402 DUP	003 L35M5 TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	17:23	
A0G140402 MS	003 L35M5 TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	17:39	
A0G140402 MS	003 L35M5 TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	17:39	
A0G140402	005 L35M7 TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	17:46	
A0G140402	005 L35M7 TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	17:46	
A0G140402	007 L35M9 TOTAL *AL CD FE SB TL ZN*	I8	07/30/10	17:51	
A0G140402	007 L35M9 TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	17:51	
A0G140402	009 L35NC TOTAL *AL CD FE SB TL ZN*	I8	07/30/10	17:56	
A0G140402	009 L35NC TOTAL *AL CD FE SB TL ZN*	I8	07/30/10	17:56	
A0G140402	012 L35NF TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	18:00	
A0G140402	012 L35NF TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	18:00	
A0G140402	014 L35NH TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	18:05	
A0G140402	014 L35NH TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	18:05	
A0G140402	016 L35NK TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	18:10	

A0G140402	016	L35NK	TOTAL	I8	07/30/10	18:10
	AL BE CD FE SB TL ZN					
A0G140402 DUP	016	L35NK	TOTAL	I8	07/30/10	18:20
	AL BE CD FE SB TL ZN					
A0G140402 DUP	016	L35NK	TOTAL	I8	07/30/10	18:20
	AL BE CD FE SB TL ZN					
A0G140402 MS	016	L35NK	TOTAL	I8	07/30/10	18:24
	AL BE CD FE SB TL ZN					
A0G140402 MS	016	L35NK	TOTAL	I8	07/30/10	18:24
	AL BE CD FE SB TL ZN					
A0G140402	019	L35NR	TOTAL	I8	07/30/10	18:43
	AL BE CD FE SB TL ZN					
A0G140402	019	L35NR	TOTAL	I8	07/30/10	18:43
	AL BE CD FE SB TL ZN					
A0G140402	021	L35NX	TOTAL	I8	07/30/10	18:48
	AL BE CD FE SB TL ZN					
A0G140402	021	L35NX	TOTAL	I8	07/30/10	18:48
	AL BE CD FE SB TL ZN					
A0G140402	023	L35N1	TOTAL	I8	07/30/10	18:53
	AL BE CD FE SB TL ZN					
A0G140402	023	L35N1	TOTAL	I8	07/30/10	18:53
	AL BE CD FE SB TL ZN					
A0G140402	025	L35N3	TOTAL	I8	07/30/10	18:58
	AL BE CD FE SB TL ZN					
A0G140402	025	L35N3	TOTAL	I8	07/30/10	18:58
	AL BE CD FE SB TL ZN					
A0G140402	027	L35N5	TOTAL	I8	07/30/10	19:03
	AL BE CD FE SB TL ZN					
A0G140402	027	L35N5	TOTAL	I8	07/30/10	19:03
	AL BE CD FE SB TL ZN					
A0G140402	029	L35N7	TOTAL	I8	07/30/10	19:07
	AL BE CD FE SB TL ZN					

Metals Run Log
Additional Information

A0G140402	029	L35N7	TOTAL	I8	07/30/10	19:07
	AL BE CD FE SB TL ZN					
A0G140402	030	L35N8	TOTAL	I8	07/30/10	19:12
	AL BE CD FE SB TL ZN					
A0G140402	030	L35N8	TOTAL	I8	07/30/10	19:12
	AL BE CD FE SB TL ZN					
A0G150000 MB	015	L37ED	TOTAL	I8	07/31/10	17:10
	BE					
A0G150000 MB	015	L37ED	TOTAL	I8	07/31/10	17:10
	BE					
A0G150000 LCS	015	L37ED	TOTAL	I8	07/31/10	17:14
	BE					
A0G150000 LCS	015	L37ED	TOTAL	I8	07/31/10	17:14
	BE					
A0G140402	009	L35NC	TOTAL	I8	07/31/10	17:21
	BE					
A0G140402	009	L35NC	TOTAL	I8	07/31/10	17:21
	BE					
A0G150000 LCS	015	L37ED	TOTAL	I8	08/02/10	16:46
	FE					
A0G150000 LCS	015	L37ED	TOTAL	I8	08/02/10	16:46
	FE					

TestAmerica North Canton

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: L35M5L

Original Sample ID: L35M5 **Client ID:** FWGLL12mw-128C-1549-GF

Matrix: Water **Units:** ug/L **Prep Date:** 7/15/2010 **Prep Batch:** 0196015

Weight: NA **Volume:** NA **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	47.5		40.0			1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Barium	493.409	61.3		61.1		0.4	1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Calcium	317.933	183000		186000		1.6	1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Chromium	267.716	2.8	B	7.0	U		1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Cobalt	228.616	2.8	B	6.5	U		1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Copper	324.753	2.1	U	10.5	U		1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Lead	220.353	2.3	B	7.5	U		1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Magnesium	279.078	109000		108000		0.8	1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Manganese	257.61	242		245		1.4	1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Nickel	231.604	4.8	B	11.5	U		1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Potassium	766.491	2770		3060	B E	10.5	1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Selenium	196.026	3.4	U	17.0	U		1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Silver	328.068	1.3	U	6.5	U		1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Sodium	330.232	22100		22200			1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50
Vanadium	292.402	2.5	B	10.0	U		1	5	ICPST	7/15/2010	18:44	7/15/2010	18:50

Comments:

E Serial dilution percent difference not within limits

U Result is less than the IDL

B Result is between IDL and RL

Form 9 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: L35M5L

Original Sample ID: L35M5 **Client ID:** FWGLL12mw-128C-1549-GF

Matrix: Water **Units:** ug/L **Prep Date:** 7/15/2010 **Prep Batch:** 0196015

Weight: NA **Volume:** NA **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Aluminum	27	1960		2010			1	5	ICPMS	7/30/2010	17:13	7/30/2010	17:18
Antimony	121	0.16	B	0.20	B		1	5	ICPMS	7/30/2010	17:13	7/30/2010	17:18
Beryllium	9	0.12	B	0.13	B		1	5	ICPMS	7/30/2010	17:13	7/30/2010	17:18
Cadmium	111	0.031	B	0.052	B		1	5	ICPMS	7/30/2010	17:13	7/30/2010	17:18
Iron	56	6890		7980	E	15.9	1	5	ICPMS	7/30/2010	17:13	7/30/2010	17:18
Thallium	205	0.25	B	0.54	B		1	5	ICPMS	7/30/2010	17:13	7/30/2010	17:18
Zinc	66	19.8		50.5	U		1	5	ICPMS	7/30/2010	17:13	7/30/2010	17:18

Comments:

E Serial dilution percent difference not within limits

U Result is less than the IDL

B Result is between IDL and RL

Form 9 Equivalent

EXECUTIVE SUMMARY - Detection Highlights

A0G140402

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGTEAM1-TRIP 07/13/10 08:00 001				
Acetone	1.5 J	10	ug/L	SW846 8260B
FWGLL12mw-128C-1549-GW 07/13/10 09:09 002				
bis(2-Ethylhexyl) phthalate	2.3 J,B	10	ug/L	SW846 8270C
FWGLL12mw-128C-1549-GF 07/13/10 09:09 003				
Aluminum	1960	50.0	ug/L	SW846 6020
Iron	6890 E	50.0	ug/L	SW846 6020
Antimony	0.16 B	2.0	ug/L	SW846 6020
Thallium U	0.25 B	1.0	ug/L	SW846 6020
Zinc	19.8	10.0	ug/L	SW846 6020
Arsenic	47.5	5.0	ug/L	SW846 6010B
Lead	2.3 B	3.0	ug/L	SW846 6010B
Barium	61.3	10.0	ug/L	SW846 6010B
Calcium	183000	1000	ug/L	SW846 6010B
Cobalt	2.8 B	5.0	ug/L	SW846 6010B
Chromium	2.8 B	5.0	ug/L	SW846 6010B
Potassium	2770 E	1000	ug/L	SW846 6010B
Magnesium	109000	1000	ug/L	SW846 6010B
Manganese	242	10.0	ug/L	SW846 6010B
Sodium	22100	1000	ug/L	SW846 6010B
Nickel	4.8 B	10.0	ug/L	SW846 6010B
Vanadium	2.5 B	10.0	ug/L	SW846 6010B
FWGLL12mw-243C-1561-GW 07/13/10 12:17 004				
beta-BHC	0.012 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	4.4 J,B	10	ug/L	SW846 8270C
2-Butanone J	1.3 J	10	ug/L	SW846 8260B
Nitrate-Nitrite	0.03 B	0.1	mg/L	MCAWW 353.2
FWGLL12mw-243C-1561-GF 07/13/10 12:17 005				
Antimony	0.63 B	2.0	ug/L	SW846 6020
Thallium U	0.27 B	1.0	ug/L	SW846 6020
Arsenic	6.5	5.0	ug/L	SW846 6010B
Barium	27.6	10.0	ug/L	SW846 6010B
Calcium	124000	1000	ug/L	SW846 6010B
Cobalt	1.5 B	5.0	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0G140402

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL12mw-243C-1561-GF 07/13/10 12:17 005				
Potassium	3320	1000	ug/L	SW846 6010B
Magnesium	81500	1000	ug/L	SW846 6010B
Manganese	281	10.0	ug/L	SW846 6010B
Sodium	22800	1000	ug/L	SW846 6010B
Nickel	2.7 B	10.0	ug/L	SW846 6010B
FWGLL12mw-187C-1557-GW 07/13/10 13:51 006				
bis(2-Ethylhexyl) phthalate	1.2 J,B	10	ug/L	SW846 8270C
Nitrate-Nitrite	1400	200	mg/L	MCAWW 353.2
FWGLL12mw-187C-1557-GF 07/13/10 13:51 007				
Thallium	0.66 B	1.0	ug/L	SW846 6020
Zinc	11.0	10.0	ug/L	SW846 6020
Barium	281	10.0	ug/L	SW846 6010B
Calcium	960000	5000	ug/L	SW846 6010B
Cobalt	10.2	5.0	ug/L	SW846 6010B
Potassium	54200	1000	ug/L	SW846 6010B
Magnesium	301000	1000	ug/L	SW846 6010B
Manganese	2020	10.0	ug/L	SW846 6010B
Sodium	35600	1000	ug/L	SW846 6010B
Nickel	15.3	10.0	ug/L	SW846 6010B
FWGLL12mw-244C-1562-GW 07/13/10 15:49 008				
bis(2-Ethylhexyl) phthalate	1.8 J,B	10	ug/L	SW846 8270C
Acetone	1.1 J	10	ug/L	SW846 8260B
2-Butanone	1.6 J	10	ug/L	SW846 8260B
Toluene	0.22 J	1.0	ug/L	SW846 8260B
Nitrate-Nitrite	0.07 B	0.1	mg/L	MCAWW 353.2
FWGLL12mw-244C-1562-GF 07/13/10 15:49 009				
Aluminum	33700	50.0	ug/L	SW846 6020
Beryllium	1.4	1.0	ug/L	SW846 6020
Iron	78800	50.0	ug/L	SW846 6020
Antimony	0.73 B	2.0	ug/L	SW846 6020
Thallium	0.60 B	1.0	ug/L	SW846 6020
Zinc	165	10.0	ug/L	SW846 6020
Arsenic	51.1	5.0	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G140402

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL12mw-244C-1562-GF 07/13/10 15:49 009				
Lead	26.0	3.0	ug/L	SW846 6010B
Barium	221	10.0	ug/L	SW846 6010B
Calcium	95400	1000	ug/L	SW846 6010B
Cobalt	28.5	5.0	ug/L	SW846 6010B
Chromium	43.0	5.0	ug/L	SW846 6010B
Copper	48.3	5.0	ug/L	SW846 6010B
Potassium	9500	1000	ug/L	SW846 6010B
Magnesium	40500	1000	ug/L	SW846 6010B
Manganese	955	10.0	ug/L	SW846 6010B
Sodium	9250	1000	ug/L	SW846 6010B
Nickel	72.1	10.0	ug/L	SW846 6010B
Vanadium	49.0	10.0	ug/L	SW846 6010B
FWGTEAM2-TRIP 07/13/10 08:00 010				
Acetone	1.7 J	10	ug/L	SW846 8260B
FWGLL12mw-186C-1556-GW 07/13/10 08:48 011				
beta-BHC	0.013 J	0.030	ug/L	SW846 8081A
Endrin ketone	0.0091 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	3.3 J,B	10	ug/L	SW846 8270C
Di-n-butyl phthalate	0.76 J	1.0	ug/L	SW846 8270C
Nitrate-Nitrite	0.04 B	0.1	mg/L	MCAWW 353.2
FWGLL12mw-186C-1556-GF 07/13/10 08:48 012				
Antimony	0.45 B	2.0	ug/L	SW846 6020
Barium	49.0	10.0	ug/L	SW846 6010B
Calcium	139000	1000	ug/L	SW846 6010B
Cobalt	1.7 B	5.0	ug/L	SW846 6010B
Potassium	1690	1000	ug/L	SW846 6010B
Magnesium	64700	1000	ug/L	SW846 6010B
Manganese	275	10.0	ug/L	SW846 6010B
Sodium	14700	1000	ug/L	SW846 6010B
Nickel	2.2 B	10.0	ug/L	SW846 6010B
FWGLL12mw-189C-1559-GW 07/13/10 10:38 013				
beta-BHC	0.014 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	2.8 J,B	10	ug/L	SW846 8270C

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G140402

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL12mw-189C-1559-GW 07/13/10 10:38 013				
Di-n-butyl phthalate	0.75 J	1.0	ug/L	SW846 8270C
Naphthalene	0.29	0.20	ug/L	SW846 8270C
Nitrate-Nitrite	0.07 B	0.1	mg/L	MCAWW 353.2
FWGLL12mw-189C-1559-GF 07/13/10 10:38 014				
Aluminum	298	50.0	ug/L	SW846 6020
Iron	1320	50.0	ug/L	SW846 6020
Arsenic	5.1	5.0	ug/L	SW846 6010B
Barium	18.5	10.0	ug/L	SW846 6010B
Calcium	152000	1000	ug/L	SW846 6010B
Cobalt	1.9 B	5.0	ug/L	SW846 6010B
Potassium	1800	1000	ug/L	SW846 6010B
Magnesium	72200	1000	ug/L	SW846 6010B
Manganese	310	10.0	ug/L	SW846 6010B
Sodium	49200	1000	ug/L	SW846 6010B
FWGSCFmw-003-1517-GW 07/13/10 12:58 015				
beta-BHC	0.0092 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.5 J,B	10	ug/L	SW846 8270C
Acetone	3.4 J	10	ug/L	SW846 8260B
FWGSCFmw-003-1517-GF 07/13/10 12:58 016				
Iron	390	50.0	ug/L	SW846 6020
Barium	75.2	10.0	ug/L	SW846 6010B
Calcium	71100	1000	ug/L	SW846 6010B
Potassium	1420	1000	ug/L	SW846 6010B
Magnesium	29000	1000	ug/L	SW846 6010B
Manganese	237	10.0	ug/L	SW846 6010B
Sodium	6860	1000	ug/L	SW846 6010B
FWGTEAM3-TRIP 07/13/10 08:00 017				
Acetone	1.6 J	10	ug/L	SW846 8260B
FWGLL12mw-182C-1552-GW 07/13/10 09:00 018				
Fluoranthene	0.23	0.20	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	0.22	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	0.23	0.20	ug/L	SW846 8270C

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EXECUTIVE SUMMARY - Detection Highlights

A0G140402

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL12mw-182C-1552-GW 07/13/10 09:00 018				
Benzo(b)fluoranthene	0.22	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	0.32	0.20	ug/L	SW846 8270C
Benzo(ghi)perylene	0.22	0.20	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	4.9 J,B	10	ug/L	SW846 8270C
Chrysene	0.21	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	0.21	0.20	ug/L	SW846 8270C
Di-n-butyl phthalate	0.89 J	1.0	ug/L	SW846 8270C
Pyrene	0.21	0.20	ug/L	SW846 8270C
Nitrate-Nitrite	0.03 B	0.1	mg/L	MCAWW 353.2
FWGLL12mw-182C-1552-GF 07/13/10 09:00 019				
Aluminum	29.5 B	50.0	ug/L	SW846 6020
Iron	766	50.0	ug/L	SW846 6020
Arsenic	25.6	5.0	ug/L	SW846 6010B
Barium	62.7	10.0	ug/L	SW846 6010B
Calcium	65500	1000	ug/L	SW846 6010B
Potassium	4080	1000	ug/L	SW846 6010B
Magnesium	51500	1000	ug/L	SW846 6010B
Manganese	43.7	10.0	ug/L	SW846 6010B
Sodium	25100	1000	ug/L	SW846 6010B
FWGLL12mw-107C-1547-GW 07/13/10 10:10 020				
beta-BHC	0.018 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	3.0 J,B	10	ug/L	SW846 8270C
Nitrate-Nitrite	0.2	0.1	mg/L	MCAWW 353.2
FWGLL12mw-107C-1547-GF 07/13/10 10:10 021				
Iron	2640	50.0	ug/L	SW846 6020
Arsenic	9.7	5.0	ug/L	SW846 6010B
Barium	24.2	10.0	ug/L	SW846 6010B
Calcium	162000	1000	ug/L	SW846 6010B
Cobalt	1.8 B	5.0	ug/L	SW846 6010B
Potassium	2230	1000	ug/L	SW846 6010B
Magnesium	67100	1000	ug/L	SW846 6010B
Manganese	242	10.0	ug/L	SW846 6010B
Sodium	17300	1000	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G140402

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL12mw-DUP4-1569-GW 07/13/10 10:30 022				
bis(2-Ethylhexyl) phthalate	7.7 J,B	10	ug/L	SW846 8270C
Di-n-butyl phthalate	0.78 J	1.0	ug/L	SW846 8270C
Nitrate-Nitrite	0.09 B	0.1	mg/L	MCAWW 353.2
FWGLL12mw-DUP4-1569-GF 07/13/10 10:30 023				
Iron	2420	50.0	ug/L	SW846 6020
Arsenic	9.9	5.0	ug/L	SW846 6010B
Barium	24.1	10.0	ug/L	SW846 6010B
Calcium	163000	1000	ug/L	SW846 6010B
Potassium	2190	1000	ug/L	SW846 6010B
Magnesium	67400	1000	ug/L	SW846 6010B
Manganese	243	10.0	ug/L	SW846 6010B
Sodium	16900	1000	ug/L	SW846 6010B
FWGLL12mw-246C-1564-GW 07/13/10 12:40 024				
bis(2-Ethylhexyl) phthalate	1.8 J,B	10	ug/L	SW846 8270C
Naphthalene	1.4	0.20	ug/L	SW846 8270C
Nitrate-Nitrite	0.08 B	0.1	mg/L	MCAWW 353.2
FWGLL12mw-246C-1564-GF 07/13/10 12:40 025				
Iron	1190	50.0	ug/L	SW846 6020
Arsenic	29.7	5.0	ug/L	SW846 6010B
Barium	35.5	10.0	ug/L	SW846 6010B
Calcium	102000	1000	ug/L	SW846 6010B
Potassium	6380	1000	ug/L	SW846 6010B
Magnesium	50400	1000	ug/L	SW846 6010B
Manganese	74.5	10.0	ug/L	SW846 6010B
Sodium	22000	1000	ug/L	SW846 6010B
FWGLL12mw-184C-1554-GW 07/13/10 14:00 026				
bis(2-Ethylhexyl) phthalate	3.8 J,B	10	ug/L	SW846 8270C
Nitrate-Nitrite	0.07 B	0.1	mg/L	MCAWW 353.2

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G140402

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL12mw-184C-1554-GF 07/13/10 14:00 027				
Iron	2300	50.0	ug/L	SW846 6020
Arsenic	15.8	5.0	ug/L	SW846 6010B
Barium	8.7 B	10.0	ug/L	SW846 6010B
Calcium	203000	1000	ug/L	SW846 6010B
Potassium	2410	1000	ug/L	SW846 6010B
Magnesium	150000	1000	ug/L	SW846 6010B
Manganese	469	10.0	ug/L	SW846 6010B
Sodium	35600	1000	ug/L	SW846 6010B
FWGLL12mw-185C-1555-GW 07/13/10 15:50 028				
bis(2-Ethylhexyl) phthalate	2.6 J,B	10	ug/L	SW846 8270C
Butyl benzyl phthalate	1.4	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	0.75 J	1.0	ug/L	SW846 8270C
Nitrate-Nitrite	160	50	mg/L	MCAWW 353.2
FWGLL12mw-185C-1555-GF 07/13/10 15:50 029				
Cadmium	0.26 B	0.50	ug/L	SW846 6020
Barium	49.4	10.0	ug/L	SW846 6010B
Calcium	665000	5000	ug/L	SW846 6010B
Potassium	7120	1000	ug/L	SW846 6010B
Magnesium	287000	1000	ug/L	SW846 6010B
Manganese	1380	10.0	ug/L	SW846 6010B
Sodium	52300	1000	ug/L	SW846 6010B
Nickel	6.2 B	10.0	ug/L	SW846 6010B
FWGEQUIPRINSE3-1580-GW 07/13/10 16:20 030				
bis(2-Ethylhexyl) phthalate	8.5 J,B	10	ug/L	SW846 8270C
Di-n-butyl phthalate	0.83 J	1.0	ug/L	SW846 8270C
Methylene chloride	1.5 J,B	2.0	ug/L	SW846 8260B
Acetone	9.7 J	10	ug/L	SW846 8260B
2-Butanone	15	10	ug/L	SW846 8260B
Nitrate-Nitrite	0.09 B	0.1	mg/L	MCAWW 353.2

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 26, 2010

SDG: A0G140402 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 5.0 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-9
7. Does the initial calibration curve consist of at least 6 standards and one blank?	✓				LCG Table 10 R
8. Was the correlation coefficient R ≥ 0.995?	✓				LCG Table 10 R<0.995=-J/R
9. Were % RSDs ≤ 10% in all standards and ICV/CCVs?	✓				LCG Table 10 RSD%>10=J
10. Were a high and low standard distilled and compared to the undistilled standard? Were the results within ± 10%?			✓	No data provided to evaluate.	LCG Table 10 R
11. Was an MDL Level Verification performed at least once per quarter with all target analytes detected?	✓			7/22/10	LCG Table 10 R
12. Was a MRL Level Verification performed at the beginning of every daily sequence? Were results within 70-130%?	✓				LCG Table 10 >130%=J; 65-70%=J/UJ; <65%=J/R
13. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓				LCG Table 10 >115%=J; 80-85%=J/UJ; <80%=J/R
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				LCG Table 7 < 5x = U
15. Was a CCV run at the beginning and end of the analytical sequence?	✓				LCG Table 10

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 26, 2010

SDG: A0G140402 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
16. Were the CCV results 80-120%?	✓				LCG Table 10 >120%=J; 75-80%=J/UJ; <75%=J/R
17. Was a method blank prepared and analyzed with each batch?	✓				
18. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR.	LCG Table 10 <5x=B
19. Was a field blank collected and analyzed?	✓				
20. Were target analytes in the field blank analyses <1/2 the MRL?	✓				<5x=B
21. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Checked by ADR.	QAPP Table 3-2 >30% = J
22. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 10
23. Were the LCS recoveries 80-120%?	✓			Checked by ADR.	LCG Table 10 >120%=J; 50-79%=J/UJ; <50%=R
24. Was a MS prepared once per every 10 samples?	✓				LCG Table 10
25. Was the MS parent a Ravenna sample?	✓				
26. Were MS recoveries 75-125%?		✓		The MS analyzed on sample FWGLL12mw-128c-1549-GW recovered below control limits at 69%. The MS analyzed on sample FWGSCFmw-003-1517-GW recovered below control limits at 62%, with an RPD of 43%. The cyanide results were qualified as estimated, "J/UJ"	QAPP Table 3-2 >125%=J; 30-75%=J/UJ; <30%=J/R
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 26, 2010

SDG: A0G140402 R0
Analysis: SW846 9012

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 10 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 26, 2010

SDG: A0G140402 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
1. Did Chain-of-Custody information agree with laboratory report?	X				
2. Were samples preserved properly and received in good condition?	X			The coolers were received between 1.2 and 5.0°C.	QAPP Table 4-2
3. Were holding times met?	X				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	X				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	X				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	X				QAPP Table 3-9
7. Was the Linear Calibration Range verified using 3 standards and 1 blank? Was the ICV within 10% of the initial values?	X				Method EPA 353.2 Section 9.2.2 J
8. Were the calibration standards verified by preparation and analysis of a Quality Control Sample? Were results within 10% of the stated values?	X				Method EPA 353.2 Section 9.2.3 Pj
9. Was an Instrument Performance Check Solution (CCV) analyzed immediately following daily calibration, after every 10th sample, and at the end of the analytical sequence?	X				Method EPA 353.2 Section 9.3.4
10. Was the CCV a mid-level standard from the initial calibration curve?	X				Method EPA 353.2 Section 9.3.4
11. Were the CCVs 90-110%?	X				Method EPA 353.2 Section 9.3.4 >110%=J; 85-90%=J/UJ; <85%=J/R
12. Was a method blank and a calibration blank prepared and analyzed with each batch?	X				Method EPA 353.2 Section 9.3.1, 9.3.4

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 26, 2010

SDG: A0G140402 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
13. Were target analytes detected in the method blank or calibration blank >1/2 the MRL?		X		ADR checked section. The closing CCB had a detected nitrate concentration of 0.0207mg/L. The nitrate/nitrite result for sample FWGLL12mw-243c-1561-GW was qualified, "U".	LCG Attachment A Section 11 <5x = U
14. Was a field blank (trip or equipment) collected and analyzed?	X				
15. Were target analytes reported in the field blank analyses (trip or equipment) >1/2 the MRL?	X			ADR checked section; Nitrate was detected in the method blank at 0.09mg/L. All nitrate results with the exception of samples FWGLL12mw-128c-1549-GW, FWGLL12mw-187c-1557-GW and FWGSCFmw-003c-1517-GW were qualified "U" as the detected concentrations were less than 5x blank contamination.	*<5x=B*
16. Was a field duplicate analyzed? Were the RPDs acceptable?	X				
17. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within 90-110%?	X				Method EPA 353.2 Section 9.3.3 J/UJ; <50%= R
18. Was a MS/MSD pair prepared with each batch?	X				*Method EPA 353.2 Section 9.4.1*
19. Was the MS/MSD parent sample a Ravenna sample?	X				
20. Were MS/MSD recoveries and RPD within acceptance criteria?		X		ADR checked section. The matrix spike analyzed on sample FWGLL12mw-189c-1559-GW recovered above limits in the MS and MSD at 134% and 124%. Detected sample results associated with batch 0208347 were qualified as estimated, "J".	*Method EPA 353.2 Section 9.4.2 Pj*
21. Were sample concentrations within calibration range?	X				
22. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		X			
23. Were lab comments included in report? If yes, summarize contents.	X			See narrative.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GW

General Chemistry

Lot-Sample #...: A0G140402-002 **Work Order #...:** L35M4 **Matrix.....:** WG
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
	Dilution Factor: 1			MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/16/10	0197124
	Dilution Factor: 1			MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GW

General Chemistry

Lot-Sample #...: A0G140402-004 Work Order #...: L35M6 Matrix.....: WG
Date Sampled...: 07/13/10 12:17 Date Received..: 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.03 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/16/10**	**0197124**
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GW

General Chemistry

Lot-Sample #...: A0G140402-006 **Work Order #...:** L35M8 **Matrix.....:** WG
Date Sampled...: 07/13/10 13:51 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**1400**	**200**	**mg/L**	**MCAWW 353.2**	**07/16/10**	**0197124**
		Dilution Factor: 2000		MDL.....: 32		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GW

General Chemistry

Lot-Sample #...: A0G140402-008 Work Order #...: L35NA Matrix.....: WG
Date Sampled...: 07/13/10 15:49 Date Received..: 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.07 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/16/10**	**0197124**
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GW

General Chemistry

Lot-Sample #...: A0G140402-011 **Work Order #...:** L35NE **Matrix.....:** WG
Date Sampled...: 07/13/10 08:48 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.04 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/16/10**	**0197124**
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GW

General Chemistry

Lot-Sample #...: A0G140402-013 **Work Order #...:** L35NG **Matrix.....:** WG
Date Sampled...: 07/13/10 10:38 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.07 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/27/10**	**0208347**
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GW

General Chemistry

Lot-Sample #...: A0G140402-015 **Work Order #...:** L35NJ **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1		MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GW

General Chemistry

Lot-Sample #...: A0G140402-018 **Work Order #...:** L35NQ **Matrix.....:** WG
Date Sampled...: 07/13/10 09:00 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.03 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/16/10**	0197124
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GW

General Chemistry

Lot-Sample #...: A0G140402-020 **Work Order #...:** L35NW **Matrix.....:** WG
Date Sampled...: 07/13/10 10:10 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.2**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/16/10**	0197124
		Dilution Factor: 1		MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GW

General Chemistry

Lot-Sample #...: A0G140402-022 **Work Order #...:** L35N0 **Matrix.....:** WG
Date Sampled...: 07/13/10 10:30 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.09 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/27/10**	**0208347**
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GW

General Chemistry

Lot-Sample #...: A0G140402-024 **Work Order #...:** L35N2 **Matrix.....:** WG
Date Sampled...: 07/13/10 12:40 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.08 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/27/10**	**0208347**
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GW

General Chemistry

Lot-Sample #...: A0G140402-026 **Work Order #...:** L35N4 **Matrix.....:** WG
Date Sampled...: 07/13/10 14:00 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.07 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/27/10**	**0208347**
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GW

General Chemistry

Lot-Sample #...: A0G140402-028 **Work Order #...:** L35N6 **Matrix.....:** WG
Date Sampled...: 07/13/10 15:50 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**160**	**50**	**mg/L**	**MCAWW 353.2**	**07/27/10**	**0208347**
		Dilution Factor: 500		MDL.....: 8.0		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

General Chemistry

Lot-Sample #...: A0G140402-030 **Work Order #...:** L35N8 **Matrix.....:** WQ
Date Sampled...: 07/13/10 16:20 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.09 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/27/10**	**0208347**
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0G140402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: L4QWM1AA		MB Lot-Sample #:	A0G270000-383	
	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1				
Nitrate-Nitrite		Work Order #: L39KG1AA		MB Lot-Sample #:	A0G160000-124	
	ND	0.1	mg/L	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1				
Nitrate-Nitrite		Work Order #: L4QMK1AA		MB Lot-Sample #:	A0G270000-347	
	ND	0.1	mg/L	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G140402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: L4QWM1AC	LCS Lot-Sample#: A0G270000-383		
	94	(80 - 120)	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1			
Nitrate-Nitrite		Work Order #: L39KG1AC	LCS Lot-Sample#: A0G160000-124		
	100	(79 - 117)	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1			
Nitrate-Nitrite		Work Order #: L4QMK1AC	LCS Lot-Sample#: A0G270000-347		
	99	(79 - 117)	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G140402 **Matrix.....:** WATER
Date Sampled...: 07/12/10 14:39 **Date Received..:** 07/13/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite		WO#: L33811AM-MS/L33811AN-MSD				MS Lot-Sample #: A0G130405-006	
	100	(34 - 125)			MCAWW 353.2	07/16/10	0197124
	105	(34 - 125)	4.3	(0-20)	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G140402 **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: L35M41AQ-MS/L35M41AR-MSD				MS Lot-Sample #: A0G140402-002	
	69 N	(80 - 120)			SW846 9012A	07/27/10	0208383
	75 N	(80 - 120)	8.1	(0-20)	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1					
Cyanide, Total		WO#: L35NJ1AQ-MS/L35NJ1AR-MSD				MS Lot-Sample #: A0G140402-015	
	62 N	(80 - 120)			SW846 9012A	07/27/10	0208383
	99 *	(80 - 120)	43	(0-20)	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1					
Nitrate-Nitrite		WO#: L35M41AM-MS/L35M41AN-MSD				MS Lot-Sample #: A0G140402-002	
	107	(34 - 125)			MCAWW 353.2	07/16/10	0197124
	97	(34 - 125)	9.4	(0-20)	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1					
Nitrate-Nitrite		WO#: L35NG1AH-MS/L35NG1AJ-MSD				MS Lot-Sample #: A0G140402-013	
	134 N	(34 - 125)			MCAWW 353.2	07/27/10	0208347
	124	(34 - 125)	6.9	(0-20)	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1					
Nitrate-Nitrite		WO#: L35NJ1AM-MS/L35NJ1AN-MSD				MS Lot-Sample #: A0G140402-015	
	100	(34 - 125)			MCAWW 353.2	07/16/10	0197124
	97	(34 - 125)	2.9	(0-20)	MCAWW 353.2	07/16/10	0197124
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibraton Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
353.2	FWGEQUIPRINSE3-1580-GW	AQ	EB	Nitrate as N (NO3-N)	0.1	0.09B		J	mg/L	L,H
353.2	FWGLL12mw-107C-1547-GW	AQ	N	Nitrate as N (NO3-N)	0.1	0.2		B	mg/L	P,N
353.2	FWGLL12mw-182C-1552-GW	AQ	N	Nitrate as N (NO3-N)	0.1	0.03B		JB	mg/L	L,N
353.2	FWGLL12mw-184C-1554-GW	AQ	N	Nitrate as N (NO3-N)	0.1	0.07B		JB	mg/L	L,N,H
353.2	FWGLL12mw-185C-1555-GW	AQ	N	Nitrate as N (NO3-N)	50	160		J	mg/L	H
353.2	FWGLL12mw-186C-1556-GW	AQ	N	Nitrate as N (NO3-N)	0.1	0.04B		JB	mg/L	L,N
353.2	FWGLL12mw-189C-1559-GW	AQ	N	Nitrate as N (NO3-N)	0.1	0.07B		JB	mg/L	L,N,H
353.2	FWGLL12mw-243C-1561-GW	AQ	N	Nitrate as N (NO3-N)	0.1	0.03B		UJB	mg/L	Cb,N,L
353.2	FWGLL12mw-244C-1562-GW	AQ	N	Nitrate as N (NO3-N)	0.1	0.07B		JB	mg/L	L,N
353.2	FWGLL12mw-246C-1564-GW	AQ	N	Nitrate as N (NO3-N)	0.1	0.08B		JB	mg/L	L,N,H
353.2	FWGLL12mw-DUP4-1569-GW	AQ	FD	Nitrate as N (NO3-N)	0.1	0.09B		JB	mg/L	L,N,H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
6010B	FWGLL12mw-107C-1547-GF	AQ	N							
				Cobalt	5.0	1.8B		J	ug/L	L,P
				Potassium	1000	2230		J	ug/L	Pj
6010B	FWGLL12mw-128C-1549-GF	AQ	N							
				Chromium	5.0	2.8B		J	ug/L	L
				Cobalt	5.0	2.8B		J	ug/L	L
				Lead	3.0	2.3B		J	ug/L	L
				Nickel	10.0	4.8B		J	ug/L	L
				Potassium	1000	2770E		J	ug/L	Pj
				Vanadium	10.0	2.5B		J	ug/L	L
6010B	FWGLL12mw-182C-1552-GF	AQ	N							
				Potassium	1000	4080		J	ug/L	Pj
6010B	FWGLL12mw-184C-1554-GF	AQ	N							
				Barium	10.0	8.7B		J	ug/L	L
				Potassium	1000	2410		J	ug/L	Pj
6010B	FWGLL12mw-185C-1555-GF	AQ	N							
				Nickel	10.0	6.2B		J	ug/L	L
				Potassium	1000	7120		J	ug/L	Pj
6010B	FWGLL12mw-186C-1556-GF	AQ	N							
				Cobalt	5.0	1.7B		J	ug/L	L
				Nickel	10.0	2.2B		J	ug/L	L
				Potassium	1000	1690		J	ug/L	Pj
6010B	FWGLL12mw-187C-1557-GF	AQ	N							
				Potassium	1000	54200		J	ug/L	Pj

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
6010B	FWGLL12mw-189C-1559-GF	AQ	N							
				Cobalt	5.0	1.9B		J	ug/L	L
				Potassium	1000	1800		J	ug/L	Pj
6010B	FWGLL12mw-243C-1561-GF	AQ	N							
				Cobalt	5.0	1.5B		J	ug/L	L
				Nickel	10.0	2.7B		J	ug/L	L
				Potassium	1000	3320		J	ug/L	Pj
6010B	FWGLL12mw-244C-1562-GF	AQ	N							
				Potassium	1000	9500		J	ug/L	Pj
6010B	FWGLL12mw-246C-1564-GF	AQ	N							
				Potassium	1000	6380		J	ug/L	Pj
6010B	FWGLL12mw-DUP4-1569-GF	AQ	FD							
				Potassium	1000	2190		J	ug/L	Pj
6010B	FWGSCFmw-003-1517-GF	AQ	N							
				Potassium	1000	1420		J	ug/L	Pj
6020	FWGLL12mw-107C-1547-GF	AQ	N							
				Iron	50.0	2640		J	ug/L	Pj
6020	FWGLL12mw-128C-1549-GF	AQ	N							
				Antimony	2.0	0.16B		J	ug/L	L
				Iron	50.0	6890E		J	ug/L	Pj
				Thallium	1.0	0.25B		UJ	ug/L	Cb,L
				Zinc	10.0	19.8		J	ug/L	Z
6020	FWGLL12mw-182C-1552-GF	AQ	N							
				Aluminum	50.0	29.5B		J	ug/L	L
				Iron	50.0	766		J	ug/L	Pj

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
6020	FWGLL12mw-184C-1554-GF	AQ	N							
				Iron	50.0	2300		J	ug/L	Pj
6020	FWGLL12mw-185C-1555-GF	AQ	N							
				Cadmium	0.50	0.26B		J	ug/L	L
6020	FWGLL12mw-186C-1556-GF	AQ	N							
				Antimony	2.0	0.45B		J	ug/L	L
6020	FWGLL12mw-187C-1557-GF	AQ	N							
				Thallium	1.0	0.66B		UJ	ug/L	Cb,L
				Zinc	10.0	11.0		J	ug/L	Z
6020	FWGLL12mw-189C-1559-GF	AQ	N							
				Iron	50.0	1320		J	ug/L	Pj
6020	FWGLL12mw-243C-1561-GF	AQ	N							
				Antimony	2.0	0.63B		J	ug/L	L
				Thallium	1.0	0.27B		UJ	ug/L	Cb,L
6020	FWGLL12mw-244C-1562-GF	AQ	N							
				Antimony	2.0	0.73B		J	ug/L	L
				Iron	50.0	78800		J	ug/L	Pj
				Thallium	1.0	0.60B		UJ	ug/L	Cb,L
				Zinc	10.0	165		J	ug/L	Z
6020	FWGLL12mw-246C-1564-GF	AQ	N							
				Iron	50.0	1190		J	ug/L	Pj
6020	FWGLL12mw-DUP4-1569-GF	AQ	FD							
				Iron	50.0	2420		J	ug/L	Pj

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8081A	FWGLL12mw-107C-1547-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.018J		J	ug/L	G,P,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8081A	FWGLL12mw-128C-1549-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8081A	FWGLL12mw-182C-1552-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8081A	FWGLL12mw-185C-1555-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8081A	FWGLL12mw-186C-1556-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.013J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.0091J		J	ug/L	G,L
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8081A	FWGLL12mw-189C-1559-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.014J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
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Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8081A	FWGLL12mw-243C-1561-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.012J		J	ug/L	G,L
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8081A	FWGLL12mw-244C-1562-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8081A	FWGSCFmw-003-1517-GW	AQ	N							
				beta-BHC	0.030	0.0092J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8082	FWGLL12mw-128C-1549-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL12mw-189C-1559-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGLL12mw-243C-1561-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8082	FWGLL12mw-244C-1562-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8260B	FWGEQUIPRINSE3-1580-GW	AQ	EB							
				2-Butanone	10	15		J	ug/L	Pj
				Acetone	10	9.7J		JB	ug/L	Pj,L,O
				Methylene chloride	2.0	1.5J B		JB	ug/L	L,F
8260B	FWGLL12mw-243C-1561-GW	AQ	N							
				2-Butanone	10	1.3J		JB	ug/L	Pj,N,L
8260B	FWGLL12mw-244C-1562-GW	AQ	N							
				2-Butanone	10	1.6J		JB	ug/L	Pj,N,L
				Acetone	10	1.1J		JB	ug/L	Pj,N,L,O
				Toluene	1.0	0.22J		J	ug/L	L
8260B	FWGSCFmw-003-1517-GW	AQ	N							
				Acetone	10	3.4J		JB	ug/L	Pj,N,L,O
8260B	FWGTEAM1-TRIP	AQ	TB							
				Acetone	10	1.5J		J	ug/L	Pj,L
8260B	FWGTEAM2-TRIP	AQ	TB							
				Acetone	10	1.7J		J	ug/L	Pj,L
8260B	FWGTEAM3-TRIP	AQ	TB							
				Acetone	10	1.6J		J	ug/L	Pj,L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8270C	FWGEQUIPRINSE3-1580-GW	AQ	EB							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	8.5J B		JB	ug/L	L,F
				Di-n-butyl phthalate	1.0	0.83J		J	ug/L	L
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj
8270C	FWGLL12mw-107C-1547-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	3.0J B		JB	ug/L	L,N,P,F
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj
8270C	FWGLL12mw-128C-1549-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	2.3J B		JB	ug/L	L,N,F
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj
8270C	FWGLL12mw-182C-1552-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	4.9J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.89J		JB	ug/L	L,N
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8270C	FWGLL12mw-184C-1554-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	3.8J B		JB	ug/L	L,N,F
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj
8270C	FWGLL12mw-185C-1555-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	2.6J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.75J		JB	ug/L	L,N
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj
8270C	FWGLL12mw-186C-1556-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	3.3J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.76J		JB	ug/L	L,N
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj
8270C	FWGLL12mw-187C-1557-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	1.2J B		JB	ug/L	L,N,F
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8270C	FWGLL12mw-189C-1559-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	2.8J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.75J		JB	ug/L	L,N
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj
8270C	FWGLL12mw-243C-1561-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	4.4J B		JB	ug/L	L,N,F
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj
8270C	FWGLL12mw-244C-1562-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	1.8J B		JB	ug/L	L,N,F
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj
8270C	FWGLL12mw-246C-1564-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	1.8J B		JB	ug/L	L,N,F
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
8270C	FWGLL12mw-DUP4-1569-GW	AQ	FD							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	J
				bis(2-Ethylhexyl) phthalate	10	7.7J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.78J		JB	ug/L	L,N
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj
8270C	FWGSCFmw-003-1517-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		R	ug/L	Pj,J,H
				4,6-Dinitro-2-methylphenol	5.0	5.0U		R	ug/L	Pj
				Benzoic acid	10	10U		UJ	ug/L	I,J,H
				bis(2-Ethylhexyl) phthalate	10	1.5J B		JB	ug/L	L,N,F
				Pentachlorophenol	5.0	5.0U		R	ug/L	Pj
9012A	FWGEQUIPRINSE3-1580-GW	AQ	EB							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL12mw-107C-1547-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL12mw-128C-1549-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL12mw-182C-1552-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL12mw-184C-1554-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL12mw-185C-1555-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140402										
9012A	FWGLL12mw-186C-1556-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL12mw-187C-1557-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL12mw-189C-1559-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL12mw-243C-1561-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL12mw-244C-1562-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL12mw-246C-1564-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL12mw-DUP4-1569-GW	AQ	FD	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGSCFmw-003-1517-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE3-1580-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402030

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.09		mg/L	B	YES	J					J			J							L,H
Analysis Method : 8260B						**Dilution: 1**															
2-Butanone	15		ug/L		YES	J															Pj
Acetone	9.7		ug/L	J	YES	~~UJ~~ JB								J		JB					Pj,L,O
Methylene chloride	1.5		ug/L	J B	YES	~~UJ~~ JB			JB					J							L,F
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	8.5		ug/L	J B	YES	~~UJ~~ JB			JB					J							L,F
Di-n-butyl phthalate	0.83		ug/L	J	YES	J								J							L
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-107C-1547-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402021

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	1.8		ug/L	B	YES	J								J							L,P
Potassium	2230		ug/L		YES	J															P
Analysis Method : 6020						**Dilution: 1**															
Iron	2640		ug/L		YES	J															P

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-107C-1547-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402020

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.2		mg/L		YES	UJB B										UB					P,N
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.018		ug/L	J	YES	**J**							J	J							G,P,L
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	**R**				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	**R**															Pj
Benzoic acid	10		ug/L	U	YES	**UJ**				UJ											J
bis(2-Ethylhexyl) phthalate	3.0		ug/L	J B	YES	UJ JB			UJ B					J		UB					L,N,P,F
Pentachlorophenol	5.0		ug/L	U	YES	**R**															Pj
Analysis Method : 9012A						**Dilution: 1**															

Project Number and Name: 030240.0006 - RVAAP (OH) **Library Used:** Ravenna GW 11-7-07

ADR 8.1 Report Date: 8/26/2010 15:42

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-107C-1547-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402020

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-128C-1549-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402003

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B							**Dilution: 1**														
Chromium	2.8		ug/L	B	YES	J								J							L
Cobalt	2.8		ug/L	B	YES	J								J							L
Lead	2.3		ug/L	B	YES	J								J							L
Nickel	4.8		ug/L	B	YES	J								J							L
Potassium	2770		ug/L	E	YES	J															Pj
Vanadium	2.5		ug/L	B	YES	J								J							L
Analysis Method : 6020							**Dilution: 1**														
Antimony	0.16		ug/L	B	YES	J								J							L
Iron	6890		ug/L	E	YES	J															Pj
Thallium	0.25		ug/L	B	YES	UJ								J							Cb,L
Zinc	19.8		ug/L		YES	J						J									Z

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-128C-1549-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402002

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-128C-1549-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402002

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	2.3		ug/L	J B	YES	~~UJ~~ JB			JB					J		JB					L,N,F
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-182C-1552-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402019

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	4080		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Aluminum	29.5		ug/L	B	YES	J								J							L
Iron	766		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-182C-1552-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402018

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.03		mg/L	B	YES	UJ JB								J		JB					L,N
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	**R**				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	**R**															Pj
Benzoic acid	10		ug/L	U	YES	**UJ**				UJ											J
bis(2-Ethylhexyl) phthalate	4.9		ug/L	J B	YES	UJ JB			JB					J		JB					L,N,F
Di-n-butyl phthalate	0.89		ug/L	J	YES	UJ JB			JB					J		JB					L,N
Pentachlorophenol	5.0		ug/L	U	YES	**R**															Pj

Project Number and Name: 030240.0006 - RVAAP (OH) **Library Used:** Ravenna GW 11-7-07

ADR 8.1 Report Date: 8/26/2010 15:42

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-182C-1552-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402018

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-184C-1554-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402027

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	8.7		ug/L	B	YES	J								J							L
Potassium	2410		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Iron	2300		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-184C-1554-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402026

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.07		mg/L	B	YES	~~UJ~~ SB					J			J		~~J~~ B					L,N,H
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	3.8		ug/L	J B	YES	~~UJ~~ SB			J B					J		J B					L,N,F
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-185C-1555-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402029

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	6.2		ug/L	B	YES	J								J							L
Potassium	7120		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Cadmium	0.26		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-185C-1555-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G140402028

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 500**															
Nitrate as N (NO3-N)	160		mg/L		YES	J					J										H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-185C-1555-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402028

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	2.6		ug/L	J B	YES	UJ JB			JB					J		JB					L,N,F
Di-n-butyl phthalate	0.75		ug/L	J	YES	UJ JB								J		JB					L,N
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-186C-1556-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402012

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	1.7		ug/L	B	YES	J								J							L
Nickel	2.2		ug/L	B	YES	J								J							L
Potassium	1690		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.45		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-186C-1556-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402011

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.04		mg/L	B	YES	UJ JB								J		UJB					L,N
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.013		ug/L	J	YES	J							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.0091		ug/L	J	YES	J							J	J							G,L
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	3.3		ug/L	J B	YES	UJ JB			JB					J		UJB					L,N,F
Di-n-butyl phthalate	0.76		ug/L	J	YES	UJ JB								J		UJB					L,N
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj

Project Number and Name: 030240.0006 - RVAAP (OH) **Library Used:** Ravenna GW 11-7-07

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-186C-1556-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402011

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-187C-1557-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402007

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	54200		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.66		ug/L	B	YES	UJ								J							Cb,L
Zinc	11.0		ug/L		YES	J						J									Z

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-187C-1557-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402006

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	1.2		ug/L	J B	YES	UJB			JB					J		JB					L,N,F
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-189C-1559-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402014

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	1.9		ug/L	B	YES	J								J							L
Potassium	1800		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Iron	1320		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-189C-1559-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402013

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.07		mg/L	B	YES	~~J~~ UJB					J			J		JB					L,N,H
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.014		ug/L	J	YES	J							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-189C-1559-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402013

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	2.8		ug/L	J B	YES	UJ / J B			UB					J		UJ / B					L,N,F
Di-n-butyl phthalate	0.75		ug/L	J	YES	UJ / J B								J		UJ / B					L,N
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-243C-1561-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402005

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	1.5		ug/L	B	YES	J								J							L
Nickel	2.7		ug/L	B	YES	J								J							L
Potassium	3320		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.63		ug/L	B	YES	J								J							L
Thallium	0.27		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-243C-1561-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402004

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.03		mg/L	B	YES	UJ								J		J					Cb,N,L
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.012		ug/L	J	YES	**J**							J	J							G,L
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-243C-1561-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402004

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
2-Butanone	1.3		ug/L	J	YES	UJ/SB								J		J/B					Pj,N,L
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	4.4		ug/L	J B	YES	UJ/SB			J/B					J		J/B					L,N,F
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-244C-1562-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402009

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	9500		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.73		ug/L	B	YES	J								J							L
Iron	78800		ug/L		YES	J															Pj
Thallium	0.60		ug/L	B	YES	UJ								J							Cb,L
Zinc	165		ug/L		YES	J						J									Z

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-244C-1562-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402008

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.07		mg/L	B	YES	~~UJ~~ J								J		J					L,N
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.025		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.030		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.030		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.10		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	2.0		ug/L	U	YES	**UJ**							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	**UJ**							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	**UJ**							UJ								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-244C-1562-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402008

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
2-Butanone	1.6		ug/L	J	YES	~~UJ~~	JB							J		UJ B					Pj,N,L
Acetone	1.1		ug/L	J	YES	~~UJ~~	JB							J		UJ B					Pj,N,L,O
Toluene	0.22		ug/L	J	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	1.8		ug/L	J B	YES	~~UJ~~	JB		JB					J		UJ B					L,N,F
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-246C-1564-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402025

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	6380		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Iron	1190		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-246C-1564-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402024

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.08		mg/L	B	YES	UJ JB					J			J		UB					L,N,H
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	1.8		ug/L	J B	YES	UJ JB			JB					J		UJB					L,N,F
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-DUP4-1569-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402023

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	2190		ug/L		YES	J															Pj
Analysis Method : 6020						**Dilution: 1**															
Iron	2420		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-DUP4-1569-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402022

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.09		mg/L	B	YES	UJ JB					J			J		UJB					L,N,H
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ											Pj,J
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	7.7		ug/L	J B	YES	UJ JB			U					J		UJB					L,N,F
Di-n-butyl phthalate	0.78		ug/L	J	YES	UJ JB								J		UJB					L,N
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-003-1517-GF **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G140402016

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	1420		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-003-1517-GW **Lab Report Batch :** A0G140402 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140402015

Reviewed By / Date : ASD 8/26/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
beta-BHC	0.0092		ug/L	J	YES	J								J							L
Analysis Method : 8260B						**Dilution: 1**															
Acetone	3.4		ug/L	J	YES	UJ SB								J		J B					Pj,N,L,O
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	R				UJ	UJ										Pj,J,H
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	R															Pj
Benzoic acid	10		ug/L	U	YES	UJ				UJ	UJ										I,J,H
bis(2-Ethylhexyl) phthalate	1.5		ug/L	J B	YES	UJ SB			J B					J		J B					L,N,F
Pentachlorophenol	5.0		ug/L	U	YES	R															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM1-TRIP
Lab Report Batch : A0G140402
Lab ID : TALCAN
Sample Date : 07/13/2010
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A0G140402001

Reviewed By / Date : ASD 8/26/2010
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.5		ug/L	J	YES	J								J							Pj,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM2-TRIP
Lab Report Batch : A0G140402
Lab ID : TALCAN
Sample Date : 07/13/2010
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A0G140402010

Reviewed By / Date : ASD 8/26/2010
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.7		ug/L	J	YES	J								J							Pj,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM3-TRIP
Lab Report Batch : A0G140402
Lab ID : TALCAN
Sample Date : 07/13/2010
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A0G140402017

Reviewed By / Date : ASD 8/26/2010
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.6		ug/L	J	YES	J								J							Pj,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G140402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE3-1580	A0G140402030	353.2	AQ	Nitrate as N (NO3-N)	B	0.09	0.1	mg/L
		8260B		Acetone	J	9.7	10	ug/L
				Methylene chloride	J B	1.5	2.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	8.5	10	ug/L
				Di-n-butyl phthalate	J	0.83	1.0	ug/L
FWGLL12mw-107C-1547-	A0G140402021	6010B		Cobalt	B	1.8	5.0	ug/L
FWGLL12mw-107C-1547-	A0G140402020	8081A		beta-BHC	J	0.018	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	3.0	10	ug/L
FWGLL12mw-128C-1549-	A0G140402003	6010B		Chromium	B	2.8	5.0	ug/L
				Cobalt	B	2.8	5.0	ug/L
				Lead	B	2.3	3.0	ug/L
				Nickel	B	4.8	10.0	ug/L
				Vanadium	B	2.5	10.0	ug/L
		6020		Antimony	B	0.16	2.0	ug/L
				Thallium	B	0.25	1.0	ug/L
FWGLL12mw-128C-1549-	A0G140402002	8270C		bis(2-Ethylhexyl) phthalate	J B	2.3	10	ug/L
FWGLL12mw-182C-1552-	A0G140402019	6020		Aluminum	B	29.5	50.0	ug/L
FWGLL12mw-182C-1552-	A0G140402018	353.2		Nitrate as N (NO3-N)	B	0.03	0.1	mg/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	4.9	10	ug/L
				Di-n-butyl phthalate	J	0.89	1.0	ug/L
FWGLL12mw-184C-1554-	A0G140402027	6010B		Barium	B	8.7	10.0	ug/L
FWGLL12mw-184C-1554-	A0G140402026	353.2		Nitrate as N (NO3-N)	B	0.07	0.1	mg/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	3.8	10	ug/L
FWGLL12mw-185C-1555-	A0G140402029	6010B		Nickel	B	6.2	10.0	ug/L
		6020		Cadmium	B	0.26	0.50	ug/L
FWGLL12mw-185C-1555-	A0G140402028	8270C		bis(2-Ethylhexyl) phthalate	J B	2.6	10	ug/L
				Di-n-butyl phthalate	J	0.75	1.0	ug/L
FWGLL12mw-186C-1556-	A0G140402012	6010B		Cobalt	B	1.7	5.0	ug/L
				Nickel	B	2.2	10.0	ug/L
		6020		Antimony	B	0.45	2.0	ug/L
FWGLL12mw-186C-1556-	A0G140402011	353.2		Nitrate as N (NO3-N)	B	0.04	0.1	mg/L
		8081A		beta-BHC	J	0.013	0.030	ug/L
				Endrin ketone	J	0.0091	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	3.3	10	ug/L
				Di-n-butyl phthalate	J	0.76	1.0	ug/L
FWGLL12mw-187C-1557-	A0G140402007	6020		Thallium	B	0.66	1.0	ug/L

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G140402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL12mw-187C-1557-	A0G140402006	8270C	AQ	bis(2-Ethylhexyl) phthalate	J B	1.2	10	ug/L
FWGLL12mw-189C-1559-	A0G140402014	6010B		Cobalt	B	1.9	5.0	ug/L
FWGLL12mw-189C-1559-	A0G140402013	353.2		Nitrate as N (NO3-N)	B	0.07	0.1	mg/L
		8081A		beta-BHC	J	0.014	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	2.8	10	ug/L
				Di-n-butyl phthalate	J	0.75	1.0	ug/L
FWGLL12mw-243C-1561-	A0G140402005	6010B		Cobalt	B	1.5	5.0	ug/L
				Nickel	B	2.7	10.0	ug/L
		6020		Antimony	B	0.63	2.0	ug/L
				Thallium	B	0.27	1.0	ug/L
FWGLL12mw-243C-1561-	A0G140402004	353.2		Nitrate as N (NO3-N)	B	0.03	0.1	mg/L
		8081A		beta-BHC	J	0.012	0.030	ug/L
		8260B		2-Butanone	J	1.3	10	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	4.4	10	ug/L
FWGLL12mw-244C-1562-	A0G140402009	6020		Antimony	B	0.73	2.0	ug/L
				Thallium	B	0.60	1.0	ug/L
FWGLL12mw-244C-1562-	A0G140402008	353.2		Nitrate as N (NO3-N)	B	0.07	0.1	mg/L
		8260B		2-Butanone	J	1.6	10	ug/L
				Acetone	J	1.1	10	ug/L
				Toluene	J	0.22	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.8	10	ug/L
FWGLL12mw-246C-1564-	A0G140402024	353.2		Nitrate as N (NO3-N)	B	0.08	0.1	mg/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.8	10	ug/L
FWGLL12mw-DUP4-1569	A0G140402022	353.2		Nitrate as N (NO3-N)	B	0.09	0.1	mg/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	7.7	10	ug/L
				Di-n-butyl phthalate	J	0.78	1.0	ug/L
FWGSCFmw-003-1517-G	A0G140402015	8081A		beta-BHC	J	0.0092	0.030	ug/L
		8260B		Acetone	J	3.4	10	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.5	10	ug/L
FWGTEAM1-TRIP	A0G140402001	8260B		Acetone	J	1.5	10	ug/L
FWGTEAM2-TRIP	A0G140402010			Acetone	J	1.7	10	ug/L
FWGTEAM3-TRIP	A0G140402017			Acetone	J	1.6	10	ug/L

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G140402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE3-1580	A0G140402030	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Potassium	U	1000	200.00	ug/L
				Sodium	U	1000	200.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **030240.0006 - RVAAP (OH)**

Method Blank Outlier Report

Lab Reporting Batch : A0G140402 **Lab ID:** TALCAN

Analysis Method : 8260B **Analysis Date :** 07/23/2010

Preparation Type : 5030B **Preparation Date :** 07/23/2010

Method Blank Lab Sample ID : A0G230000233B **Preparation Batch :** 0204233

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.76	2.0	ug/L	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE3-1580-G	A0G140402030	1	1.5	J B	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A0G140402 **Lab ID:** TALCAN

Analysis Method : 8260B **Analysis Date :** 07/22/2010

Preparation Type : 5030B **Preparation Date :** 07/22/2010

Method Blank Lab Sample ID : A0G220000119B **Preparation Batch :** 0203119

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.54	2.0	ug/L	J	Common Contaminant

Methylene chloride contamination found in the method blank did not qualify any samples.

QC Outlier Report: Trip Blank

Lab Reporting Batch : A0G140402
Lab ID: TALCAN
Method/Preparation Batch : 0203119 / 0203119
Analysis Date : 07/22/2010
Client Sample ID : FWGTEAM1-TRIP
Preparation Date : 07/22/2010
Lab Sample ID : A0G140402001
Preparation Type : 5030B

Analysis Method : 8260B

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.5	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL12mw-244C-1562-G	A0G140402008	1	1.1	J	ug/L

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.7	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGSCFmw-003-1517-GW	A0G140402015	1	3.4	J	ug/L

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.6	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGEQUIPRINSE3-1580-G	A0G140402030	1	9.7	J	ug/L

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0203119 **Analysis Method :** 8260B **Analysis Date :** 07/22/2010

Preparation Batch : 0203119 **Preparation Type :** 5030B **Preparation Date :** 07/22/2010

Lab Reporting Batch : A0G140402 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	Matrix	Analyte Name	Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0G220000119C	AQ	Carbon disulfide	128		30.00	40.00	123.00	30.00
A0G220000119L		Carbon disulfide	125	2.3	30.00	40.00	123.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGLL12mw-187C-1557-GW	A0G140402006
FWGLL12mw-243C-1561-GW	A0G140402004
FWGTEAM1-TRIP	A0G140402001

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 030240.0006 - RVAAP (OH)

Method Blank Outlier Report

Lab Reporting Batch : A0G140402 **Lab ID:** TALCAN

Analysis Method : 8270C **Analysis Date :** 07/27/2010

Preparation Type : 3520C **Preparation Date :** 07/15/2010

Method Blank Lab Sample ID : A0G150000051B **Preparation Batch :** 0196051

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	2.3	10	ug/L	J	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE3-1580-G	A0G140402030	1	8.5	J B	ug/L
FWGLL12mw-107C-1547-G	A0G140402020	1	3.0	J B	ug/L
FWGLL12mw-128C-1549-G	A0G140402002	1	2.3	J B	ug/L
FWGLL12mw-182C-1552-G	A0G140402018	1	4.9	J B	ug/L
FWGLL12mw-184C-1554-G	A0G140402026	1	3.8	J B	ug/L
FWGLL12mw-185C-1555-G	A0G140402028	1	2.6	J B	ug/L
FWGLL12mw-186C-1556-G	A0G140402011	1	3.3	J B	ug/L
FWGLL12mw-187C-1557-G	A0G140402006	1	1.2	J B	ug/L
FWGLL12mw-189C-1559-G	A0G140402013	1	2.8	J B	ug/L
FWGLL12mw-243C-1561-G	A0G140402004	1	4.4	J B	ug/L
FWGLL12mw-244C-1562-G	A0G140402008	1	1.8	J B	ug/L
FWGLL12mw-246C-1564-G	A0G140402024	1	1.8	J B	ug/L
FWGLL12mw-DUP4-1569-G	A0G140402022	1	7.7	J B	ug/L
FWGSCFmw-003-1517-GW	A0G140402015	1	1.5	J B	ug/L

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0196051 **Analysis Method :** 8270C **Analysis Date :** 07/27/2010

Preparation Batch : 0196051 **Preparation Type :** 3520C **Preparation Date :** 07/15/2010

Lab Reporting Batch : A0G140402 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	Matrix	Analyte Name	Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0G150000051C	AQ	2,4-Dinitrophenol	23		29.00	29.00	146.00	30.00
		Benzoic acid	9.4		0.00	10.00	136.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE3-1580-GW	A0G140402030
FWGLL12mw-107C-1547-GW	A0G140402020
FWGLL12mw-128C-1549-GW	A0G140402002
FWGLL12mw-182C-1552-GW	A0G140402018
FWGLL12mw-184C-1554-GW	A0G140402026
FWGLL12mw-185C-1555-GW	A0G140402028
FWGLL12mw-186C-1556-GW	A0G140402011
FWGLL12mw-187C-1557-GW	A0G140402006
FWGLL12mw-189C-1559-GW	A0G140402013
FWGLL12mw-243C-1561-GW	A0G140402004
FWGLL12mw-244C-1562-GW	A0G140402008
FWGLL12mw-246C-1564-GW	A0G140402024
FWGLL12mw-DUP4-1569-GW	A0G140402022
FWGSCFmw-003-1517-GW	A0G140402015

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 030240.0006 - RVAAP (OH)

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0196051 **Analysis Method :** 8270C **Analysis Date :** 07/27/2010

Preparation Batch : 0196051 **Preparation Type :** 3520C **Preparation Date :** 07/15/2010

Lab Reporting Batch : A0G140402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL12mw-128C-1549	A0G140402002S	AQ	3,3'-Dichlorobenzidine	33		0.00	45.00	135.00	20.00
			Hexachlorocyclopentadiene	41		0.00	45.00	135.00	20.00
FWGLL12mw-128C-1549	A0G140402002D		3,3'-Dichlorobenzidine	37		0.00	45.00	135.00	20.00
			Benzo(a)anthracene		21	0.00	45.00	135.00	20.00
			Benzo(k)fluoranthene		26	0.00	45.00	135.00	20.00
			bis(2-Ethylhexyl) phthalate	169	65	0.00	45.00	135.00	20.00
			Hexachlorobenzene		22	0.00	45.00	135.00	20.00
			Hexachlorobutadiene		32	0.00	45.00	135.00	20.00
			Hexachlorocyclopentadiene		33	0.00	45.00	135.00	20.00
			Hexachloroethane		22	0.00	45.00	135.00	20.00
FWGSCFmw-003-1517-	A0G140402015S		2,4-Dinitrophenol	35		0.00	45.00	135.00	20.00
			Benzoic acid	22		0.00	45.00	135.00	20.00
FWGSCFmw-003-1517-	A0G140402015D		2,4-Dinitrophenol	42		0.00	45.00	135.00	20.00
			Benzoic acid	31	34	0.00	45.00	135.00	20.00
			bis(2-Ethylhexyl) phthalate	188	68	0.00	45.00	135.00	20.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL12mw-128C-1549-GW	A0G140402002
FWGSCFmw-003-1517-GW	A0G140402015

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.

** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 030240.0006 - RVAAP (OH)

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0G140402
Lab ID: TALCAN
Method/Preparation Batch : 0208347 / 0208347
Analysis Date : 07/27/2010
Client Sample ID : FWGEQUIPRINSE3-1580-GW
Preparation Date : 07/27/2010
Lab Sample ID : A0G140402030
Preparation Type : Gen Prep

Analysis Method : 353.2

Nitrate as N (NO3-N)	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.09	0.1	mg/L	B	

Nitrate as N (NO3-N) was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL12mw-107C-1547-G	A0G140402020	1	0.2		mg/L
FWGLL12mw-182C-1552-G	A0G140402018	1	0.03	B	mg/L
FWGLL12mw-184C-1554-G	A0G140402026	1	0.07	B	mg/L
FWGLL12mw-186C-1556-G	A0G140402011	1	0.04	B	mg/L
FWGLL12mw-189C-1559-G	A0G140402013	1	0.07	B	mg/L
FWGLL12mw-243C-1561-G	A0G140402004	1	0.03	B	mg/L
FWGLL12mw-244C-1562-G	A0G140402008	1	0.07	B	mg/L
FWGLL12mw-246C-1564-G	A0G140402024	1	0.08	B	mg/L
FWGLL12mw-DUP4-1569-G	A0G140402022	1	0.09	B	mg/L

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	15	10	ug/L		Common Contaminant

2-Butanone was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL12mw-243C-1561-G	A0G140402004	1	1.3	J	ug/L
FWGLL12mw-244C-1562-G	A0G140402008	1	1.6	J	ug/L

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	9.7	10	ug/L	J	Common Contaminant

Acetone was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL12mw-244C-1562-G	A0G140402008	1	1.1	J	ug/L
FWGSCFmw-003-1517-GW	A0G140402015	1	3.4	J	ug/L

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.5	2.0	ug/L	J B	Common Contaminant

Methylene chloride contamination found in the equipment blank did not qualify any samples.

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0G140402
Lab ID: TALCAN
Method/Preparation Batch : 0196051 / 0196051
Analysis Date : 07/27/2010
Client Sample ID : FWGEQUIPRINSE3-1580-GW
Preparation Date : 07/15/2010
Lab Sample ID : A0G140402030
Preparation Type : 3520C

Analysis Method : 8270C

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	8.5	10	ug/L	J B	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL12mw-107C-1547-G	A0G140402020	1	3.0	J B	ug/L
FWGLL12mw-128C-1549-G	A0G140402002	1	2.3	J B	ug/L
FWGLL12mw-182C-1552-G	A0G140402018	1	4.9	J B	ug/L
FWGLL12mw-184C-1554-G	A0G140402026	1	3.8	J B	ug/L
FWGLL12mw-185C-1555-G	A0G140402028	1	2.6	J B	ug/L
FWGLL12mw-186C-1556-G	A0G140402011	1	3.3	J B	ug/L
FWGLL12mw-187C-1557-G	A0G140402006	1	1.2	J B	ug/L
FWGLL12mw-189C-1559-G	A0G140402013	1	2.8	J B	ug/L
FWGLL12mw-243C-1561-G	A0G140402004	1	4.4	J B	ug/L
FWGLL12mw-244C-1562-G	A0G140402008	1	1.8	J B	ug/L
FWGLL12mw-246C-1564-G	A0G140402024	1	1.8	J B	ug/L
FWGLL12mw-DUP4-1569-G	A0G140402022	1	7.7	J B	ug/L
FWGSCFmw-003-1517-GW	A0G140402015	1	1.5	J B	ug/L

Di-n-butyl phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.83	1.0	ug/L	J	Common Contaminant

Di-n-butyl phthalate was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL12mw-182C-1552-G	A0G140402018	1	0.89	J	ug/L
FWGLL12mw-185C-1555-G	A0G140402028	1	0.75	J	ug/L
FWGLL12mw-186C-1556-G	A0G140402011	1	0.76	J	ug/L
FWGLL12mw-189C-1559-G	A0G140402013	1	0.75	J	ug/L
FWGLL12mw-DUP4-1569-G	A0G140402022	1	0.78	J	ug/L

Surrogate Recovery Outlier Report

Lab Report Batch: A0G140402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGLL12mw-107C-1547-GW	A0G140402020	8081A	1	AQ	Decachlorobiphenyl	49	50.0	150.0	10.0	All Target
FWGLL12mw-128C-1549-GW	A0G140402002	8081A	1	AQ	Decachlorobiphenyl	30	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	40	50.0	150.0	10.0	All Target
FWGLL12mw-128C-1549-GWMS	A0G140402002S	8081A	2	AQ	Decachlorobiphenyl	46	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	26	50.0	150.0	10.0	All Target
FWGLL12mw-128C-1549-GWMS	A0G140402002D	8082	2	AQ	Decachlorobiphenyl	48	50.0	150.0	10.0	All Target
FWGLL12mw-182C-1552-GW	A0G140402018	8081A	1	AQ	Decachlorobiphenyl	49	50.0	150.0	10.0	All Target
FWGLL12mw-185C-1555-GW	A0G140402028	8081A	1	AQ	Decachlorobiphenyl	38	50.0	150.0	10.0	All Target
FWGLL12mw-186C-1556-GW	A0G140402011	8081A	1	AQ	Decachlorobiphenyl	40	50.0	150.0	10.0	All Target
FWGLL12mw-189C-1559-GW	A0G140402013	8081A	1	AQ	Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	36	50.0	150.0	10.0	All Target
FWGLL12mw-243C-1561-GW	A0G140402004	8081A	1	AQ	Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	33	50.0	150.0	10.0	All Target
FWGLL12mw-244C-1562-GW	A0G140402008	8081A	1	AQ	Decachlorobiphenyl	22	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	29	50.0	150.0	10.0	All Target

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0196037 **Analysis Method :** 8082 **Analysis Date :** 07/23/2010

Preparation Batch : 0196037 **Preparation Type :** 3520C **Preparation Date :** 07/15/2010

Lab Reporting Batch : A0G140402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL12mw-128C-1549	A0G140402002S	AQ	Aroclor 1260	37		0.00	40.00	140.00	20.00
FWGLL12mw-128C-1549	A0G140402002D		Aroclor 1016		24	0.00	40.00	140.00	20.00
			Aroclor 1260		53	0.00	40.00	140.00	20.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL12mw-128C-1549-GW	A0G140402002
FWGSCFmw-003-1517-GW	A0G140402015

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.

** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 030240.0006 - RVAAP (OH)

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0208383 **Analysis Method :** 9012A **Analysis Date :** 07/27/2010

Preparation Batch : 0208383 **Preparation Type :** Gen Prep **Preparation Date :** 07/27/2010

Lab Reporting Batch : A0G140402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL12mw-128C-1549	A0G140402002S	AQ	Cyanide	69		40.00	75.00	125.00	20.00
FWGSCFmw-003-1517-	A0G140402015S		Cyanide	62		40.00	75.00	125.00	20.00
FWGSCFmw-003-1517-	A0G140402015D		Cyanide		43	40.00	75.00	125.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE3-1580-GW	A0G140402030
FWGLL12mw-107C-1547-GW	A0G140402020
FWGLL12mw-128C-1549-GW	A0G140402002
FWGLL12mw-182C-1552-GW	A0G140402018
FWGLL12mw-184C-1554-GW	A0G140402026
FWGLL12mw-185C-1555-GW	A0G140402028
FWGLL12mw-186C-1556-GW	A0G140402011
FWGLL12mw-187C-1557-GW	A0G140402006
FWGLL12mw-189C-1559-GW	A0G140402013
FWGLL12mw-243C-1561-GW	A0G140402004
FWGLL12mw-244C-1562-GW	A0G140402008
FWGLL12mw-246C-1564-GW	A0G140402024
FWGLL12mw-DUP4-1569-GW	A0G140402022
FWGSCFmw-003-1517-GW	A0G140402015

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 030240.0006 - RVAAP (OH)

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0208347 **Analysis Method :** 353.2 **Analysis Date :** 07/27/2010

Preparation Batch : 0208347 **Preparation Type :** Gen Prep **Preparation Date :** 07/27/2010

Lab Reporting Batch : A0G140402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL12mw-189C-1559	A0G140402013S	AQ	Nitrate as N (NO3-N)	134		30.00	80.00	120.00	20.00
FWGLL12mw-189C-1559	A0G140402013D		Nitrate as N (NO3-N)	124		30.00	80.00	120.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE3-1580-GW	A0G140402030
FWGLL12mw-184C-1554-GW	A0G140402026
FWGLL12mw-185C-1555-GW	A0G140402028
FWGLL12mw-189C-1559-GW	A0G140402013
FWGLL12mw-246C-1564-GW	A0G140402024
FWGLL12mw-DUP4-1569-GW	A0G140402022

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 030240.0006 - RVAAP (OH)

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A0G140402 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
6010B	AQ	Cobalt	FWGLL12mw-107	ES/TO	1.8	B	FWGLL12mw-DU	ES/TO	5.0	U	200.0	30	ug/L
353.2	AQ	Nitrate as N (NO3-N)	FWGLL12mw-107	RES	0.2		FWGLL12mw-DU	RES	0.09	B	75.9	30	mg/L
8081A	AQ	beta-BHC		RES	0.018	J		RES	0.030	U	200.0	30	ug/L
8270C	AQ	bis(2-Ethylhexyl) phthalate		RES	3.0	J B		RES	7.7	J B	87.9	30	ug/L
	AQ	Di-n-butyl phthalate		RES	1.0	U		RES	0.78	J	200.0	30	ug/L

Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GF

TOTAL Metals

Lot-Sample #...: A0G140402-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.66 B**	**1.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35M91AL**
		Dilution Factor: 1		Analysis Time..: 17:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15/10	L35M91A1
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**11.0**	**10.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35M91AK**
		Dilution Factor: 1		Analysis Time..: 17:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GF

TOTAL Metals

Lot-Sample #...: A0G140402-009 Matrix.....: WG
Date Sampled...: 07/13/10 15:49 Date Received..: 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NC1AQ
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**33700**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35NC1AE**
		Dilution Factor: 1		Analysis Time..: 17:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**51.1**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NC1AA**
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**221**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NC1AR**
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	**1.4**	**1.0**	**ug/L**	**SW846 6020**	**07/15-07/31/10**	**L35NC1AF**
		Dilution Factor: 1		Analysis Time..: 17:21	Analyst ID.....: 001576	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**95400**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NC1AT**
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35NC1AG
		Dilution Factor: 1		Analysis Time..: 17:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**28.5**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NC1AU**
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	**43.0**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NC1AV**
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	**48.3**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NC1AW**
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GF

TOTAL Metals

Lot-Sample #...: A0G140402-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	78800	50.0	ug/L	SW846 6020	07/15-07/30/10	L35NC1AH
		Dilution Factor: 1		Analysis Time..: 17:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35NC1A2
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	9500	1000	ug/L	SW846 6010B	07/15/10	L35NC1AX
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	40500	1000	ug/L	SW846 6010B	07/15/10	L35NC1AM
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	955	10.0	ug/L	SW846 6010B	07/15/10	L35NC1AN
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	9250	1000	ug/L	SW846 6010B	07/15/10	L35NC1AP
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	72.1	10.0	ug/L	SW846 6010B	07/15/10	L35NC1A0
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	26.0	3.0	ug/L	SW846 6010B	07/15/10	L35NC1AC
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	0.73 B	2.0	ug/L	SW846 6020	07/15-07/30/10	L35NC1AJ
		Dilution Factor: 1		Analysis Time..: 17:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NC1AD
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GF

TOTAL Metals

Lot-Sample #...: A0G140402-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	0.60 B	1.0	ug/L	SW846 6020	07/15-07/30/10	L35NC1AL
		Dilution Factor: 1		Analysis Time..: 17:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	49.0	10.0	ug/L	SW846 6010B	07/15/10	L35NC1A1
		Dilution Factor: 1		Analysis Time..: 19:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	165	10.0	ug/L	SW846 6020	07/15-07/30/10	L35NC1AK
		Dilution Factor: 1		Analysis Time..: 17:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GF

TOTAL Metals

Lot-Sample #...: A0G140402-012 **Matrix.....:** WG
Date Sampled...: 07/13/10 08:48 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NF1AQ
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35NF1AE
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NF1AA
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**49.0**	10.0	ug/L	SW846 6010B	07/15/10	L35NF1AR
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35NF1AF
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**139000**	1000	ug/L	SW846 6010B	07/15/10	L35NF1AT
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35NF1AG
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.7 B**	5.0	ug/L	SW846 6010B	07/15/10	L35NF1AU
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NF1AV
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NF1AW
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GF

TOTAL Metals

Lot-Sample #...: A0G140402-012 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35NF1AH
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35NF1A2
		Dilution Factor: 1		Analysis Time..: 18:43	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**1690**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NF1AX**
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**64700**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NF1AM**
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**275**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NF1AN**
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**14700**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NF1AP**
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**2.2 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NF1A0**
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35NF1AC
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.45 B**	**2.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35NF1AJ**
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NF1AD
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GF

TOTAL Metals

Lot-Sample #...: A0G140402-012 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35NF1AL
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15/10	L35NF1A1
		Dilution Factor: 1		Analysis Time..: 19:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L35NF1AK
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GF

TOTAL Metals

Lot-Sample #...: A0G140402-014 Matrix.....: WG
Date Sampled...: 07/13/10 10:38 Date Received..: 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NH1AU
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**298**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35NH1AH**
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**5.1**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NH1AE**
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**18.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NH1AV**
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35NH1AJ
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**152000**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NH1AW**
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35NH1AK
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.9 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NH1AX**
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NH1A0
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NH1A1
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GF

TOTAL Metals

Lot-Sample #...: A0G140402-014 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1320**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35NH1AL**
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35NH1AD
		Dilution Factor: 1		Analysis Time..: 18:55	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**1800**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NH1A2**
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**72200**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NH1AQ**
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**310**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NH1AR**
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**49200**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NH1AT**
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15/10	L35NH1AA
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35NH1AF
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/30/10	L35NH1AM
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NH1AG
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GF

TOTAL Metals

Lot-Sample #...: A0G140402-014 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35NH1AP
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15/10	L35NH1AC
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L35NH1AN
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GF

TOTAL Metals

Lot-Sample #...: A0G140402-016 **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NK1CL
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35NK1AL
		Dilution Factor: 1		Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NK1AA
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**75.2**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NK1CP**
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35NK1AP
		Dilution Factor: 1		Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**71100**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NK1CT**
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35NK1AT
		Dilution Factor: 1		Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NK1CW
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NK1C1
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NK1C4
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GF

TOTAL Metals

Lot-Sample #...: A0G140402-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**390**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35NK1AW**
		Dilution Factor: 1		Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35NK1DH
		Dilution Factor: 1		Analysis Time..: 18:24	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**1420**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NK1C7**
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**29000**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NK1CA**
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**237**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NK1CE**
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**6860**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NK1CH**
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15/10	L35NK1DA
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35NK1AE
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/30/10	L35NK1A1
		Dilution Factor: 1		Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NK1AH
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GF

TOTAL Metals

Lot-Sample #...: A0G140402-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35NK1A7
		Dilution Factor: 1		Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15/10	L35NK1DE
		Dilution Factor: 1		Analysis Time..: 19:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L35NK1A4
		Dilution Factor: 1		Analysis Time..: 18:10	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GF

TOTAL Metals

Lot-Sample #...: A0G140402-019 **Matrix.....:** WG
Date Sampled...: 07/13/10 09:00 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NR1AQ
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**29.5 B**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35NR1AE**
		Dilution Factor: 1		Analysis Time..: 18:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**25.6**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NR1AA**
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**62.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NR1AR**
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35NR1AF
		Dilution Factor: 1		Analysis Time..: 18:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**65500**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NR1AT**
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35NR1AG
		Dilution Factor: 1		Analysis Time..: 18:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NR1AU
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NR1AV
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NR1AW
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GF

TOTAL Metals

Lot-Sample #...: A0G140402-019 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**766**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35NR1AH**
		Dilution Factor: 1		Analysis Time..: 18:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35NR1A2
		Dilution Factor: 1		Analysis Time..: 18:54	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**4080**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NR1AX**
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**51500**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NR1AM**
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**43.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NR1AN**
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**25100**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NR1AP**
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15/10	L35NR1A0
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35NR1AC
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/30/10	L35NR1AJ
		Dilution Factor: 1		Analysis Time..: 18:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NR1AD
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GF

TOTAL Metals

Lot-Sample #...: A0G140402-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35NR1AL
		Dilution Factor: 1		Analysis Time..: 18:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15/10	L35NR1A1
		Dilution Factor: 1		Analysis Time..: 20:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L35NR1AK
		Dilution Factor: 1		Analysis Time..: 18:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GF

TOTAL Metals

Lot-Sample #...: A0G140402-021 **Matrix.....:** WG
Date Sampled...: 07/13/10 10:10 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NX1AQ
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35NX1AE
		Dilution Factor: 1		Analysis Time..: 18:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**9.7**	5.0	ug/L	SW846 6010B	07/15/10	L35NX1AA
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**24.2**	10.0	ug/L	SW846 6010B	07/15/10	L35NX1AR
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35NX1AF
		Dilution Factor: 1		Analysis Time..: 18:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**162000**	1000	ug/L	SW846 6010B	07/15/10	L35NX1AT
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35NX1AG
		Dilution Factor: 1		Analysis Time..: 18:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.8 B**	5.0	ug/L	SW846 6010B	07/15/10	L35NX1AU
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NX1AV
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NX1AW
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GF

TOTAL Metals

Lot-Sample #...: A0G140402-021 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**2640**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35NX1AH**
		Dilution Factor: 1		Analysis Time..: 18:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35NX1A2
		Dilution Factor: 1		Analysis Time..: 18:40	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**2230**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NX1AX**
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**67100**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NX1AM**
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**242**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NX1AN**
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**17300**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35NX1AP**
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15/10	L35NX1A0
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35NX1AC
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/30/10	L35NX1AJ
		Dilution Factor: 1		Analysis Time..: 18:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35NX1AD
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GF

TOTAL Metals

Lot-Sample #...: A0G140402-021 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35NX1AL
		Dilution Factor: 1		Analysis Time..: 18:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15/10	L35NX1A1
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L35NX1AK
		Dilution Factor: 1		Analysis Time..: 18:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GF

TOTAL Metals

Lot-Sample #...: A0G140402-023 **Matrix.....:** WG
Date Sampled...: 07/13/10 10:30 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N11AQ
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35N11AE
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**9.9**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N11AA**
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**24.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N11AR**
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35N11AF
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**163000**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N11AT**
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35N11AG
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N11AU
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N11AV
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N11AW
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GF

TOTAL Metals

Lot-Sample #...: A0G140402-023 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**2420**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35N11AH**
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35N11A2
		Dilution Factor: 1		Analysis Time..: 18:44	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**2190**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N11AX**
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**67400**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N11AM**
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**243**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N11AN**
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**16900**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N11AP**
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15/10	L35N11A0
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35N11AC
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/30/10	L35N11AJ
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N11AD
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GF

TOTAL Metals

Lot-Sample #...: A0G140402-023 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35N11AL
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15/10	L35N11A1
		Dilution Factor: 1		Analysis Time..: 20:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L35N11AK
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GF

TOTAL Metals

Lot-Sample #...: A0G140402-025 **Matrix.....:** WG
Date Sampled...: 07/13/10 12:40 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N31AQ
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35N31AE
		Dilution Factor: 1		Analysis Time..: 18:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**29.7**	5.0	ug/L	SW846 6010B	07/15/10	L35N31AA
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**35.5**	10.0	ug/L	SW846 6010B	07/15/10	L35N31AR
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35N31AF
		Dilution Factor: 1		Analysis Time..: 18:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**102000**	1000	ug/L	SW846 6010B	07/15/10	L35N31AT
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35N31AG
		Dilution Factor: 1		Analysis Time..: 18:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N31AU
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N31AV
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N31AW
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GF

TOTAL Metals

Lot-Sample #...: A0G140402-025 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1190**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35N31AH**
		Dilution Factor: 1		Analysis Time..: 18:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35N31A2
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**6380**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N31AX**
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**50400**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N31AM**
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**74.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N31AN**
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**22000**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N31AP**
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15/10	L35N31A0
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35N31AC
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/30/10	L35N31AJ
		Dilution Factor: 1		Analysis Time..: 18:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N31AD
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GF

TOTAL Metals

Lot-Sample #...: A0G140402-025 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35N31AL
		Dilution Factor: 1		Analysis Time..: 18:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15/10	L35N31A1
		Dilution Factor: 1		Analysis Time..: 20:30	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L35N31AK
		Dilution Factor: 1		Analysis Time..: 18:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GF

TOTAL Metals

Lot-Sample #...: A0G140402-027 **Matrix.....:** WG
Date Sampled...: 07/13/10 14:00 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N51AQ
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35N51AE
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**15.8**	**5.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N51AA**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**8.7 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N51AR**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35N51AF
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**203000**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N51AT**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35N51AG
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N51AU
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N51AV
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N51AW
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GF

TOTAL Metals

Lot-Sample #...: A0G140402-027 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**2300**	**50.0**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35N51AH**
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35N51A2
		Dilution Factor: 1		Analysis Time..: 18:38	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**2410**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N51AX**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**150000**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N51AM**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**469**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N51AN**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**35600**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N51AP**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15/10	L35N51A0
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35N51AC
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/30/10	L35N51AJ
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N51AD
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GF

TOTAL Metals

Lot-Sample #...: A0G140402-027 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35N51AL
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/21/10	L35N51A1
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L35N51AK
		Dilution Factor: 1		Analysis Time..: 19:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GF

TOTAL Metals

Lot-Sample #...: A0G140402-029 **Matrix.....:** WG
Date Sampled...: 07/13/10 15:50 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N71AQ
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35N71AE
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N71AA
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**49.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N71AR**
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35N71AF
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**665000**	**5000**	**ug/L**	**SW846 6010B**	**07/15-07/21/10**	**L35N71AT**
		Dilution Factor: 5		Analysis Time..: 13:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3170		
Cadmium	**0.26 B**	**0.50**	**ug/L**	**SW846 6020**	**07/15-07/30/10**	**L35N71AG**
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N71AU
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N71AV
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N71AW
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GF

TOTAL Metals

Lot-Sample #...: A0G140402-029 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35N71AH
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35N71A2
		Dilution Factor: 1		Analysis Time..: 18:41	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**7120**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N71AX**
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**287000**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N71AM**
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1380**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N71AN**
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**52300**	**1000**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N71AP**
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**6.2 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/15/10**	**L35N71A0**
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35N71AC
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/30/10	L35N71AJ
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N71AD
		Dilution Factor: 1		Analysis Time..: 20:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GF

TOTAL Metals

Lot-Sample #...: A0G140402-029 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35N71AL
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/21/10	L35N71A1
		Dilution Factor: 1		Analysis Time..: 13:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L35N71AK
		Dilution Factor: 1		Analysis Time..: 19:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

TOTAL Metals

Lot-Sample #...: A0G140402-030 **Matrix.....:** WQ
Date Sampled...: 07/13/10 16:20 **Date Received..:** 07/14/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0196015						
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N81AU
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35N81AH
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N81AQ
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	07/15/10	L35N81AV
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35N81AJ
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	07/15/10	L35N81AW
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L35N81AK
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N81AX
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N81A0
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N81A1
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

TOTAL Metals

Lot-Sample #...: A0G140402-030 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L35N81AL
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L35N81A8
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	07/15/10	L35N81A2
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	07/15/10	L35N81A3
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	07/15/10	L35N81A4
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6010B	07/15/10	L35N81A5
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/15/10	L35N81A6
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L35N81AR
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/30/10	L35N81AM
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L35N81AT
		Dilution Factor: 1		Analysis Time..: 21:00	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

TOTAL Metals

Lot-Sample #...: A0G140402-030 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L35N81AP
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15-07/21/10	L35N81A7
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L35N81AN
		Dilution Factor: 1		Analysis Time..: 19:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G140402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A0G150000-015 **Prep Batch #...:** 0196015						
Aluminum	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L37ED1AA
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	07/15-07/30/10	L37ED1AF
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	07/15/10	L37ED1AJ
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	07/15/10	L37ED1AN
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	07/15-07/31/10	L37ED1AC
		Dilution Factor: 1				
		Analysis Time..: 17:10		Analyst ID.....: 001576	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	07/15-07/30/10	L37ED1AD
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	07/15/10	L37ED1AP
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	07/15/10	L37ED1AR
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	07/15/10	L37ED1AQ
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	07/15/10	L37ED1AT
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	07/15-07/30/10	L37ED1AE
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 000079	Instrument ID..: I8	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G140402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	07/15/10	L37ED1AK
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	07/15/10	L37ED1AV
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	07/15/10	L37ED1AW
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	07/15/10	L37ED1A2
		Dilution Factor: 1				
		Analysis Time..: 18:20		Analyst ID.....: 001576	Instrument ID..: H4	
Nickel	ND	10.0	ug/L	SW846 6010B	07/15/10	L37ED1A0
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	07/15/10	L37ED1AU
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	07/15/10	L37ED1AL
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	07/15/10	L37ED1AM
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6010B	07/15/10	L37ED1AX
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Thallium	ND	1.0	ug/L	SW846 6020	07/15-07/30/10	L37ED1AH
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	07/15/10	L37ED1A1
		Dilution Factor: 1				
		Analysis Time..: 18:32		Analyst ID.....: 001637	Instrument ID..: I5	
Zinc	ND	10.0	ug/L	SW846 6020	07/15-07/30/10	L37ED1AG
		Dilution Factor: 1				
		Analysis Time..: 17:01		Analyst ID.....: 000079	Instrument ID..: I8	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G140402 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** September 2, 2010
STL Sample Delivery Group: A0G140403 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 13, 2010, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0G140403.

Field Sample ID	Analytes	Method
FWGLL12mw-128c-1549-GW	Explosives	SW846 8330
FWGLL12mw-243c-1561-GW	Nitroguanidine	SW846 M8330
FWGLL12mw-187c-1557-GW	Nitrocellulose	TAL- SOP WS-WC-0050
FWGLL12mw-244c-1562-GW		
FWGLL12mw-186c-1556-GW		
FWGLL12mw-189c-1559-GW		
FWGSCFmw-003-1517-GW		
FWGLL12mw-182c-1552-GW		
FWGLL12mw-107c-1547-GW		
FWGLL12mw-DUP4-1569-GW		
FWGLL12mw-246c-1564-GW		
FWGLL12mw-184c-1554-GW		
FWGLL12mw-185c-1555-GW		
FWGEQUIPRinse3-1580-GW		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004, Analytical Methods, and Laboratory Standard Operating Procedures*. These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** September 2, 2010
STL Sample Delivery Group: A0G140403 **Revision:** 0

Explosives- 8330

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration Criteria
- ICV and CCV criteria
- Retention time criteria
- MDL Verification
- Surrogate recovery criteria
- Method and equipment blanks free from contamination
- MS Recovery Criteria
- LCS Recovery Criteria

LC9-4-Nitrotoluene appears to not have been spiked and/or recover in the calibration verifications or MRL verifications; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation and the %D for 2-nitrotoluene were within criteria.

MRL Recovery

LC10- the following outliers were noted:

- The MRL analyzed 8/5/10 @ 0958 recovered above control limits with a %D of 54% for RDX and for tetryl with a %D of 39%.

No qualifications were required as there were no detected RDX or tetryl concentrations bracketed by this MRL check.

Blanks

Due to excessive particulates, samples FWGLL12mw-128c-1549-GW, FWGLL12mw-243c-1561-GW, FWGLL12mw-107c-1547-GW and FWGLL12mw-DUP4-1569-GW required filtration. A filter blank was prepared and analyzed with no detected concentrations reported.

Field Duplicate RPD

Sample FWGLL12mw-DUP4-1569-GW was the field duplicate for FWGLL12mw-107c-1547-GW. The duplicate RPD was above control limits for 1, 3,5-trinitrobenzene and tetryl at 200%. The 1, 3,5-trinitrobenzene and tetryl results for FWGLL12mw-107c-1547-GW were qualified as estimated, "J".

Nitroguanidine- 8330M

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MRL level verification criteria
- MDL verification criteria
- ICV and CCV criteria
- The method blank and equipment blanks were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** September 2, 2010
STL Sample Delivery Group: A0G140403 **Revision:** 0

Nitrocellulose - 353.2

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Sample preparation criteria
- Initial Calibration criteria
- ICV and CCV criteria
- The method and equipment blanks were free from contamination
- MRL Level Verification criteria
- ICB and CCBs were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- MS/MSD percent recoveries
- Nitrocellulose assay criteria

No QC outliers were noted.

Data Validator: 9/2/10
Date:

2nd Level Data Review: Erik Corbin
Date: 9/9/10

CASE NARRATIVE

A0G140403

The following report contains the analytical results for fourteen water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 030240.0006. The samples were received July 14, 2010, according to documented sample acceptance procedures.

The 8330 Explosives, Nitroguanidine, and 353.2 Nitrocellulose as N analyses were performed at the TestAmerica West Sacramento laboratory. Refer to TestAmerica West Sacramento narrative included in their data package for additional information.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 06, 2010. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 1.2 to 5.0°C.

See TestAmerica's Cooler Receipt Form for additional information.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

GENERAL CHEMISTRY

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

Case Narrative

TestAmerica West Sacramento Project Number A0G140403

General Comments
Following US EPA Region V guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. The reasons for manual integration have been documented on the affected chromatograms, which are provided in the raw data package. The raw data also includes the original chromatograms prior to any manual integrations being performed. The following samples and analytes required manual integrations:

Instrument LC10
Initial calibration (ICAL) level 3 – PETN
ICAL level 8 – Nitroglycerin
Sample 1 – 3,4-Dinitrotoluene
Sample 1MS & 1MSD – HMX, Tetryl, 3,4-Dinitrotoluene, Nitrobenzene, 4-Amino-2,6-Dinitrotoluene, 2,4,6-Trinitrotoluene, & 2-Amino-4,6-Dinitrotoluene
Sample 3 - 3,4-Dinitrotoluene
Sample 5 - Tetryl
Sample 8 – 1,3,5-Trinitrotoluene & 3,4-Dinitrotoluene
Sample 9 - 3,4-Dinitrotoluene
Sample 10 - 3,4-Dinitrotoluene
Sample 13 - HMX & 3,4-Dinitrotoluene

WATER, 8330, Explosives
Sample(s): 1, 1MS, 1MSD, 2, 9, 10
These samples were filtered prior to extraction since they contained excessive sediment/particulates. A filtered blank was included with the batch.

Sample(s): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
The beginning method reporting limit standard did not meet % difference criteria for RDX (54%) & Tetryl (39%). Since the associated sample results were all "ND" at or above the reporting limit, no corrective action was performed.

There were no other anomalies associated with this project.

SAMPLE SUMMARY

A0G140403

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L35PC	001	FWGLL12mw-128C-1549-GW	07/13/10	09:09
L35PD	002	FWGLL12mw-243C-1561-GW	07/13/10	12:17
L35PE	003	FWGLL12mw-187C-1557-GW	07/13/10	13:51
L35PF	004	FWGLL12mw-244C-1562-GW	07/13/10	15:49
L35PG	005	FWGLL12mw-186C-1556-GW	07/13/10	08:48
L35PJ	006	FWGLL12mw-189C-1559-GW	07/13/10	10:38
L35PK	007	FWGSCFmw-003-1517-GW	07/13/10	12:58
L35PL	008	FWGLL12mw-182C-1552-GW	07/13/10	09:00
L35PM	009	FWGLL12mw-107C-1547-GW	07/13/10	10:10
L35PN	010	FWGLL12mw-DUP4-1569-GW	07/13/10	10:30
L35PP	011	FWGLL12mw-246C-1564-GW	07/13/10	12:40
L35PQ	012	FWGLL12mw-184C-1554-GW	07/13/10	14:00
L35PR	013	FWGLL12mw-185C-1555-GW	07/13/10	15:50
L35PT	014	FWGEQUIPRINSE3-1580-GW	07/13/10	16:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica Laboratory location: North Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact			
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb
Address: 1800 Carillon Blvd.	Telephone: 513-825-7530	Telephone: 513-825-7500	Telephone: 330-497-9396
City/State/Zip: Cincinnati OH 45240	Email:	Analysis Turnaround Time	
Phone: 513-825-7500		TAT if different from below per SOW	
Project Name: RVAAP(OH)	Method of Shipment/Carrier: Lab pickup	☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	
Project Number: 030240.0006	Shipping/Tracking No:		
PO# 16726			

COC No: 1 of 1 COCs

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered (Y/N)	Sample (Y/N)	Analyses: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	NO2/NO3 353.2	Metals 6010/6020 7470		Sample Specific Notes / Special Instructions: Cooler ID
FWG Team 1 - Trip	7/13/10	08:00		X						2							X										A85
FWGLL12mw-128C-1549-GW	7/13/10	09:09		X				3		9	3		27		N	G	X	X	X	X	X	X	X	X			MS/MSD 0411, 241-1033, 680-114
FWGLL12mw-128C-1549-GF	7/13/10	09:09		X					3						Y	G									X		MS/MSD 0411, 241-1033, 680-114
FWGLL12mw-248C-1561-GW	7/13/10	12:17		X				1		3	1		9		N	G	X	X	X	X	X	X	X	X			PH4
FWGLL12mw-248C-1561-GF	7/13/10	12:17		X					1						Y	G									X		PH4
FWGLL12mw-187C-1557-GW	7/13/10	13:15		X				1		3	1		9		N	G	X	X	X	X	X	X	X	X			R2
FWGLL12mw-187C-1557-GF	7/13/10	13:51		X					1						Y	G									X		R2
FWGLL12mw-244C-1562-GW	7/13/10	15:49		X				1		3	1		9		N	G	X	X	X	X	X	X	X	X			A85
FWGLL12mw-244C-1562-GF	7/13/10	15:41		X					1						Y	G									X		A85
									EC	7/13/10																	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Metals are field filtered

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	7/13/10 1820	[signature]	TestAmerica	7/13/10 1820
[signature]	TestAmerica	7/13/10 1915			
			Received in Laboratory by: [signature]	Company: TAL NC	Date/Time: 7/14/10 0700

Temps may not meet requirements if sample collection is close to pick up time. ALL VOAs in cooler A85

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TAL-0018 (1008)

North Canton

Chain of Custody Record

TESTAMERICA — SEVERN TRENT STL — Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Muller	7-13-10	336187
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page / of**
1800 CARILLON BLVD	5138257500 (fax 7495)	330497396	1 / 1
City / State / Zip Code	**Site Contact / Lab Contact**		
CINCINNATI / OH / 45240	E. CORBIN / M. LOEB		
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP Ravenna Oh	LAB PICK UP		
Contract/Purchase Order/Quote No.			
PO 16726 PM30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOC	SVOC	Pest	PCB	6010	Perchlorate	Cyanide	Nitrate	NO2 NO3	Special Instructions/ Conditions of Receipt
FWG Team 2 Trip	7-13-10	0800		X									X									Cooler ID # C119
FWGLL12mw-186C-1556-GW	"	0848		X			9	1		3	1		X	X	X	X	X	X	X		X	L751
FWGLL12mw-186C-1556-GF	"	"		X					1											X		L751
FWGLL12mw-189C-1559-GW	"	1038		X			9	1		3	1		X	X	X	X	X	X	X		X	12009
FWGLL12mw-189C-1559-GF	"	"		X					1											X		12009
FWGSCFmw-003-1517-GW	"	1258		X			2	3		9	3		X	X	X	X	X	X	X		X	MS/MSD 727 C119 M12
FWGSCFmw-003-1517-GF	"	"		X					3											X		MS/MSD 727 C119 M12
					EC				7/13/10													

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

(Turn Around Time Required)
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other person

QC Requirements (Specify)
Metals GF were field filtered

1. Relinquished By	Date	Time	1. Received By	Date	Time
Erik Corbin EQ	7/13/10	1820	[signature]	7/13/10	1820
2. Relinquished By	**Date**	**Time**	**2. Received By**	**Date**	**Time**
[signature]	7/13/10	1915	[signature]	7/14/10	0700
3. Relinquished By	**Date**	**Time**	**3. Received By**	**Date**	**Time**

Comments
Temps may not meet requirements if lab pickup is close to sample collection time.
All VOAs in cooler C119

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

15

Chain of Custody Record

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

COC No: LS001 1 of 2 COCs

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:
Company Name: EQM	John Miller	E. Corbin	M Lock
Address: 1800 Carillon Blvd	Telephone: 513 825 7500	Telephone: 513 825 7500	Telephone: 303 497 9396
City/State/Zip: Cincinnati, OH 45240	Email: jmiller@eqm.com	Site/Project Turnaround Time	Analyses
Phone: 513 825 7500		TAT if different from below ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab - Pick up		
Project Number: 030240.0006	Shipping/Tracking No: NA		
PO# 107124			

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Field Filtered	Perform MS/MSD	VOC 8260B	SVOC 8270C	TEST 8081	CVAA 8015	ICP 6010	Isotopic Uranium	Metals 6020	NO3/NO2 353.2	Sample Specific Notes / Special Instructions:
FWGTeam3-Trip	7/7/10	0800		X						2						X									465
FWGLL12MW182C-1552-GW	7-13-10	0900		X				1		3	1		9			X	X	X	X	X	X	X		X	B81
FWGLL12MW182C-1552-GF		0900		X					1						Y								X		B81
FWGLL12MW107C-1547-GW		1010		X				1		3	1		9			X	X	X	X	X	X	X		X	JC3
FWGLL12MW107C-1547-GF		1010		X					1						Y								X		JC3
FWGLL12MWDUP4-1569-GW		1030		X				1		3	1		9			X	X	X	X	X	X	X		X	465
FWGLL12MWDUP4-1569-GF		1030		X					1						Y								X		465
FWGLL12MW246C-1564-GW		1240		X				1		3	1		9			X	X	X	X	X	X	X		X	114
FWGLL12MW246C-1564-GF		1240		X					1						Y								X		114
FWGLL12MW158C-1564-GW	7-13-10	1400		X				1		3	1		9			X	X	X	X	X	X	X		X	A49

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

All metals filtered in field

Temps may not meet requirements if sample time is close to pick up time

* ALL VOA'S IN COOLER 465 *

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Eric Corbin	EQ	7/13/10 1820		TestAmerica	7/13/10 1820
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	7/13/10 1915			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA NC	7/14/10 0700

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TAL-0018 (1008)

North Canton

Chain of Custody Record

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact			
Company Name: EQM	Client Project Manager: John Miller	Site Contact: E. Corbin	Lab Contact: M. Loch
Address: 1800 Carillon Blvd	Telephone: 513 825 7500	Telephone: 513 825 7500	Telephone: 303 417 9376
City/State/Zip: Cincinnati OH 45240	Email: JMiller@eqm.com		
Phone: 513 825 - 7500			
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Pick Up		
Project Number: 030240.0001c	Shipping/Tracking No: NA		
PO# 167216			

COC No: LS002

2 of 2 COCs

TAT if different from below
- ☒ 3 weeks
- ☐ 2 weeks
- ☐ 1 week
- ☐ 2 days
- ☐ 1 day

Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Cooler	VOC 8260	SVOC 8270	TEST 8081	PCB 8082	Explo 8330	Propellants 8015	Metals 6010/7470	ND IND 353.2	Sample Specific Notes / Special Instructions:
FWGLL12MW184C-1554-GF	7/13/10	1400		X					1						Y							X		A49
FWGLL12MW185C-1555-GW		1550		X				1		3	1		9			X	X	X	X	X	X		X	E-120
FWGLL12MW185C-1555-GF		1550		X					1						Y							X		E-120
FWGEQUIPRINSE3-1580GW		1620		X				1	1	3	1		9		N	X	X	X	X	X	X	X	X	8

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
All Metals filtered in field. EQUIPRINSE3 Not field filtered *ALL VOA's in COOLER 465*
Temps may not meet requirements if sample time is close to pick up time

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EQ	7/13/10 1820		TestAmerica	7/13/10 1820
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	7/13/10 1915			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL NC	7/14/10 0700

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TAL-0018 (1008)

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number: ADG140403**
North Canton Facility

Client EQM Project RVAAP By: Donna M
Cooler Received on 7/14/10 Opened on 7/14/10 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 18 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt °C See back of form for multiple coolers/temps ☐
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot#* 051010-HNO_3; *Sulfuric Acid Lot#* 121709-H_2SO_4; *Sodium Hydroxide Lot#* 100108 -*NaOH; Hydrochloric Acid Lot#* 092006-*HCl; Sodium Hydroxide and Zinc Acetate Lot#* 100108-$(CH_3COO)_2ZN$/*NaOH.* What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
128C-1549	<2 <2 <2 <2 <2 <2 7 12 7 12 7 12	7/14/10	[illegible]
243C-1561	<2 <2 <2 7 12		
187C-1557	<2 <2 <2 7 12		
244C-1562	<2 <2 <2 7 12		
186C-1556	<2 <2 <2 7 12		
189C-1559	<2 <2 <2 7 12		
003-1517	<2 <2 <2 <2 <2 <2 7 12 7 12 7 12		
182C-1552	<2 <2 <2 7 12		

TestAmerica Multiple Cooler Receipt Form/Narrative — Lot Number: A06140403
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
B51	1.6	IR	Ice	
IC3	4.2	"	"	
465	3.9			
114	4.0			
A49	4.3			
E-120	3.7			
8	2.9			

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
107C-1547	<2 <2 7/12	7/14/10	TJ
DUP4-1569	<2 <2 7/12		
246C-1564	<2 <2 7/12		
184C-1554	<2 <2 7/12		
185C-1555	<2 <2 7/12		
EquipRinse3-1580	<2 <2 7/12		

Cooler #	Temp. °C	Method	Coolant
~~Ag5~~ @ 7/14/10	~~3.2~~ @ 7/14/10	IR	Wet ice
0411	3.7		
241-1033	2.9		
1080-114	5.0		
PH4	1.2		
R2	2.3		
A85	2.9		
L75-1	2.4		
12009	2.1		
M12	3.7		
727	2.1		
C119	3.8		

Discrepancies Cont'd:

8330 EXPLOSIVES DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

SDG: A0G140403 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 5.0 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓				LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?		✓		LC10- the following outliers were noted: • The MRL analyzed 8/5/10 @ 0958 recovered above control limits with a %D of 54% for RDX and for tetryl with a %D of 39%. No qualifications were required as there were no detected RDX or tetryl concentrations bracketed by this MRL check.	LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			LC10 7/30/10 , LC9 7/21/10	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve).			✓		STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			LC10 7/31/10 @0246 LC9 7/22/10 @0641- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical	✓				STL SOP Section 10.9

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

SDG: A0G140403 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
run?					
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓			LC9- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓			Due to excessive particulates, samples FWGLL12mw-128c-1549-GW, FWGLL12mw-243c-1561-GW, FWGLL12mw-107c-1547-GW and FWGLL12mw-DUP4-1569-GW required filtration. A filter blank was prepared and analyzed with no detected concentrations reported.	LCG Attachment A Section 5.6
16. Were target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR.	LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓				
18. Were target analytes in the field blank analyses < ½ the MRL?	✓			Checked by ADR.	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?		✓		Sample FWGLL12mw-DUP4-1569-GW was the field duplicate for FWGLL12mw-107c-1547-GW. The duplicate RPD was above control limits for 1, 3,5-trinitrobenzene and tetryl at 200%. The 1, 3,5-trinitrobenzene and tetryl results for FWGLL12mw-107c-1547-GW were qualified as estimated, "J".	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Were the RPDs ≤ 40%?			✓	No concentrations were reported above the RL.	LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR.	QAPP Table 3-2 Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

SDG: A0G140403 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments: Only LC10 was evaluated as there were no reported concentrations above the RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GW

HPLC

Lot-Sample #...: A0G140403-001 **Work Order #...:** L35PC1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/05/10
Prep Batch #...: 0200132
Dilution Factor: 1 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.088
3-Nitrotoluene	ND	0.50	ug/L	0.057
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.65	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GW

HPLC

Lot-Sample #...: A0G140403-002 **Work Order #...:** L35PD1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 12:17 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/05/10
Prep Batch #...: 0200132
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	ND	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	**0.38 J**	**0.63**	**ug/L**	**0.32**
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GW

HPLC

Lot-Sample #...: A0G140403-003 **Work Order #...:** L35PE1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 13:51 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/05/10
Prep Batch #...: 0200132
Dilution Factor: 0.99 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.099	ug/L	0.030
1,3-Dinitrobenzene	ND	0.099	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.099	ug/L	0.099
2,4,6-Trinitrotoluene	ND	0.099	ug/L	0.050
2,4-Dinitrotoluene	ND	0.099	ug/L	0.050
2,6-Dinitrotoluene	ND	0.099	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.087
3-Nitrotoluene	ND	0.50	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.099	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.087
HMX	ND	0.099	ug/L	0.036
Nitrobenzene	ND	0.099	ug/L	0.050
Nitroglycerin	ND	0.64	ug/L	0.33
RDX	ND	0.099	ug/L	0.036
PETN	ND	0.64	ug/L	0.30
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GW

HPLC

Lot-Sample #...: A0G140403-004 **Work Order #...:** L35PF1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 15:49 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/05/10
Prep Batch #...: 0200132
Dilution Factor: 1.02 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.031
1,3-Dinitrobenzene	ND	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.051
2,4-Dinitrotoluene	ND	0.10	ug/L	0.051
2,6-Dinitrotoluene	ND	0.10	ug/L	0.051
2-Nitrotoluene	ND	0.51	ug/L	0.090
3-Nitrotoluene	ND	0.51	ug/L	0.058
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.051
4-Nitrotoluene	ND	0.51	ug/L	0.090
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.051
Nitroglycerin	ND	0.66	ug/L	0.34
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.66	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GW

HPLC

Lot-Sample #...: A0G140403-005 **Work Order #...:** L35PG1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 08:48 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/05/10
Prep Batch #...: 0200132
Dilution Factor: 1.06 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.032
1,3-Dinitrobenzene	ND	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.053
2,4-Dinitrotoluene	ND	0.11	ug/L	0.053
2,6-Dinitrotoluene	ND	0.11	ug/L	0.053
2-Nitrotoluene	ND	0.53	ug/L	0.093
3-Nitrotoluene	ND	0.53	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.053
4-Nitrotoluene	ND	0.53	ug/L	0.093
HMX	ND	0.11	ug/L	0.038
Nitrobenzene	ND	0.11	ug/L	0.053
Nitroglycerin	ND	0.69	ug/L	0.35
RDX	ND	0.11	ug/L	0.038
PETN	ND	0.69	ug/L	0.32
Tetryl	**0.054 J**	**0.11**	**ug/L**	**0.053**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GW

HPLC

Lot-Sample #...: A0G140403-006 **Work Order #...:** L35PJ1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 10:38 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/05/10
Prep Batch #...: 0200132
Dilution Factor: 1.06 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.032
1,3-Dinitrobenzene	ND	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.053
2,4-Dinitrotoluene	ND	0.11	ug/L	0.053
2,6-Dinitrotoluene	ND	0.11	ug/L	0.053
2-Nitrotoluene	ND	0.53	ug/L	0.093
3-Nitrotoluene	ND	0.53	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.053
4-Nitrotoluene	ND	0.53	ug/L	0.093
HMX	ND	0.11	ug/L	0.038
Nitrobenzene	ND	0.11	ug/L	0.053
Nitroglycerin	ND	0.69	ug/L	0.35
RDX	ND	0.11	ug/L	0.038
PETN	ND	0.69	ug/L	0.32
Tetryl	**0.059 J**	**0.11**	**ug/L**	**0.053**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GW

HPLC

Lot-Sample #...: A0G140403-007 **Work Order #...:** L35PK1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/05/10
Prep Batch #...: 0200132
Dilution Factor: 1 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.088
3-Nitrotoluene	ND	0.50	ug/L	0.057
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.65	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GW

HPLC

Lot-Sample #...: A0G140403-008 **Work Order #...:** L35PL1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 09:00 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/05/10
Prep Batch #...: 0200132
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.031 J**	**0.098**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	**0.068 J**	**0.098**	**ug/L**	**0.049**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GW

HPLC

Lot-Sample #...:	A0G140403-009	**Work Order #...:**	L35PM1AA	**Matrix.....:**	WG
Date Sampled...:	07/13/10 10:10	**Date Received..:**	07/14/10		
Prep Date.....:	07/19/10	**Analysis Date..:**	08/06/10		
Prep Batch #...:	0200132				
Dilution Factor:	0.98	**Method.....:**	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.058 J**	**0.098**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	**0.074 J**	**0.098**	**ug/L**	**0.049**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GW

HPLC

Lot-Sample #...: A0G140403-010 **Work Order #...:** L35PN1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 10:30 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/06/10
Prep Batch #...: 0200132
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GW

HPLC

Lot-Sample #...: A0G140403-011 **Work Order #...:** L35PP1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 12:40 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/06/10
Prep Batch #...: 0200132
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GW

HPLC

Lot-Sample #...: A0G140403-012 **Work Order #...:** L35PQ1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 14:00 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/06/10
Prep Batch #...: 0200132
Dilution Factor: 1.02 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.031
1,3-Dinitrobenzene	ND	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.051
2,4-Dinitrotoluene	ND	0.10	ug/L	0.051
2,6-Dinitrotoluene	ND	0.10	ug/L	0.051
2-Nitrotoluene	ND	0.51	ug/L	0.090
3-Nitrotoluene	ND	0.51	ug/L	0.058
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.051
4-Nitrotoluene	ND	0.51	ug/L	0.090
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.051
Nitroglycerin	ND	0.66	ug/L	0.34
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.66	ug/L	0.31
Tetryl	**0.055 J**	**0.10**	**ug/L**	**0.051**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GW

HPLC

Lot-Sample #...: A0G140403-013 **Work Order #...:** L35PR1AA **Matrix.....:** WG
Date Sampled...: 07/13/10 15:50 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/06/10
Prep Batch #...: 0200132
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	**0.076 J**	**0.098**	**ug/L**	**0.035**
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	**0.075 J**	**0.098**	**ug/L**	**0.049**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

HPLC

Lot-Sample #...: A0G140403-014 **Work Order #...:** L35PT1AA **Matrix.....:** WQ
Date Sampled...: 07/13/10 16:20 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/06/10
Prep Batch #...: 0200132
Dilution Factor: 1.05 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.032
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.052
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.092
3-Nitrotoluene	ND	0.52	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.052
4-Nitrotoluene	ND	0.52	ug/L	0.092
HMX	ND	0.10	ug/L	0.038
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.68	ug/L	0.35
RDX	ND	0.10	ug/L	0.038
PETN	ND	0.68	ug/L	0.32
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G140403 **Work Order #...:** L4C5N1AA **Matrix.....:** WATER
MB Lot-Sample #: G0G190000-132

Prep Date.....: 07/19/10
Analysis Date..: 08/05/10 **Prep Batch #...:** 0200132
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	ND	0.10	ug/L	SW846 8330
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G140403 **Work Order #...:** L4C5N1AD **Matrix.....:** WATER
MB Lot-Sample #: G0G190000-132

Prep Date.....: 07/19/10
Analysis Date..: 08/05/10 **Prep Batch #...:** 0200132
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	ND	0.10	ug/L	SW846 8330
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G140403 **Work Order #...:** L4C5N1AC **Matrix.....:** WATER
LCS Lot-Sample#: G0G190000-132
Prep Date.....: 07/19/10 **Analysis Date..:** 08/05/10
Prep Batch #...: 0200132
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	106	(53 - 135)	**SW846 8330**
1,3-Dinitrobenzene	108	(54 - 120)	**SW846 8330**
2-Amino-4,6-dinitrotoluene	104	(53 - 120)	**SW846 8330**
2,4,6-Trinitrotoluene	101	(37 - 120)	**SW846 8330**
2,4-Dinitrotoluene	102	(58 - 136)	**SW846 8330**
2,6-Dinitrotoluene	102	(52 - 144)	**SW846 8330**
2-Nitrotoluene	86	(52 - 120)	**SW846 8330**
3-Nitrotoluene	88	(48 - 136)	**SW846 8330**
4-Amino-2,6-dinitrotoluene	100	(58 - 159)	**SW846 8330**
4-Nitrotoluene	91	(46 - 136)	**SW846 8330**
HMX	99	(45 - 140)	**SW846 8330**
Nitrobenzene	95	(49 - 120)	**SW846 8330**
Nitroglycerin	104	(60 - 120)	**SW846 8330**
RDX	104	(39 - 120)	**SW846 8330**
PETN	102	(60 - 120)	**SW846 8330**
Tetryl	102	(30 - 120)	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G140403 **Work Order #...:** L35PC1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140403-001 L35PC1AD-MSD
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/05/10
Prep Batch #...: 0200132
Dilution Factor: 0.99

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	97	(50 - 150)			SW846 8330
	95	(50 - 150)	1.6	(0-50)	SW846 8330
1,3-Dinitrobenzene	102	(50 - 150)			SW846 8330
	104	(50 - 150)	2.0	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	100	(50 - 150)			SW846 8330
	101	(50 - 150)	1.4	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	96	(50 - 150)			SW846 8330
	97	(50 - 150)	1.6	(0-50)	SW846 8330
2,4-Dinitrotoluene	96	(50 - 150)			SW846 8330
	97	(50 - 150)	1.7	(0-50)	SW846 8330
2,6-Dinitrotoluene	94	(50 - 150)			SW846 8330
	96	(50 - 150)	1.8	(0-50)	SW846 8330
2-Nitrotoluene	82	(50 - 150)			SW846 8330
	85	(50 - 150)	3.2	(0-50)	SW846 8330
3-Nitrotoluene	90	(50 - 150)			SW846 8330
	87	(50 - 150)	2.6	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	94	(50 - 150)			SW846 8330
	96	(50 - 150)	2.3	(0-50)	SW846 8330
4-Nitrotoluene	89	(50 - 150)			SW846 8330
	91	(50 - 150)	2.6	(0-50)	SW846 8330
HMX	94	(50 - 150)			SW846 8330
	96	(50 - 150)	3.1	(0-50)	SW846 8330
Nitrobenzene	89	(50 - 150)			SW846 8330
	90	(50 - 150)	2.2	(0-50)	SW846 8330
Nitroglycerin	102	(50 - 150)			SW846 8330
	103	(50 - 150)	2.1	(0-50)	SW846 8330
RDX	93	(50 - 150)			SW846 8330
	97	(50 - 150)	3.8	(0-50)	SW846 8330
PETN	102	(50 - 150)			SW846 8330
	103	(50 - 150)	1.2	(0-50)	SW846 8330
Tetryl	94	(50 - 150)			SW846 8330
	96	(50 - 150)	2.2	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G140403 **Work Order #...:** L35PC1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140403-001 L35PC1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)
	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G140403 **Work Order #...:** L35PK1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140403-007 L35PK1AD-MSD
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10
Prep Date.....: 07/19/10 **Analysis Date..:** 08/05/10
Prep Batch #...: 0200132
Dilution Factor: 1.05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	102	(50 - 150)			SW846 8330
	101	(50 - 150)	6.2	(0-50)	SW846 8330
1,3-Dinitrobenzene	107	(50 - 150)			SW846 8330
	106	(50 - 150)	6.2	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	105	(50 - 150)			SW846 8330
	103	(50 - 150)	6.4	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	100	(50 - 150)			SW846 8330
	99	(50 - 150)	6.3	(0-50)	SW846 8330
2,4-Dinitrotoluene	102	(50 - 150)			SW846 8330
	100	(50 - 150)	6.8	(0-50)	SW846 8330
2,6-Dinitrotoluene	100	(50 - 150)			SW846 8330
	98	(50 - 150)	7.0	(0-50)	SW846 8330
2-Nitrotoluene	100	(50 - 150)			SW846 8330
	98	(50 - 150)	7.2	(0-50)	SW846 8330
3-Nitrotoluene	100	(50 - 150)			SW846 8330
	99	(50 - 150)	6.8	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	101	(50 - 150)			SW846 8330
	99	(50 - 150)	6.5	(0-50)	SW846 8330
4-Nitrotoluene	105	(50 - 150)			SW846 8330
	106	(50 - 150)	4.2	(0-50)	SW846 8330
HMX	99	(50 - 150)			SW846 8330
	97	(50 - 150)	7.1	(0-50)	SW846 8330
Nitrobenzene	106	(50 - 150)			SW846 8330
	105	(50 - 150)	6.0	(0-50)	SW846 8330
Nitroglycerin	105	(50 - 150)			SW846 8330
	102	(50 - 150)	7.3	(0-50)	SW846 8330
RDX	102	(50 - 150)			SW846 8330
	101	(50 - 150)	6.2	(0-50)	SW846 8330
PETN	104	(50 - 150)			SW846 8330
	103	(50 - 150)	6.3	(0-50)	SW846 8330
Tetryl	116	(50 - 150)			SW846 8330
	117	(50 - 150)	4.3	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G140403 **Work Order #...:** L35PK1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140403-007 L35PK1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)
	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica West Sacramento

A-000003.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 8/5/2010 9:58 Operator: RN
DataFile: LC10.I\08052010.B\A-000003.D Vial Num: 81
Instrument ID: LC10

Sample : **STD_MRL 10GCSV0309 8330 5ng/mL** Method File: LC10.I\08052010 B\8330AB.M
Start Cal Date: 7/30/2010 18:51 End Cal Date: 7/31/2010 0:23

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE SubList: CAL.SUB SpikeList: 0
Samp. Info: STD_MRL 10GCSV0309 8330 5ng/mL;2;
Misc. Info: ;9;;;;3;CAL.SUB;0;1;

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.13	1092	20.4400<	20	2%	Acceptable		16.13	1860	18.8700	20	-6%	Acceptable		(±15)	
HMX	5.31	622	4.9480<	5	-1%	Acceptable					5	-100%	Fails		(±15)	45
RDX	**7.43**	**717**	**7.6890<**	**5**	**54%**	**Fails** ↑ and ND					5	-100%	Fails		(±15)	45
Picric ACID	8.51	4686	52.1000	50	4%	Acceptable		8.51	6816	49.7000<	50	-1%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.72	755	4.8110<	5	-4%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.18	749	4.8230<	5	-4%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	**13.22**	**683**	**6.9450<**	**5**	**39%**	**Fails** ↑ and ND					5	-100%	Fails		(±15)	45
Nitrobenzene	**13.65**	**292**	**3.9330<**	**5**	**-21%**	**Fails** OK 30%					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.28	462	4.6590<	5	-7%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.64	384	4.8030<	5	-4%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.59	415	4.9380<	5	-1%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.00	298	5.0460<	5	1%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.67	448	4.6910<	5	-6%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.50	189	4.4240<	5	-12%	Acceptable					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.17	226	4.3780<	5	-12%	Acceptable					5	-100%	Fails		(±15)	45
3-Nitrotoluene	**24.88**	**201**	**3.9780<**	**5**	**-20%**	**Fails** OK 30%					5	-100%	Fails		(±15)	45
Nitroglycerin				**20**	**-100%**	**Fails**		14.30	1416	21.3700<	20	7%	Acceptable		(±15)	45
PETN				**20**	**-100%**	**Fails**		27.26	697	19.0100<	20	-5%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.93	539	5.2030<	5	4%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				**20**	**-100%**	**Fails**					20	-100%	Fails		(±15)	

MR 8/6/10

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

8330MOD NITROGUANIDINE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

SDG: A0G140403 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 5.0 °C.	QAPP Table 4-2
3. Were holding times met?	✓			Checked by ADR.	QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			7/30/2010	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			Varian Star #1 ICAL: 4/20/10 primary column Stds: 20, 50, 100, 200, 500, 1000	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve)	✓			Linear fit used. No qualifications were made as r>0.995.	STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			4/21/10 @ 0143	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓				LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

SDG: A0G140403 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes reported in the method blank <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓				
18. Were target analytes reported in the field blank analyses < ½ the MRL?	✓				<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓				QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?			✓		LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

SDG: A0G140403 R0
Analysis: SW846 8330M Nitroguanadine

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0010 "Determination of Nitroguanidine Based on Method 8330, SW-846" April 2007, revision 2.0

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GW

Dissolved HPLC

Lot-Sample #...:	A0G140403-001	**Work Order #...:**	L35PC1AH	**Matrix.....:**	WG
Date Sampled...:	07/13/10 09:09	**Date Received..:**	07/14/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/26/10		
Prep Batch #...:	0202234				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GW

Dissolved HPLC

Lot-Sample #...:	A0G140403-002	**Work Order #...:**	L35PD1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/10 12:17	**Date Received..:**	07/14/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/26/10		
Prep Batch #...:	0202234				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GW

Dissolved HPLC

Lot-Sample #...:	A0G140403-003	**Work Order #...:**	L35PE1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/10 13:51	**Date Received..:**	07/14/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/26/10		
Prep Batch #...:	0202234				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GW

Dissolved HPLC

Lot-Sample #...:	A0G140403-004	**Work Order #...:**	L35PF1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/10 15:49	**Date Received..:**	07/14/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/26/10		
Prep Batch #...:	0202234				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GW

Dissolved HPLC

Lot-Sample #...:	A0G140403-005	**Work Order #...:**	L35PG1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/10 08:48	**Date Received..:**	07/14/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/26/10		
Prep Batch #...:	0202234				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GW

Dissolved HPLC

Lot-Sample #...: A0G140403-006	**Work Order #...:** L35PJ1AD	**Matrix.....:** WG	
Date Sampled...: 07/13/10 10:38	**Date Received..:** 07/14/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/26/10		
Prep Batch #...: 0202234			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GW

Dissolved HPLC

Lot-Sample #...:	A0G140403-007	**Work Order #...:**	L35PK1AH	**Matrix.....:**	WG
Date Sampled...:	07/13/10 12:58	**Date Received..:**	07/14/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0202234				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GW

Dissolved HPLC

Lot-Sample #...:	A0G140403-008	**Work Order #...:**	L35PL1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/10 09:00	**Date Received..:**	07/14/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0202234				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GW

Dissolved HPLC

Lot-Sample #...: A0G140403-009	**Work Order #...:** L35PM1AD	**Matrix.....:** WG	
Date Sampled...: 07/13/10 10:10	**Date Received..:** 07/14/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0202234			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GW

Dissolved HPLC

Lot-Sample #...:	A0G140403-010	**Work Order #...:**	L35PN1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/10 10:30	**Date Received..:**	07/14/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0202234				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GW

Dissolved HPLC

Lot-Sample #...:	A0G140403-011	**Work Order #...:**	L35PP1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/10 12:40	**Date Received..:**	07/14/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0202234				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GW

Dissolved HPLC

Lot-Sample #...:	A0G140403-012	**Work Order #...:**	L35PQ1AD	**Matrix.....:**	WG
Date Sampled...:	07/13/10 14:00	**Date Received..:**	07/14/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0202234				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GW

Dissolved HPLC

Lot-Sample #...: A0G140403-013	**Work Order #...:** L35PR1AD		**Matrix.....:** WG	
Date Sampled...: 07/13/10 15:50	**Date Received..:** 07/14/10			
Prep Date.....: 07/21/10	**Analysis Date..:** 07/27/10			
Prep Batch #...: 0202234				
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif			

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

Dissolved HPLC

Lot-Sample #...: A0G140403-014	**Work Order #...:** L35PT1AD	**Matrix.....:** WQ	
Date Sampled...: 07/13/10 16:20	**Date Received..:** 07/14/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0202234			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G140403 **Work Order #...:** L4GF91AA **Matrix.....:** WATER
MB Lot-Sample #: G0G210000-234

Prep Date.....: 07/21/10
Analysis Date..: 07/26/10 **Prep Batch #...:** 0202234
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitroguanidine	ND	20	ug/L	SW846 8330 (Modif

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G140403 **Work Order #...:** L4GF91AC **Matrix.....:** WATER
LCS Lot-Sample#: G0G210000-234
Prep Date.....: 07/21/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0202234
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	**113**	**(73 - 117)**	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G140403 **Work Order #...:** L35PC1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140403-001 L35PC1AK-MSD
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0202234
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**116**	**(73 - 117)**			**SW846 8330 (Modified**
	114	**(73 - 117)**	**1.1**	**(0-15)**	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G140403 **Work Order #...:** L35PK1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G140403-007 L35PK1AK-MSD
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0202234
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**113**	**(73 - 117)**			**SW846 8330 (Modified**
	113	**(73 - 117)**	0.07	(0-15)	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
SDG: A0G140403 Rev 0
Sample Event: July 2010
Analysis: TAL-SOP WS-WC-005 Nitrocellulose
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

Review Questions:	Yes	No	N/A	Comments	Qualifier
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 5.0 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3.7
7. Was Acetone used to extract the samples? Was the Acetone evaporated using Nitrogen?	✓				STL SOP Sections 11.4
8. Does the initial calibration curve consist of 5 concentration levels with the low standard near but > MDL?	✓			Instrument FS4; ICAL 7/27/10 Stds- 0, 0.05, 0.2, 0.4, 1, 2	STL SOP Section 10.2 R
9. Was the correlation coefficient >0.995?	✓				STL SOP Section 10.2
10. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D <30%?	✓				LCG Table 5 >30%=J
11. Was a second source verification (ICV) analyzed after the ICAL? Were all analytes 90-110%?	✓				STL SOP Section 9.8, 10.3, LCG >110%=J; 90-85%=J/UJ; <85%=J/R
12. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 9.8, LCG < 5x = U
13. Was a CCV run every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.4
14. Was the ICV and CCV a mid-level standard from the initial calibration curve?	✓				STL SOP Section 10.3.1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

SDG: A0G140403 Rev 0
Analysis: TAL-SOP WS-WC-005 Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
15. Were all CCV calibration analytes within 90-110%?	✓				STL SOP Section 10.4, LCG >110%=J; 85-90%=J/UJ; <85%=J/R
16. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 10.4, LCG < 5x = U
17. Was the Nitrocellulose assay available and/or analyzed to be within 10%?	✓				STL SOP Section 7.14.1 R
18. Was a method blank prepared and analyzed with each batch?	✓				
19. Were target analytes reported in the method blank <1/2 the MRL?	✓			ADR checked section.	STL SOP Section 9.4, LCG <5x=B
20. Was a field blank collected and analyzed?	✓				
21. Were target analytes reported in the field blank analyses <1/2 the MRL?	✓				<5x=B
22. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			ADR checked section.	QAPP Table 3-2 RPD > 30% = J
23. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within lab's in-house limits% (26-144%)?	✓				>UL%=J; 50-LL%=J/UJ; <50%=J/R
24. Was a MS/MSD pair prepared with each batch?	✓				
25. Was the MS/MSD parent a Ravenna sample?	✓				
26. Were MS/MSD recoveries 26-144% and RPD ≤20?	✓			ADR checked section.	Method EPA 353.2 Section 9.4.2 >UL%=J; <LL%=J/UJ; RPD>20%=J/UJ
27. Were sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

SDG: A0G140403 Rev 0
Analysis: TAL-SOP WS-WC-005 Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.		✓			

References: *STL SOP SAC-WC-0050 "Preparation and Analysis of Nitrocellulose in Aqueous and Soil/Sediment Samples by Colorimetric Autoanalyzer", Jan 2007, rev. 2.0*

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-128C-1549-GW

General Chemistry

Lot-Sample #...: A0G140403-001 **Work Order #...:** L35PC **Matrix.....:** WG
Date Sampled...: 07/13/10 09:09 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-243C-1561-GW

General Chemistry

Lot-Sample #...: A0G140403-002 **Work Order #...:** L35PD **Matrix.....:** WG
Date Sampled...: 07/13/10 12:17 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-187C-1557-GW

General Chemistry

Lot-Sample #...: A0G140403-003 Work Order #...: L35PE Matrix.....: WG
Date Sampled...: 07/13/10 13:51 Date Received..: 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	5.7	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-244C-1562-GW

General Chemistry

Lot-Sample #...: A0G140403-004 **Work Order #...:** L35PF **Matrix.....:** WG
Date Sampled...: 07/13/10 15:49 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-186C-1556-GW

General Chemistry

Lot-Sample #...: A0G140403-005 Work Order #...: L35PG Matrix.....: WG
Date Sampled...: 07/13/10 08:48 Date Received..: 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-189C-1559-GW

General Chemistry

Lot-Sample #...: A0G140403-006 Work Order #...: L35PJ Matrix.....: WG
Date Sampled...: 07/13/10 10:38 Date Received..: 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	0.12 B	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1517-GW

General Chemistry

Lot-Sample #...: A0G140403-007 **Work Order #...:** L35PK **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-182C-1552-GW

General Chemistry

Lot-Sample #...: A0G140403-008 **Work Order #...:** L35PL **Matrix.....:** WG
Date Sampled...: 07/13/10 09:00 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-107C-1547-GW

General Chemistry

Lot-Sample #...: A0G140403-009 **Work Order #...:** L35PM **Matrix.....:** WG
Date Sampled...: 07/13/10 10:10 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-DUP4-1569-GW

General Chemistry

Lot-Sample #...: A0G140403-010 **Work Order #...:** L35PN **Matrix.....:** WG
Date Sampled...: 07/13/10 10:30 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-246C-1564-GW

General Chemistry

Lot-Sample #...: A0G140403-011 **Work Order #...:** L35PP **Matrix.....:** WG
Date Sampled...: 07/13/10 12:40 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-184C-1554-GW

General Chemistry

Lot-Sample #...: A0G140403-012 **Work Order #...:** L35PQ **Matrix.....:** WG
Date Sampled...: 07/13/10 14:00 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL12mw-185C-1555-GW

General Chemistry

Lot-Sample #...: A0G140403-013 Work Order #...: L35PR Matrix.....: WG
Date Sampled...: 07/13/10 15:50 Date Received..: 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	0.54	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1580-GW

General Chemistry

Lot-Sample #...: A0G140403-014 **Work Order #...:** L35PT **Matrix.....:** WQ
Date Sampled...: 07/13/10 16:20 **Date Received..:** 07/14/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122

Dilution Factor: 1 MDL.....: 0.12

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0G140403 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: L4KX01AA		MB Lot-Sample #:	G0G230000-122	
	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/23-07/27/10	0204122
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G140403 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: L4KX01AC LCS Lot-Sample#: G0G230000-122			
	85	(26 - 144)	TAL-SOP WS-WC-005	07/23-07/27/10	0204122
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G140403 **Matrix.....:** WG
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: L35PC1AF-MS/L35PC1AG-MSD				MS Lot-Sample #: A0G140403-001	
	72	(26 - 144)			TAL-SOP WS-WC-005	07/23-07/27/10	0204122
	92	(26 - 144)	24	(0-45)	TAL-SOP WS-WC-005	07/23-07/27/10	0204122
		Dilution Factor: 1					
Nitrocellulose		WO#: L35PK1AF-MS/L35PK1AG-MSD				MS Lot-Sample #: A0G140403-007	
	80	(26 - 144)			TAL-SOP WS-WC-005	07/23-07/27/10	0204122
	80	(26 - 144)	1.2	(0-45)	TAL-SOP WS-WC-005	07/23-07/27/10	0204122
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automatically adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G140403										
8330	FWGLL12mw-107C-1547-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.098	0.058J		J	ug/L	L,P
				TETRYL	0.098	0.074J		J	ug/L	L,P
8330	FWGLL12mw-182C-1552-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.098	0.031J		J	ug/L	L
				TETRYL	0.098	0.068J		J	ug/L	L
8330	FWGLL12mw-184C-1554-GW	AQ	N							
				TETRYL	0.10	0.055J		J	ug/L	L
8330	FWGLL12mw-185C-1555-GW	AQ	N							
				HMX	0.098	0.076J		J	ug/L	L
				TETRYL	0.098	0.075J		J	ug/L	L
8330	FWGLL12mw-186C-1556-GW	AQ	N							
				TETRYL	0.11	0.054J		J	ug/L	L
8330	FWGLL12mw-189C-1559-GW	AQ	N							
				TETRYL	0.11	0.059J		J	ug/L	L
8330	FWGLL12mw-243C-1561-GW	AQ	N							
				NITROGLYCERINE	0.63	0.38J		J	ug/L	L
WS-WC-0050	FWGLL12mw-189C-1559-GW	AQ	N							
				Nitrocellulose	0.50	0.12B		J	mg/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-107C-1547-GW **Lab Report Batch :** A0G140403 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G140403009

Reviewed By / Date : Angye Dragotta 9/2/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.98**															
1,3,5-Trinitrobenzene	0.058		ug/L	J	YES	J								J							L,P
TETRYL	0.074		ug/L	J	YES	J								J							L,P

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-182C-1552-GW **Lab Report Batch :** A0G140403 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G140403008

Reviewed By / Date : Angye Dragotta 9/2/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.98**															
1,3,5-Trinitrobenzene	0.031		ug/L	J	YES	J								J							L
TETRYL	0.068		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-184C-1554-GW **Lab Report Batch :** A0G140403 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G140403012

Reviewed By / Date : Angye Dragotta 9/2/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330							**Dilution: 1.02**														
TETRYL	0.055		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-185C-1555-GW **Lab Report Batch :** A0G140403 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G140403013

Reviewed By / Date : Angye Dragotta 9/2/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.98**															
HMX	0.076		ug/L	J	YES	J								J							L
TETRYL	0.075		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-186C-1556-GW **Lab Report Batch :** A0G140403 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G140403005

Reviewed By / Date : Angye Dragotta 9/2/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.06**															
TETRYL	0.054		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-189C-1559-GW **Lab Report Batch :** A0G140403 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G140403006

Reviewed By / Date : Angye Dragotta 9/2/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.06**															
TETRYL	0.059		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-189C-1559-GW **Lab Report Batch :** A0G140403 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G140403006

Reviewed By / Date : Angye Dragotta 9/2/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : WS-WC-0050						**Dilution: 1**															
Nitrocellulose	0.12		mg/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL12mw-243C-1561-GW **Lab Report Batch :** A0G140403 **Lab ID :** TALCAN

Sample Date : 07/13/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G140403002

Reviewed By / Date : Angye Dragotta 9/2/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.97**															
NITROGLYCERINE	0.38		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A0G140403 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
8330	AQ	1,3,5-Trinitrobenzene	FWGLL12mw-107	DL	0.058	J	FWGLL12mw-DU	DL	0.098	U	200.0	30	ug/L
	AQ	TETRYL		DL	0.074	J		DL	0.098	U	200.0	30	ug/L

Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G140403 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL12mw-107C-1547-	A0G140403009	8330	AQ	1,3,5-Trinitrobenzene	J	0.058	0.098	ug/L
				TETRYL	J	0.074	0.098	ug/L
FWGLL12mw-182C-1552-	A0G140403008			1,3,5-Trinitrobenzene	J	0.031	0.098	ug/L
				TETRYL	J	0.068	0.098	ug/L
FWGLL12mw-184C-1554-	A0G140403012			TETRYL	J	0.055	0.10	ug/L
FWGLL12mw-185C-1555-	A0G140403013			HMX	J	0.076	0.098	ug/L
				TETRYL	J	0.075	0.098	ug/L
FWGLL12mw-186C-1556-	A0G140403005			TETRYL	J	0.054	0.11	ug/L
FWGLL12mw-189C-1559-	A0G140403006			TETRYL	J	0.059	0.11	ug/L
		WS-WC-0050		Nitrocellulose	B	0.12	0.50	mg/L
FWGLL12mw-243C-1561-	A0G140403002	8330		NITROGLYCERINE	J	0.38	0.63	ug/L

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G140403 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE3-1580	A0G140403014	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGLL12mw-107C-1547-	A0G140403009	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL12mw-128C-1549-	A0G140403001	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL12mw-182C-1552-	A0G140403008	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL12mw-184C-1554-	A0G140403012	8330	AQ	2-Nitrotoluene	U	0.51	0.20	ug/L
				3-Nitrotoluene	U	0.51	0.20	ug/L
				4-Nitrotoluene	U	0.51	0.20	ug/L
FWGLL12mw-185C-1555-	A0G140403013	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL12mw-186C-1556-	A0G140403005	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.53	0.21	ug/L
				3-Nitrotoluene	U	0.53	0.21	ug/L
				4-Nitrotoluene	U	0.53	0.21	ug/L
FWGLL12mw-187C-1557-	A0G140403003	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL12mw-189C-1559-	A0G140403006	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **030240.0006 - RVAAP (OH)**

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G140403 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGLL12mw-189C-1559-	A0G140403006	8330	AQ	2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.53	0.21	ug/L
				3-Nitrotoluene	U	0.53	0.21	ug/L
				4-Nitrotoluene	U	0.53	0.21	ug/L
FWGLL12mw-243C-1561-	A0G140403002	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL12mw-244C-1562-	A0G140403004	8330	AQ	2-Nitrotoluene	U	0.51	0.20	ug/L
				3-Nitrotoluene	U	0.51	0.20	ug/L
				4-Nitrotoluene	U	0.51	0.20	ug/L
FWGLL12mw-246C-1564-	A0G140403011	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL12mw-DUP4-1569	A0G140403010	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGSCFmw-003-1517-G	A0G140403007	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **030240.0006 - RVAAP (OH)**

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 30, 2010
STL Sample Delivery Group: A0G150401 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 14, 2010 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0G150401.

Field Sample ID	Analytes	Method
FWGLL1mw-067c-1523-GW	VOCs	SW846 8260B
FWGLL1mw-080c-1525-GW	SVOCs	SW846 8270C
FWGLL1mw-065c-1522-GW	Pesticides	SW846 8081A
FWGLL1mw-DUP1-1566-GW	PCBs	SW846 8082
FWGEQUIPRinse4-1581-GW	Cyanide	SW846 9012A
FWGSCFmw-002-1516-GW	Nitrate/Nitrite	353.2
FWGSCFmw-001-1515-GW		
FWGLL1mw-084c-1529-GW		
FWGLL1mw-064c-1521-GW		
FWGLL1mw-078c-1524-GW		
FWGLL1mw-081c-1526-GW		
FWGLL1mw-083c-1528-GW		
FWGEQUIPRinse4-1581-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL1mw-067c-1523-GW	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGLL1mw-080c-1525-GW		
FWGLL1mw-065c-1522-GW		
FWGLL1mw-DUP1-1566-GW		
FWGSCFmw-002-1516-GW		
FWGSCFmw-001-1515-GW		
FWGLL1mw-084c-1529-GW		
FWGLL1mw-064c-1521-GW		
FWGLL1mw-078c-1524-GW		
FWGLL1mw-081c-1526-GW		
FWGLL1mw-083c-1528-GW		
FWGTEAM1-Trip	VOCs	SW846 8260B
FWGTEAM3-Trip		
FWGTEAM2-Trip		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004*, Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The cooler temperatures were documented as being received from 0.4°C – 4.4°C.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 30, 2010
STL Sample Delivery Group: A0G150401 **Revision:** 0

VOAs - 8260B
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Tuning criteria
- CCV criteria
- Initial Calibration Criteria including SPCC and CCC compounds
- Internal standard area counts and retention times
- MDL verification criteria
- Surrogate recoveries
- Field duplicate RPD criteria
- Matrix Spike Recovery Criteria and RPD

QC/MRL

- The opening MRL check analyzed 7/23/10 at 1226 had methylene chloride recover above limits at 185%, chloroethane at 140%, bromomethane at 140% and bromoform at 167%.
- The closing MRL check analyzed 7/23/10 at 2141 had 2-butanone recover above limits at 140%, acetone at 151%, chloroethane at 142% and bromoform at 154%.

The acetone results for the trip blanks and the methylene chloride, 2-butanone and acetone results for FWGEQUIPRinse4-1581-GW were qualified as estimated, "J". Documentation provided in SDG A0G140402.

Blanks

- Methylene chloride was detected in the method blank (batch 0204233) at 0.76ug/L. Methylene chloride was also detected in the method blank (batch 0207253) at 0.88ug/L. Sample FWGEQUIPRinse4-1581-GW was qualified, "B". No additional qualifications were made as there were no other detected methylene chloride results associated with the blanks.
- FWGEQUIPRinse4-1581-GW had 2-butanone detected at 15ug/L, acetone at 13ug/L, toluene at 0.32ug/L and methylene chloride at 1.4ug/L.
- The trip blanks had acetone contamination detected from 1.8- 1.9ug/L.

The acetone result for sample FWGEQUIPRinse4-1581-GW, was qualified, "B" as the result was <10x trip blank contamination. As there were no detected concentrations of the methylene chloride, toluene or 2-butanone in the associated field samples no additional qualifications were made.

LCS Recovery
Carbon disulfide recovered above control limits in the LCS/LCD for batch 0207253 at 132% and 130%. Samples with detected concentrations of carbon disulfide associated with batch 0207253 were qualified as estimated,"J". A list of qualified samples is provided in Appendix 1.

SVOCs- 8270C
The following QC criteria were reviewed with acceptable results:

- Preservation, holding time and sample handling
- Tuning criteria
- Initial Calibration criteria including CCC and SPCC compounds
- ICV/ CCV criteria
- MDL Level Verification
- Internal standard area counts and retention times
- LCS Recovery Criteria
- Field duplicate RPD
- Surrogate Recovery

MRL Recovery Criteria
Hexachlorocyclopentadiene recovered below control limits at 40.2% in the MRL analyzed 7/22/10 at 1802. An MDL check was analyzed with acceptable results. Hexachlorocyclopentadiene results for samples FWGLL1mw-083C-1528-GW and FWGLL1mw-064C-1521-GW were qualified as estimated, "UJ". Documentation provided in SDG A0G130405.

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 30, 2010
STL Sample Delivery Group: A0G150401 **Revision:** 0

Blanks

- bis(2-Ethylhexyl) phthalate was detected in the method blank at 1.2ug/L.

Samples with detected concentrations of bis(2-ethylhexyl) phthalate <10x contamination were qualified, "B". See Appendix 1 for list of affected samples.

- bis(2-Ethylhexyl) phthalate was detected in the FWGEQUIPRinse4-1581-GW at 1.8ug/L.

Samples with detected concentrations of bis(2-ethylhexyl) phthalate <10x contamination were qualified, "B". See Appendix 1 for list of affected samples.

Matrix Spike Recovery

Sample FWGLL12mw-088c-1546-GW was the parent MS/MSD sample from this SDG.

- The MS and MSD recovered below control limits for 3,3'-dichorobenzidine at 30 and 17%, for 2,4-dinitrophenol at 37 and 34%, for benzoic acid at 18 and 21%, for hexachlorobutadiene at 41 and 43% and for hexachlorocyclopentadiene at 38 and 43%. The matrix spike recovered below control limits for hexachloroethane at 41%.

No qualifications were made for these outliers as the associated LCS recovered within limits.

Surrogate Recovery

For sample FWGLL1mw-083c-1528-GW, 2,4,6-tribromophenol recovered below control limits at 39%, 2-Fluorophenol recovered at 33% and phenol-5 at 38%. The results for the acid targets in sample FWGLL1mw-083c-1528-GW were qualified as estimated, "UJ".

Pesticides- 8081A

The following QC criteria were reviewed with acceptable results:

- Preservation, holding time and sample handling
- Initial Calibration criteria
- DDT and Endrin breakdown criteria
- Retention time criteria
- ICV criteria
- CCV Criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS Recoveries
- Field Duplicate Criteria
- MDL verification criteria
- MRL verification criteria

Matrix Spike Recovery

The matrix spike and spike duplicate analyzed on sample FWGLL1mw-064c-1521-GW had an RPD above control limits at 31%. No qualification was required as the LCS recovered within limits.

Surrogate Recovery

The surrogate, DCB, recovered below control limits in sample FWGLL1mw-065c-1522-GW at 40%, FWGLL1mw-078c-1524-GW at 40% and FWGSCFmw-001-1515-GW at 41%. The associated results were qualified as estimated, "J/UJ".

Second Column Confirmation

The second column confirmation analyzed for sample FWGLL1mw-084c-1529-GW for beta-BHC had an RPD above 40%. The beta-BHC result for FWGLL1mw-084c-1529-GW was qualified as estimated, "J".

PCBs- 8082

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MDL and MRL verification criteria
- ICV/ CCV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination

- LCS/ LCSD percent recoveries and RPD value criteria
- Second Column confirmation criteria
- Field Duplicate RPD criteria

Matrix Spike Criteria
The Aroclor 1016 MS/MSD RPD was above limits at 29%. No qualifications were made as the LCS recovered within limits.

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in sample FWGLL1mw-065c-1522-GW at 45%, FWGLL1mw-078c-1524-GW at 40% and FWGSCFmw-001-1515-GW at 38%. The associated results were qualified as estimated, "J/UJ".

Metals - 6010B
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV criteria
- Interference Check Sample (ICSA/ICSAB) criteria
- LCS recovery criteria
- MS/MSD recovery criteria
- MDL Verification criteria
- MRL verification criteria
- Field Duplicate RPD
- Serial dilution criteria

Blanks

- The ICB analyzed 7/21/10 had detected potassium at 134ug/L. Potassium results for samples FWGLL1mw-067c-1523-GF and FWGLL1mw-064c-1521-GF were qualified "B" as the detected concentration were <5x contamination.
- The CCBs analyzed 7/21/10 had detected potassium from 138ug/L to 180ug/L. No additional potassium qualifications other than those made for the ICB contamination were made.

No qualifications were made for ICP results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

CCV Recovery
The CCV analyzed 7/21/2010 at 1834 had a potassium recovery below control limits at 88% and sodium at 89%. No qualifications were made as the reported sodium and potassium results were not bracketed by these CCVs.

Metals - 6020
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Internal standard and tune criteria
- Initial Calibration criteria
- ICV criteria
- MDL Verification Data
- MRL verification criteria
- Interference Check Sample (ICSA/ICSAB) criteria
- LCS Recovery Criteria
- MS recovery criteria
- Field Duplicate RPD
- Lab Duplicate RPD

Blanks

- The ICB analyzed 7/30/10 had thallium detected at 0.23ug/L. The thallium results for samples FWGLL1mw-067c-1523-GF, FWGLL1mw-080c-1525-GF, FWGLL1mw-084c-1529-GF, FWGLL1mw-078c-1524-GF, FWGLL1mw-081c-1526-GF and FWGLL1mw-083c-1528-GF were <5x the ICB contamination and were qualified, "U".

- The CCBs analyzed 7/30/2010 had beryllium detected from 0.021 to 0.027ug/L, antimony at 0.04ug/L, cadmium at 0.012-0.037ug/L, iron from 9.3ug/L to 10.2ug/L and thallium from 0.25ug/L to 0.29ug/L. No additional thallium qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all bracketed detected contaminants were >5x the blank contamination.

No qualifications were made for ICPMS results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

CCV Recovery
The CCVs analyzed 7/30/2010 at 2245 and 7/31/10 at 0048 had recoveries above control limits for beryllium at 111% and 112%, respectively. Sample FWGLL1mw-083c-1528-GF was qualified as estimated, "J". No additional qualifications were made as there were no other detected beryllium concentrations reported.

Mercury - 7470A
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- ICB /CCBs were free from contamination
- The method blank was free from contamination
- The equipment blank was free from contamination
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

No QC outliers were noted.

Cyanide- 9012
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria and RPD

No QC outliers were noted.

Nitrate/Nitrite- 353.2
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria and RPD

The COC incorrectly had sample FWGLL1MW-084C-1529-GW listed for nitrate analysis. No bottle was rec'd by the lab, so no analysis was performed.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** August 30, 2010
STL Sample Delivery Group: A0G150401 **Revision:** 0

Blanks
The ICB had a detected nitrate concentration of 0.088mg/L and following CCB at 0.0773mg/L. The nitrate/nitrite result for sample FWGSCFmw-001c-1515-GW was qualified, "U".

Data Reviewer:
Date: 8/30/10

2nd Level Data Reviewer:
Date:

CASE NARRATIVE

A0G150401

The following report contains the analytical results for twenty-three water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 15, 2010, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 02, 2010. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 0.4 to 4.4°C.

See TestAmerica's Cooler Receipt Form for additional information.

GC/MS VOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

GC/MS SEMIVOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL1mw-064C-1521-GW had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The LCS associated with batch(es) 0197036 had Benzoic acid recovered below acceptance criteria. Per client, no corrective action is required. Also, sample(s) FWGLL1mw-083C-1528-GW had three acid surrogates recovered below 50%, but greater than 10%. No corrective action was required.

CASE NARRATIVE (continued)

PESTICIDES-8081

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The analyses reported herein were performed using an instrument that has two columns(GC) or detectors(HPLC), one of which is used to confirm the results of the other. Peak interferences may result in some cases, which cause a quantitation difference between the two columns/detectors. If the difference between the two results is greater than 40%, the higher of the two results or the primary column/detector is normally reported. The reported results are flagged with "PG".

For sample(s) FWGLL1mw-065C-1522-GW, FWGSCFmw-001-1515-GW, and FWGLL1mw-078C-1524-GW, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

Sample(s) FWGLL1mw-080C-1525-GW and FWGLL1mw-083C-1528-GW had elevated reporting limits due to matrix interference.

For sample(s) FWGLL1mw-080C-1525-GW, FWGLL1mw-084C-1529-GW, and FWGLL1mw-083C-1528-GW, the opening CCV failed biased high for alpha-BHC and gamma-BHC. Because the samples were non-detect for these compounds, no corrective action was taken.

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGLL1mw-065C-1522-GW, FWGSCFmw-001-1515-GW, and FWGLL1mw-078C-1524-GW, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

CASE NARRATIVE (continued)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

For batch(es) 0197016, the CCV exceeded method criteria on the high side Beryllium. Since the sample(s) FWGEQUIPRINSE4-1581-GW, FWGSCFmw-002-1516-GF, FWGSCFmw-001-1515-GF, FWGLL1mw-084C-1529-GF, FWGLL1mw-064C-1521-GF, FWGLL1mw-078C-1524-GF, FWGLL1mw-081C-1526-GF, FWGLL1mw-083C-1528-GF, FWGLL1mw-067C-1523-GF, FWGLL1mw-080C-1525-GF, FWGLL1mw-065C-1522-GF, and FWGLL1mw-DUP1-1566-GF result(s) was/were below the requested reporting limit, the result(s) was/were accepted.

GENERAL CHEMISTRY

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The matrix spike/matrix spike duplicate(s) for batch(es) 0208383 and 0208347 had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.
California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

MANUAL INTEGRATION SUMMARY

Lot A0G150401

Client ID: FWGLL1mw-064C-1521-
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: L37G81AF.D
Inj. Date and Time: 22-JUL-2010 11:54
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL1mw-064C-1521-
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: L37G81AG.D
Inj. Date and Time: 22-JUL-2010 12:14
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL1mw-064C-1521-
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 025F2501.D
Inj. Date and Time: 27-JUL-2010 13:20
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGLL1mw-064C-1521-
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 026F2601.D
Inj. Date and Time: 27-JUL-2010 13:34
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 031F3101.D
Inj. Date and Time: 27-JUL-2010 14:48
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 031F3101.D
Inj. Date and Time: 27-JUL-2010 14:48
Manual Integration Reason: Analyte not Identified by the Data System

SAMPLE SUMMARY

A0G150401

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L37GF	001	FWGTEAM1-TRIP	07/14/10	08:00
L37GG	002	FWGLL1mw-067C-1523-GW	07/14/10	10:29
L37GJ	003	FWGLL1mw-067C-1523-GF	07/14/10	10:29
L37GK	004	FWGLL1mw-080C-1525-GW	07/14/10	12:11
L37GL	005	FWGLL1mw-080C-1525-GF	07/14/10	12:11
L37GM	006	FWGLL1mw-065C-1522-GW	07/14/10	14:53
L37GN	007	FWGLL1mw-065C-1522-GF	07/14/10	14:53
L37GP	008	FWGLL1mw-DUP1-1566-GW	07/14/10	15:47
L37GT	009	FWGLL1mw-DUP1-1566-GF	07/14/10	15:47
L37GV	010	FWGEQUIPRINSE4-1581-GW	07/14/10	17:07
L37G0	011	FWGTEAM2-TRIP	07/14/10	08:00
L37G1	012	FWGSCFmw-002-1516-GW	07/14/10	09:14
L37G2	013	FWGSCFmw-002-1516-GF	07/14/10	09:14
L37G3	014	FWGSCFmw-001-1515-GW	07/14/10	13:38
L37G4	015	FWGSCFmw-001-1515-GF	07/14/10	13:38
L37G5	016	FWGLL1mw-084C-1529-GW	07/14/10	16:48
L37G6	017	FWGLL1mw-084C-1529-GF	07/14/10	16:48
L37G7	018	FWGTEAM3-TRIP	07/14/10	08:00
L37G8	019	FWGLL1mw-064C-1521-GW	07/14/10	10:50
L37G9	020	FWGLL1mw-064C-1521-GF	07/14/10	10:50
L37HC	021	FWGLL1mw-078C-1524-GW	07/14/10	13:20
L37HE	022	FWGLL1mw-078C-1524-GF	07/14/10	13:20
L37HF	023	FWGLL1mw-081C-1526-GW	07/14/10	15:20
L37HH	024	FWGLL1mw-081C-1526-GF	07/14/10	15:20
L37HK	025	FWGLL1mw-083C-1528-GW	07/14/10	16:50
L37HL	026	FWGLL1mw-083C-1528-GF	07/14/10	16:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica 22
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: ML001
Address: 1800 Carillon Blvd.	Telephone: 513-825-7500	Telephone: 513-825-7500	Telephone: 330-497-9396	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email:			
Phone: 513-825-7500		TAT if different from below Per 30W ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab pickup			
Project Number: 30240.0006	Shipping/Tracking No:			
PO# 167726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Field Filtered	Lab Perform MS/MSD	Analyses: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	NO2/NO3	Metals 6010/7470	Sample Specific Notes / Special Instructions:
FWG Team 1 - Trip	7/14/10	08:00		X						2					N	G	X									123
FWGLL1mw-067C-1523-GW	7/14/10	10:29		X					X	3	1		9		N	G	X	X	X	X	X	X	X			123
FWGLL1mw-067C-1523-GF	7/14/10	10:29		X					1						Y	G									X	123
FWGLL1mw-080C-1525-GW	7/14/10	12:11		X					X	3	1		9		N	G	X	X	X	X	X	X	X			C8
FWGLL1mw-080C-1525-GF	7/14/10	12:11		X					1						Y	G									X	C8
FWGLL1mw-065C-1522-GW	7/14/10	14:53		X						3	1		9		N	G	X	X	X	X	X	X	X			C99
FWGLL1mw-065C-1522-GF	7/14/10	14:53		X					1						Y	G									X	C99
FWGLL1mw-DUP1-1566-GW	7/14/10	15:47		X						3	1		9		N	G	X	X	X	X	X	X	X			H113
FWGLL1mw-DUP1-1566-GF	7/14/10	15:47		X					1						Y	G									X	H113
FWGEQUIPRinse4-1581-GW	7/14/10	17:07		X				1		3	1		9		N	G	X	X	X	X	X	X	X	X	X	C333

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Metals are field filtered

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	EQM	7-14-10 1830	[signature]	TAN CANTON	7-14-10 18:30
[signature]	TAN CANTON	7-14-10 7:20			
			Received in Laboratory by: [signature]	TAL NC	7/15/10 730

Temps may not meet requirements if sample collection is close to lab pickup time. All VOAs in cooler 123

North Canton

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TAL-0018 (1008)

Chain of Custody Record

TEST AMERICA

SEVERN TRENT STL

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: EDM	Project Manager: JOHN MILLER	Date: 7-14-10	Chain of Custody Number: 336186
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (7495 FAX)	Lab Number: 330497396	Page 1 of 1
City: CINCINNATI / State: OH / Zip Code: 45240	Site Contact: E. CORBIN	Lab Contact: M. LOSS	
Project Name and Location (State): RVAAP Ravenna OHIO	Carrier/Waybill Number: LAB PICK UP		
Contract/Purchase Order/Quote No.: PO 16726 PN 30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOC	SVOC	PEST	PCB	Explo	Appendix IX	Cyanide	Metals	NO2/NO3	Special Instructions/ Conditions of Receipt
																						Cooler ID#
FWG TEAM 2-TRIP	7-14-10	0800		X						2			2									C111
FWGSCFmw-002-1516-GW	1	914		X			9	1		3	1		3	2	2	2	1	2	1		1	12
FWGSCFmw-002-1516-GF	1	1		X					1											1		12
FWGSCFmw-001-1515-GW	1	1338		X			9	1		3	1		3	2	2	2	1	2	1		1	179
FWGSCFmw-001-1515-GF	1	1		X					1											1		179
FWGLLmw-084C-1529-GW	1	1648		X			9	1		3	1		3	2	2	2	1	2	1		1	C111
FWGLLmw-084C-1529-GF	1	1							1											1		C111

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metal GF are field filtered.

	Date	Time		Date	Time
1. Relinquished By	7-14-10	1830	1. Received By: Lance Hesselma	7-14-10	18:30
2. Relinquished By: Lance Heal	7-14-10	7120	2. Received By: Liliana Cruz	7/15/10	730
3. Relinquished By			3. Received By		

Comments: temps may not meet requirements of lab pickup & close to sample collection time.

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

ALL VOAs in cooler C111

Chain of Custody Record

TestAmerica 24
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact
Company Name: EQM
Address: 1800 Carillon Blvd
City/State/Zip: Cincinnati OH 45240
Phone: 513 825 7500
Project Name: RVAAP (OH)
Project Number: 03024.0001e
PO# 1107216

Client Project Manager: John Miller
Telephone: 513 825 7500
Email: JMiller@eqm.com
Method of Shipment/Carrier: Lab Pick up
Shipping/Tracking No: NA

Site Contact: E. Corbin
Telephone: 513 825 7500

Lab Contact: M. Loeb
Telephone: 330 497 9396

COC No: 15003
____ of ____ COCs

TAT if different from below
☒ 3 weeks
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Analyses

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B VOA	SVOC 8270	Pest 4051	PCB 4083	EXP10 8330	Propellants	Cyanide 9012	Metals 6010/6020	Hg 7470/7471	Total Number of containers	Sample Specific Notes / Special Instructions:
FWGTeam3-Trip	7-14-10	0800		X						2							X										PH12
FWGLLIMW04C-1521GW		1050		X					2	5			27				X	X	X	X	X	X	X				13, AD 7,54
FWGLLIMW04C-1521GF		1050		X					3															X			13, AD 7,54
FWGLLIMW07SC-1524GW		1320		X						3	1		9				X	X	X	X	X	X	X				C113
FWGLLIMW07SC-1524GF		1320		X					1			5												X			C113
FWGLLIMW08IC-1526GW		1520		X						3	1		9				X	X	X	X	X	X	X				404
FWGLLIMW08IC-1526GF		1520		X					1															X			404
FWGLLIMW08SC-1528GW		1650		X						3	1		9				X	X	X	X	X	X	X				PH12
FWGLLIMW08SC-1528GF		1650		X					1															X			PH12

Sample Specific Notes / Special Instructions: Cooler #1

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
All Metals are field filtered
Temps may not meet requirements if sample collection is close to pick up time.
* ALL VOAS IN COOLER PH12 *

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	EQM	7-14-10 1830	Lance Hall	TANCASTON	7-14-10 18:30
Lance Hall	TANCASTON	7-14-10 7:20			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			[signature]	TAL NC	7/15/10 730

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North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number: ADG150401**
North Canton Facility

Client EQM Project RVAAP By: _____
Cooler Received on 7/15/10 Opened on 7/16/10 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☒ TestAmerica Courier ☐ Other _____
TestAmerica Cooler # _____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 14 Quantity Unsalvageable _____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? _____
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other _____
6. Cooler temperature upon receipt _____ °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ _____
   COOLANT: Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM MJC Date 9/15/10 by _____ via Verbal ☒ Voice Mail ☐ Other ☐
Concerning #14

14. CHAIN OF CUSTODY

The following discrepancies occurred:
Did not receive NO_2/NO_3 bottle for sample FWGLLIMW-0846-1529-GW. Will not log.

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot#* 051010-HNO_3; *Sulfuric Acid Lot#* 121709-H_2SO_4; *Sodium Hydroxide Lot#* 100108 -*NaOH; Hydrochloric Acid Lot#* 092006-*HCl; Sodium Hydroxide and Zinc Acetate Lot#* 100108-$(CH_3COO)_2ZN/NaOH$. What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
0676-1523	<2 >12	7/15/10	
0806-1525	<2 >12		
0656-1522	<2 >12		
DUP1-1566	<2 >12		
EquipRinse4-1581	<2 <2 >12		
002-1516	<2 <2 >12		
001-1515	<2 <2 >12		
0846-1529	<2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
064C-1521	<2 <2 <2 >12 >12	7/15/10	JV
078C-1524	<2 >12		
081C-1526	<2 >12		
083C-1528	<2 >12		

Cooler #	Temp. °C	Method	Coolant
123	2.2	IR	Wet ice
C8	2.5		
C99	0.4		
H113	2.6		
C333	2.9		
C111	1.6		
12	4.4		
179	3.4		
PH12	1.4		
13	3.2		
AD7	2.4		
54	1.7		

Discrepancies Cont'd:

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 and 4.4 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3.3
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-3
7. Was the GC/MS system tuned with bromofluorobenzene (BFB)?	✓				LCG Table 1
8. Was the criteria met during each 12 hour shift (prior to ICAL and Cal Ver.)?	✓				SW846 8260B 7.3.1
9. Did the initial calibration curve consist of 5 concentration levels?	✓			Instrument A3UX11 – 6/17/10 stds – 5, 10, 25, 50, 100, 200 ng on column	LCG Table 1 R
10. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviations (%RSD) ≤ 30%?	✓				LCG Table 1 R
11. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 1
12. Were all other target analytes ≤ 15% RSD? OR Was the average RSD ≤ 15%? Was a different calibration option used?	✓			Acetone, trans-1,3-dichloropropene, dibromochloromethane and bromoform used weighted linear curves.	LCG Table 1 15% <RSD< 20% = J/UJ
13. If a linear regression curve was used, was the correlation coefficient r≥0.99?	✓			All correlation coefficients were ≥0.99. No qualifications were made since the correlation coefficients were acceptable.	LCG Table 1 R<0.99=-J/R
14. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/21/10 @1907	LCG Table 1 R
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Were the QC/MRL recoveries 70-130%?		✓		• The opening MRL check analyzed 7/23/10 at 1226 had methylene chloride recover above limits at 185%, chloroethane at 140%, bromomethane at 140% and bromoform at 167%. • The closing MRL check analyzed 7/23/10 at 2141 had 2-butanone recover above limits at 140%, acetone at 151%, chloroethane at 142% and bromoform at 154%. The acetone results for the trip blanks and the methylene chloride, 2-butanone and acetone results for FWGEQUIPRinse4-1581-GW were qualified as estimated, "J". Documentation provided in SDG A0G140402.	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed? Were results 80-120%?	✓			6/17/10 @ 1442	LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
18. Was a CCV run every 12 hours?	✓			7/23/10 @ 1118,1141	LCG Table 1
19. Did the CCCs have a %Difference < 20%?	✓				LCG Table 1
20. Were the minimum RFs for the SPCCs within limits?	✓				LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓				LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
26. Were target analytes detected in the method blank >1/2 the MRL?		✓		Checked by ADR. Methylene chloride was detected in the method blank (batch 0204233) at 0.76ug/L. Methylene chloride was also detected in the method blank (batch 0207253) at 0.88ug/L. Sample FWGEQUIPRinse4-1581-GW was qualified, "B". No additional qualifications were made as there were no other detected methylene chloride results associated with the blanks.	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse4-1581-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGEQUIPRinse4-1581-GW had 2-butanone detected at 15ug/L, acetone at 13ug/L, toluene at 0.32ug/L and methylene chloride at 1.4ug/L. • The trip blanks had acetone contamination detected from 1.8-1.9ug/L. The acetone results for samples FWGEQUIPRinse4-1581-GW, was qualified, "B" as the result was <10x trip blank contamination. As there were no detected concentrations of the methylene chloride, toluene or 2-butanone in the associated field samples no additional qualifications were made.	<5/10X =B
29. Was a field duplicate analyzed?	✓				
30. Were the Field duplicates RPDs within ±30%?	✓			ADR checked section;	QAPP Table 3-2 RPD >30=J
31. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 1
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?	✓			ADR checked section; Carbon disulfide recovered above control limits in the LCS/LCD for batch 0207253 at 132% and 130%. Samples with detected concentrations of carbon disulfide associated with batch 0207253 were qualified as estimated,"J". A list of qualified samples is provided in Appendix 1.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent sample a Ravenna sample?	✓				
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?	✓			ADR checked section.	LCG Table 1 Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% - 50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G150401-001 **Work Order #...:** L37GF1AA **Matrix.....:** WQ
Date Sampled...: 07/14/10 08:00 **Date Received..:** 07/15/10
Prep Date.....: 07/23/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.9 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G150401-001 **Work Order #...:** L37GF1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-002 **Work Order #...:** L37GG1AA **Matrix.....:** WG
Date Sampled...: 07/14/10 10:29 **Date Received..:** 07/15/10
Prep Date.....: 07/23/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-002 **Work Order #...:** L37GG1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(50 - 150)
1,2-Dichloroethane-d4	105	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-004 **Work Order #...:** L37GK1AA **Matrix.....:** WG
Date Sampled...: 07/14/10 12:11 **Date Received..:** 07/15/10
Prep Date.....: 07/23/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-004 Work Order #...: L37GK1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-006	**Work Order #...:** L37GM1AA	**Matrix.....:** WG	
Date Sampled...: 07/14/10 14:53	**Date Received..:** 07/15/10		
Prep Date.....: 07/26/10	**Analysis Date..:** 07/26/10		
Prep Batch #...: 0207253			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-065C-1522-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-006 **Work Order #...:** L37GM1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-008 **Work Order #...:** L37GP1AA **Matrix.....:** WG
Date Sampled...: 07/14/10 15:47 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-008 Work Order #...: L37GP1AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-010 **Work Order #...:** L37GV1AA **Matrix.....:** WQ
Date Sampled...: 07/14/10 17:07 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	**1.4 J,B**	**2.0**	**ug/L**	**0.33**
Acetone	**13**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**15**	**10**	**ug/L**	**0.57**
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	**0.32 J**	**1.0**	**ug/L**	**0.13**
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-010 **Work Order #...:** L37GV1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G150401-011 **Work Order #...:** L37G01AA **Matrix.....:** WQ
Date Sampled...: 07/14/10 08:00 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.9 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G150401-011 **Work Order #...:** L37G01AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-012 **Work Order #...:** L37G11AA **Matrix.....:** WG
Date Sampled...: 07/14/10 09:14 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	**0.34 J**	**1.0**	**ug/L**	**0.13**
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-012 Work Order #...: L37G11AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-014 **Work Order #...:** L37G31AA **Matrix.....:** WG
Date Sampled...: 07/14/10 13:38 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	**0.69 J**	**1.0**	**ug/L**	**0.13**
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-014 **Work Order #...:** L37G31AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	99	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-016 **Work Order #...:** L37G51AA **Matrix.....:** WG
Date Sampled...: 07/14/10 16:48 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-016 **Work Order #...:** L37G51AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	99	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G150401-018 **Work Order #...:** L37G71AA **Matrix.....:** WQ
Date Sampled...: 07/14/10 08:00 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.8 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G150401-018 **Work Order #...:** L37G71AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-019 **Work Order #...:** L37G81AA **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-019 **Work Order #...:** L37G81AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	100	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-021	**Work Order #...:** L37HC1AA	**Matrix.....:** WG	
Date Sampled...: 07/14/10 13:20	**Date Received..:** 07/15/10		
Prep Date.....: 07/26/10	**Analysis Date..:** 07/26/10		
Prep Batch #...: 0207253			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-021 **Work Order #...:** L37HC1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-023 **Work Order #...:** L37HF1AA **Matrix.....:** WG
Date Sampled...: 07/14/10 15:20 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-023 **Work Order #...:** L37HF1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-025 **Work Order #...:** L37HK1AA **Matrix.....:** WG
Date Sampled...: 07/14/10 16:50 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GW

GC/MS Volatiles

Lot-Sample #...: A0G150401-025 **Work Order #...:** L37HK1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	100	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 **Work Order #...:** L4LL11AA **Matrix.....:** WATER
MB Lot-Sample #: A0G230000-233

Prep Date.....: 07/23/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/23/10 **Prep Batch #...:** 0204233
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	**0.76 J**	**2.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 **Work Order #...:** L4LL11AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 **Work Order #...:** L4NMQ1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G260000-253

Prep Date.....: 07/26/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/26/10 **Prep Batch #...:** 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	**0.88 J**	**2.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 **Work Order #...:** L4NMQ1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 Work Order #...: L4LL11AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G230000-233 L4LL11AD-LCSD
Prep Date.....: 07/23/10 Analysis Date..: 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	99	(73 - 133)			SW846 8260B
	104	(73 - 133)	4.9	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	106	(75 - 134)			SW846 8260B
	109	(75 - 134)	3.2	(0-30)	SW846 8260B
1,2-Dibromoethane	94	(75 - 127)			SW846 8260B
	99	(75 - 127)	4.8	(0-30)	SW846 8260B
Bromochloromethane	100	(75 - 127)			SW846 8260B
	105	(75 - 127)	4.4	(0-30)	SW846 8260B
m-Xylene & p-Xylene	96	(75 - 122)			SW846 8260B
	100	(75 - 122)	4.4	(0-30)	SW846 8260B
o-Xylene	98	(75 - 118)			SW846 8260B
	103	(75 - 118)	5.1	(0-30)	SW846 8260B
Chloromethane	78	(58 - 135)			SW846 8260B
	80	(58 - 135)	3.2	(0-30)	SW846 8260B
Bromomethane	102	(35 - 153)			SW846 8260B
	101	(35 - 153)	0.86	(0-30)	SW846 8260B
Vinyl chloride	77	(73 - 134)			SW846 8260B
	75	(73 - 134)	3.2	(0-30)	SW846 8260B
Chloroethane	94	(72 - 129)			SW846 8260B
	95	(72 - 129)	1.2	(0-30)	SW846 8260B
Methylene chloride	98	(69 - 118)			SW846 8260B
	102	(69 - 118)	4.0	(0-30)	SW846 8260B
Acetone	100	(51 - 157)			SW846 8260B
	99	(51 - 157)	1.9	(0-30)	SW846 8260B
Carbon disulfide	123	(74 - 123)			SW846 8260B
	123	(74 - 123)	0.27	(0-30)	SW846 8260B
1,1-Dichloroethene	107	(75 - 125)			SW846 8260B
	106	(75 - 125)	1.2	(0-30)	SW846 8260B
1,1-Dichloroethane	105	(75 - 133)			SW846 8260B
	111	(75 - 133)	6.1	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	103	(85 - 111)			SW846 8260B
	107	(85 - 111)	4.0	(0-30)	SW846 8260B
Chloroform	102	(74 - 127)			SW846 8260B
	107	(74 - 127)	5.0	(0-30)	SW846 8260B
1,2-Dichloroethane	103	(67 - 132)			SW846 8260B
	110	(67 - 132)	7.0	(0-30)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 Work Order #...: L4LL11AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G230000-233 L4LL11AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	98	(45 - 150)			SW846 8260B
	95	(45 - 150)	3.2	(0-30)	SW846 8260B
1,1,1-Trichloroethane	101	(70 - 127)			SW846 8260B
	102	(70 - 127)	1.0	(0-30)	SW846 8260B
Carbon tetrachloride	102	(71 - 132)			SW846 8260B
	99	(71 - 132)	3.0	(0-30)	SW846 8260B
Bromodichloromethane	111	(70 - 130)			SW846 8260B
	114	(70 - 130)	3.2	(0-30)	SW846 8260B
1,2-Dichloropropane	104	(75 - 127)			SW846 8260B
	108	(75 - 127)	3.6	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	105	(73 - 132)			SW846 8260B
	109	(73 - 132)	3.6	(0-30)	SW846 8260B
Trichloroethene	96	(67 - 128)			SW846 8260B
	98	(67 - 128)	2.6	(0-30)	SW846 8260B
Dibromochloromethane	102	(74 - 145)			SW846 8260B
	110	(74 - 145)	7.0	(0-30)	SW846 8260B
1,1,2-Trichloroethane	95	(75 - 136)			SW846 8260B
	103	(75 - 136)	8.4	(0-30)	SW846 8260B
Benzene	101	(75 - 126)			SW846 8260B
	106	(75 - 126)	4.7	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	100	(74 - 131)			SW846 8260B
	104	(74 - 131)	4.6	(0-30)	SW846 8260B
Bromoform	114	(72 - 136)			SW846 8260B
	116	(72 - 136)	1.5	(0-30)	SW846 8260B
4-Methyl-2-pentanone	103	(59 - 150)			SW846 8260B
	102	(59 - 150)	0.90	(0-30)	SW846 8260B
2-Hexanone	101	(53 - 139)			SW846 8260B
	103	(53 - 139)	1.7	(0-30)	SW846 8260B
Tetrachloroethene	94	(75 - 129)			SW846 8260B
	95	(75 - 129)	0.90	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	93	(68 - 129)			SW846 8260B
	98	(68 - 129)	4.7	(0-30)	SW846 8260B
Toluene	96	(75 - 125)			SW846 8260B
	101	(75 - 125)	5.6	(0-30)	SW846 8260B
Chlorobenzene	93	(75 - 127)			SW846 8260B
	100	(75 - 127)	7.3	(0-30)	SW846 8260B
Ethylbenzene	95	(75 - 120)			SW846 8260B
	102	(75 - 120)	7.5	(0-30)	SW846 8260B
Styrene	98	(75 - 130)			SW846 8260B
	104	(75 - 130)	6.7	(0-30)	SW846 8260B
Xylenes (total)	97	(90 - 114)			SW846 8260B
	101	(90 - 114)	4.6	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 **Work Order #...:** L4LL11AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0G230000-233 L4LL11AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
	95	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
	96	(50 - 150)
Toluene-d8	93	(50 - 150)
	93	(50 - 150)
4-Bromofluorobenzene	94	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 Work Order #...: L4NMQ1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G260000-253 L4NMQ1AD-LCSD
Prep Date.....: 07/26/10 Analysis Date..: 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	104	(73 - 133)			SW846 8260B
	105	(73 - 133)	1.0	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	109	(75 - 134)			SW846 8260B
	109	(75 - 134)	0.15	(0-30)	SW846 8260B
1,2-Dibromoethane	101	(75 - 127)			SW846 8260B
	101	(75 - 127)	0.76	(0-30)	SW846 8260B
Bromochloromethane	104	(75 - 127)			SW846 8260B
	105	(75 - 127)	1.4	(0-30)	SW846 8260B
m-Xylene & p-Xylene	103	(75 - 122)			SW846 8260B
	104	(75 - 122)	0.60	(0-30)	SW846 8260B
o-Xylene	106	(75 - 118)			SW846 8260B
	108	(75 - 118)	1.9	(0-30)	SW846 8260B
Chloromethane	84	(58 - 135)			SW846 8260B
	83	(58 - 135)	0.63	(0-30)	SW846 8260B
Bromomethane	106	(35 - 153)			SW846 8260B
	107	(35 - 153)	0.84	(0-30)	SW846 8260B
Vinyl chloride	80	(73 - 134)			SW846 8260B
	79	(73 - 134)	1.4	(0-30)	SW846 8260B
Chloroethane	99	(72 - 129)			SW846 8260B
	98	(72 - 129)	1.4	(0-30)	SW846 8260B
Methylene chloride	105	(69 - 118)			SW846 8260B
	104	(69 - 118)	1.1	(0-30)	SW846 8260B
Acetone	102	(51 - 157)			SW846 8260B
	108	(51 - 157)	6.0	(0-30)	SW846 8260B
Carbon disulfide	132 a	(74 - 123)			SW846 8260B
	130 a	(74 - 123)	1.7	(0-30)	SW846 8260B
1,1-Dichloroethene	106	(75 - 125)			SW846 8260B
	106	(75 - 125)	0.10	(0-30)	SW846 8260B
1,1-Dichloroethane	111	(75 - 133)			SW846 8260B
	112	(75 - 133)	0.96	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	107	(85 - 111)			SW846 8260B
	107	(85 - 111)	0.58	(0-30)	SW846 8260B
Chloroform	107	(74 - 127)			SW846 8260B
	107	(74 - 127)	0.64	(0-30)	SW846 8260B
1,2-Dichloroethane	109	(67 - 132)			SW846 8260B
	112	(67 - 132)	2.3	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 Work Order #...: L4NMQ1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G260000-253 L4NMQ1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	93	(45 - 150)			SW846 8260B
	93	(45 - 150)	0.65	(0-30)	SW846 8260B
1,1,1-Trichloroethane	102	(70 - 127)			SW846 8260B
	103	(70 - 127)	0.27	(0-30)	SW846 8260B
Carbon tetrachloride	104	(71 - 132)			SW846 8260B
	102	(71 - 132)	1.8	(0-30)	SW846 8260B
Bromodichloromethane	116	(70 - 130)			SW846 8260B
	116	(70 - 130)	0.20	(0-30)	SW846 8260B
1,2-Dichloropropane	108	(75 - 127)			SW846 8260B
	110	(75 - 127)	1.9	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	112	(73 - 132)			SW846 8260B
	111	(73 - 132)	0.42	(0-30)	SW846 8260B
Trichloroethene	99	(67 - 128)			SW846 8260B
	98	(67 - 128)	1.1	(0-30)	SW846 8260B
Dibromochloromethane	115	(74 - 145)			SW846 8260B
	112	(74 - 145)	3.2	(0-30)	SW846 8260B
1,1,2-Trichloroethane	101	(75 - 136)			SW846 8260B
	105	(75 - 136)	3.6	(0-30)	SW846 8260B
Benzene	105	(75 - 126)			SW846 8260B
	107	(75 - 126)	1.6	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	110	(74 - 131)			SW846 8260B
	108	(74 - 131)	2.0	(0-30)	SW846 8260B
Bromoform	122	(72 - 136)			SW846 8260B
	119	(72 - 136)	2.7	(0-30)	SW846 8260B
4-Methyl-2-pentanone	101	(59 - 150)			SW846 8260B
	101	(59 - 150)	0.040	(0-30)	SW846 8260B
2-Hexanone	100	(53 - 139)			SW846 8260B
	101	(53 - 139)	1.4	(0-30)	SW846 8260B
Tetrachloroethene	98	(75 - 129)			SW846 8260B
	96	(75 - 129)	1.8	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	98	(68 - 129)			SW846 8260B
	98	(68 - 129)	0.55	(0-30)	SW846 8260B
Toluene	103	(75 - 125)			SW846 8260B
	104	(75 - 125)	0.67	(0-30)	SW846 8260B
Chlorobenzene	101	(75 - 127)			SW846 8260B
	101	(75 - 127)	0.85	(0-30)	SW846 8260B
Ethylbenzene	103	(75 - 120)			SW846 8260B
	104	(75 - 120)	1.0	(0-30)	SW846 8260B
Styrene	107	(75 - 130)			SW846 8260B
	107	(75 - 130)	0.42	(0-30)	SW846 8260B
Xylenes (total)	104	(90 - 114)			SW846 8260B
	105	(90 - 114)	1.0	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 **Work Order #...:** L4NMQ1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0G260000-253 L4NMQ1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	90	(50 - 150)
	92	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
	95	(50 - 150)
Toluene-d8	93	(50 - 150)
	92	(50 - 150)
4-Bromofluorobenzene	98	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 Work Order #...: L35M41AC-MS Matrix.....: WATER
MS Lot-Sample #: A0G140402-002 L35M41AD-MSD
Date Sampled...: 07/13/10 09:09 Date Received..: 07/14/10
Prep Date.....: 07/23/10 Analysis Date..: 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.36	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	108	(70 - 130)			SW846 8260B
	105	(70 - 130)	2.8	(0-30)	SW846 8260B
1,2-Dibromoethane	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.3	(0-30)	SW846 8260B
Bromochloromethane	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.0	(0-30)	SW846 8260B
m-Xylene & p-Xylene	100	(70 - 130)			SW846 8260B
	97	(70 - 130)	2.5	(0-30)	SW846 8260B
o-Xylene	102	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.27	(0-30)	SW846 8260B
Chloromethane	77	(70 - 130)			SW846 8260B
	77	(70 - 130)	0.10	(0-30)	SW846 8260B
Bromomethane	93	(70 - 130)			SW846 8260B
	91	(70 - 130)	1.9	(0-30)	SW846 8260B
Vinyl chloride	75	(70 - 130)			SW846 8260B
	73	(70 - 130)	2.6	(0-30)	SW846 8260B
Chloroethane	90	(70 - 130)			SW846 8260B
	92	(70 - 130)	2.0	(0-30)	SW846 8260B
Methylene chloride	94	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.70	(0-30)	SW846 8260B
Acetone	99	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.1	(0-30)	SW846 8260B
Carbon disulfide	122	(70 - 130)			SW846 8260B
	119	(70 - 130)	2.3	(0-30)	SW846 8260B
1,1-Dichloroethene	104	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.3	(0-30)	SW846 8260B
1,1-Dichloroethane	108	(70 - 130)			SW846 8260B
	108	(70 - 130)	0.27	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	104	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.6	(0-30)	SW846 8260B
Chloroform	103	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.0	(0-30)	SW846 8260B
1,2-Dichloroethane	105	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.39	(0-30)	SW846 8260B
2-Butanone	97	(70 - 130)			SW846 8260B
	94	(70 - 130)	2.6	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 **Work Order #...:** L35M41AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A0G140402-002 L35M41AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	99	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.34	(0-30)	SW846 8260B
Carbon tetrachloride	100	(70 - 130)			SW846 8260B
	98	(70 - 130)	2.4	(0-30)	SW846 8260B
Bromodichloromethane	111	(70 - 130)			SW846 8260B
	112	(70 - 130)	0.13	(0-30)	SW846 8260B
1,2-Dichloropropane	104	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.90	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	103	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.06	(0-30)	SW846 8260B
Trichloroethene	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.39	(0-30)	SW846 8260B
Dibromochloromethane	105	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.88	(0-30)	SW846 8260B
1,1,2-Trichloroethane	99	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.97	(0-30)	SW846 8260B
Benzene	104	(70 - 130)			SW846 8260B
	104	(70 - 130)	0.29	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.86	(0-30)	SW846 8260B
Bromoform	118	(70 - 130)			SW846 8260B
	115	(70 - 130)	2.6	(0-30)	SW846 8260B
4-Methyl-2-pentanone	102	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.20	(0-30)	SW846 8260B
2-Hexanone	104	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.92	(0-30)	SW846 8260B
Tetrachloroethene	97	(70 - 130)			SW846 8260B
	91	(70 - 130)	5.9	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	96	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.15	(0-30)	SW846 8260B
Toluene	100	(70 - 130)			SW846 8260B
	98	(70 - 130)	2.1	(0-30)	SW846 8260B
Chlorobenzene	98	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.6	(0-30)	SW846 8260B
Ethylbenzene	101	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.2	(0-30)	SW846 8260B
Styrene	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.4	(0-30)	SW846 8260B
Xylenes (total)	100	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.7	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 **Work Order #...:** L35M41AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A0G140402-002 L35M41AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
	93	(50 - 150)
1,2-Dichloroethane-d4	97	(50 - 150)
	94	(50 - 150)
Toluene-d8	93	(50 - 150)
	92	(50 - 150)
4-Bromofluorobenzene	98	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 Work Order #...: L35NJ1AC-MS Matrix.....: WATER
MS Lot-Sample #: A0G140402-015 L35NJ1AD-MSD
Date Sampled...: 07/13/10 12:58 Date Received..: 07/14/10
Prep Date.....: 07/23/10 Analysis Date..: 07/23/10
Prep Batch #...: 0204233
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Bromochloromethane	99	(70 - 130)			SW846 8260B
	96	(70 - 130)	3.5	(0-30)	SW846 8260B
m-Xylene & p-Xylene	94	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.97	(0-30)	SW846 8260B
o-Xylene	97	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.22	(0-30)	SW846 8260B
cis-1,2-Dichloroethene	96	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.2	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.5	(0-30)	SW846 8260B
1,2-Dibromoethane	93	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.3	(0-30)	SW846 8260B
Chloromethane	72	(70 - 130)			SW846 8260B
	73	(70 - 130)	1.3	(0-30)	SW846 8260B
Bromomethane	80	(70 - 130)			SW846 8260B
	82	(70 - 130)	2.8	(0-30)	SW846 8260B
Vinyl chloride	80	(70 - 130)			SW846 8260B
	81	(70 - 130)	0.63	(0-30)	SW846 8260B
Chloroethane	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.6	(0-30)	SW846 8260B
Methylene chloride	90	(70 - 130)			SW846 8260B
	90	(70 - 130)	0.23	(0-30)	SW846 8260B
Acetone	105	(70 - 130)			SW846 8260B
	110	(70 - 130)	3.6	(0-30)	SW846 8260B
Carbon disulfide	127	(70 - 130)			SW846 8260B
	127	(70 - 130)	0.0	(0-30)	SW846 8260B
1,1-Dichloroethene	109	(70 - 130)			SW846 8260B
	109	(70 - 130)	0.50	(0-30)	SW846 8260B
1,1-Dichloroethane	105	(70 - 130)			SW846 8260B
	106	(70 - 130)	0.08	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	101	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.19	(0-30)	SW846 8260B
Chloroform	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.17	(0-30)	SW846 8260B
1,2-Dichloroethane	104	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.5	(0-30)	SW846 8260B
2-Butanone	96	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.9	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 **Work Order #...:** L35NJ1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A0G140402-015 L35NJ1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	102	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.59	(0-30)	SW846 8260B
Carbon tetrachloride	104	(70 - 130)			SW846 8260B
	104	(70 - 130)	0.32	(0-30)	SW846 8260B
Bromodichloromethane	108	(70 - 130)			SW846 8260B
	107	(70 - 130)	1.0	(0-30)	SW846 8260B
1,2-Dichloropropane	102	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.2	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	95	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.88	(0-30)	SW846 8260B
Trichloroethene	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.06	(0-30)	SW846 8260B
Dibromochloromethane	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.39	(0-30)	SW846 8260B
1,1,2-Trichloroethane	95	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.0	(0-30)	SW846 8260B
Benzene	101	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.6	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.21	(0-30)	SW846 8260B
Bromoform	111	(70 - 130)			SW846 8260B
	111	(70 - 130)	0.16	(0-30)	SW846 8260B
4-Methyl-2-pentanone	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.03	(0-30)	SW846 8260B
2-Hexanone	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.6	(0-30)	SW846 8260B
Tetrachloroethene	94	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.58	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	95	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.83	(0-30)	SW846 8260B
Toluene	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.07	(0-30)	SW846 8260B
Chlorobenzene	92	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.6	(0-30)	SW846 8260B
Ethylbenzene	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.29	(0-30)	SW846 8260B
Styrene	96	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.76	(0-30)	SW846 8260B
Xylenes (total)	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.56	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 **Work Order #...:** L35NJ1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A0G140402-015 L35NJ1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
	94	(50 - 150)
1,2-Dichloroethane-d4	99	(50 - 150)
	98	(50 - 150)
Toluene-d8	90	(50 - 150)
	92	(50 - 150)
4-Bromofluorobenzene	96	(50 - 150)
	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 Work Order #...: L37G81AC-MS Matrix.....: WG
MS Lot-Sample #: A0G150401-019 L37G81AD-MSD
Date Sampled...: 07/14/10 10:50 Date Received..: 07/15/10
Prep Date.....: 07/26/10 Analysis Date..: 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	100	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.2	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	105	(70 - 130)			SW846 8260B
	104	(70 - 130)	1.1	(0-30)	SW846 8260B
1,2-Dibromoethane	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.08	(0-30)	SW846 8260B
Bromochloromethane	98	(70 - 130)			SW846 8260B
	95	(70 - 130)	3.0	(0-30)	SW846 8260B
m-Xylene & p-Xylene	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.96	(0-30)	SW846 8260B
o-Xylene	97	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.72	(0-30)	SW846 8260B
Chloromethane	83	(70 - 130)			SW846 8260B
	81	(70 - 130)	2.5	(0-30)	SW846 8260B
Bromomethane	99	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.60	(0-30)	SW846 8260B
Vinyl chloride	80	(70 - 130)			SW846 8260B
	79	(70 - 130)	1.7	(0-30)	SW846 8260B
Chloroethane	100	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.0	(0-30)	SW846 8260B
Methylene chloride	92	(70 - 130)			SW846 8260B
	89	(70 - 130)	3.0	(0-30)	SW846 8260B
Acetone	110	(70 - 130)			SW846 8260B
	104	(70 - 130)	5.7	(0-30)	SW846 8260B
Carbon disulfide	130	(70 - 130)			SW846 8260B
	124	(70 - 130)	4.3	(0-30)	SW846 8260B
1,1-Dichloroethene	107	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.4	(0-30)	SW846 8260B
1,1-Dichloroethane	108	(70 - 130)			SW846 8260B
	107	(70 - 130)	1.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	103	(70 - 130)			SW846 8260B
	100	(70 - 130)	2.1	(0-30)	SW846 8260B
Chloroform	104	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.8	(0-30)	SW846 8260B
1,2-Dichloroethane	108	(70 - 130)			SW846 8260B
	105	(70 - 130)	3.2	(0-30)	SW846 8260B
2-Butanone	100	(70 - 130)			SW846 8260B
	96	(70 - 130)	3.9	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 Work Order #...: L37G81AC-MS Matrix.....: WG
MS Lot-Sample #: A0G150401-019 L37G81AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	102	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.6	(0-30)	SW846 8260B
Carbon tetrachloride	104	(70 - 130)			SW846 8260B
	104	(70 - 130)	0.59	(0-30)	SW846 8260B
Bromodichloromethane	112	(70 - 130)			SW846 8260B
	107	(70 - 130)	4.3	(0-30)	SW846 8260B
1,2-Dichloropropane	104	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.1	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	97	(70 - 130)			SW846 8260B
	94	(70 - 130)	3.1	(0-30)	SW846 8260B
Trichloroethene	93	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.6	(0-30)	SW846 8260B
Dibromochloromethane	105	(70 - 130)			SW846 8260B
	103	(70 - 130)	1.5	(0-30)	SW846 8260B
1,1,2-Trichloroethane	100	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.0	(0-30)	SW846 8260B
Benzene	103	(70 - 130)			SW846 8260B
	100	(70 - 130)	2.6	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	99	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.7	(0-30)	SW846 8260B
Bromoform	113	(70 - 130)			SW846 8260B
	114	(70 - 130)	0.75	(0-30)	SW846 8260B
4-Methyl-2-pentanone	103	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.7	(0-30)	SW846 8260B
2-Hexanone	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.2	(0-30)	SW846 8260B
Tetrachloroethene	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.54	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.9	(0-30)	SW846 8260B
Toluene	99	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.2	(0-30)	SW846 8260B
Chlorobenzene	96	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.2	(0-30)	SW846 8260B
Ethylbenzene	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.65	(0-30)	SW846 8260B
Styrene	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.39	(0-30)	SW846 8260B
Xylenes (total)	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.39	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150401 **Work Order #...:** L37G81AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150401-019 L37G81AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
	93	(50 - 150)
1,2-Dichloroethane-d4	103	(50 - 150)
	97	(50 - 150)
Toluene-d8	95	(50 - 150)
	95	(50 - 150)
4-Bromofluorobenzene	102	(50 - 150)
	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 and 4.4 °C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP9-7/21/2010 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 2 R
12. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviation (%RSD) ≤ 30%?	✓				LCG Table 2 R
13. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 2 R
14. Was each target analyte <15 % RSD, or was the average RSD <15%?	✓				LCG Table 2 15% <RSD< 30% = J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			Benzoic acid, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol and pentachlorophenol used a quadratic fit. No qualifications were made as coefficients of determination (COD)(r) were≥0.99.	LCG Table 2 r<0.99=-J/R
16. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			6/8/10	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓			7/21/2010 @ 1233, 1942 and 7/22/10 @0859, 1802	LCG Table 2
18. Were the QC/MRL recoveries 70-130%?		✓		Hexachlorocyclopentadiene recovered below control limits at 40.2% in the MRL analyzed 7/22/10 at 1802. An MDL check was analyzed with acceptable results. Hexachlorocyclopentadiene results for samples FWGLL1mw-083C-1528-GW and FWGLL1mw-064C-1521-GW were qualified as estimated, "UJ". Documentation provided in SDG A0G130405.	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			7/21/10 @ 1214	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?	✓			7/22/10 @ 0838	LCG Table 2
21. Was the percent difference (% D) for the CCCs ≤ 20%? (see Table 1) (% drift if regression fit model used)	✓				LCG Table 2
22. Were the minimum RFs for the SPCCs met? (see Table 2)	✓				LCG Table 2
23. Was the %Difference or %Drift ≤20% for all target analytes? OR was the average %D ≤20% with no individual analyte ≥30%D?	✓				LCG Table 2 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>30% (neg) = J/R D>30% (pos) = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
24. Were the internal standards added to every sample?	✓				LCG Table 2
25. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point ICAL std?	✓				LCG Table 2 R
26. Did the areas of all IS compounds vary by no more than -50% to +100% from the ICAL EICP area?	✓				LCG Table 2 R
27. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 2
28. Were all target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. bis(2-Ethylhexyl) phthalate was detected in the method blank at 1.2ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate <10x contamination were qualified, "B". See Appendix 1 for list of affected samples.	LCG Table 2 <5/10x blank = B
29. Was a field blank collected and analyzed?	✓				
30. Were all target analytes in the field blank analysis <1/2 the MRL?		✓		Checked by ADR. bis(2-Ethylhexyl) phthalate was detected in the FWGEQUIPRinse4-1581-GW at 1.8ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate <10x contamination were qualified, "B". See Appendix 1 for list of affected samples.	<5/10x blank = B
31. Was a field duplicate analyzed?	✓				
32. Were the field duplicate RPDs ≤30%?	✓			Checked by ADR. Only detected sample results above the RL were evaluated.	QAPP Table 3-2 RPD >30=J
33. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 2
34. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
35. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 2
36. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL12mw-088c-1546-GW was the parent MS/MSD sample from this SDG.	
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		The MS and MSD recovered below control limits for 3,3'-dichorobenzidine at 30 and 17%, for 2,4-dinitrophenol at 37 and 34%, for benzoic acid at 18 and	LCG Table 2 Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
				21%, for hexachlorobutadiene at 41 and 43% and for hexachlorocyclopentadiene at 38 and 43%. The matrix spike recovered below control limits for hexachloroethane at 41%. No qualifications were made for these outliers as the associated LCS recovered within limits.	
38. Were surrogate recoveries within 50-150%?		✓		For sample FWGLL1mw-083c-1528-GW, 2,4,6-tribromophenol recovered below control limits at 39%, 2-Fluorophenol recovered at 33% and phenol-5 at 38%. The results for the acid targets in sample FWGLL1mw-083c-1528-GW were qualified as estimated, "UJ".	LCG Table 2 >150%=J; 10% -50%=J/UJ; <10%=J/R
39. Were reported sample concentrations within calibration range?	✓				
40. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
41. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding MS outliers and surrogate outliers.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 2 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Table 1: CCCs *(All analytes if CCCs not included in standard)*

Base / Neutral Compunds	Acid Compounds
Acenaphthalene	4-Chloro-3-methylphenol
1,4-Dichlorobenzene	2,4-Dichlorophenol
Hexachlorobutadiene	2-Nitrophenol
N-Nitrosodiphehylamine	Phenol
Di-n-octylphthalate	Pentachlorophenol
Fluoroanthene	2,4,6-Trichlorophenol
Benzo(a)pyrene	

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8270C (including PAHs)

Table 2: SPCCs

N-Nitroso-di-n-propylamine	0.050
Hexachlorocyclopentadiene	0.050
2,4-Dinitrophenol	0.050
4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-002 **Work Order #...:** L37GG1AC **Matrix.....:** WG
Date Sampled...: 07/14/10 10:29 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-002 Work Order #...: L37GG1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-002 Work Order #...: L37GG1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	85	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	79	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-004 **Work Order #...:** L37GK1AC **Matrix.....:** WG
Date Sampled...: 07/14/10 12:11 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**4.2 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-004 **Work Order #...:** L37GK1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-004 Work Order #...: L37GK1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
Terphenyl-d14	88	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-006 **Work Order #...:** L37GM1AC **Matrix.....:** WG
Date Sampled...: 07/14/10 14:53 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.4 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-006 **Work Order #...:** L37GM1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-006 Work Order #...: L37GM1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	56	(50 - 150)
2,4,6-Tribromophenol	56	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-008 **Work Order #...:** L37GP1AC **Matrix.....:** WG
Date Sampled...: 07/14/10 15:47 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**8.6 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-008 **Work Order #...:** L37GP1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-008 **Work Order #...:** L37GP1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	66	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-010 **Work Order #...:** L37GV1AC **Matrix.....:** WQ
Date Sampled...: 07/14/10 17:07 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-010 Work Order #...: L37GV1AC Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-010 **Work Order #...:** L37GV1AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	82	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	89	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-012 **Work Order #...:** L37G11AC **Matrix.....:** WG
Date Sampled...: 07/14/10 09:14 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.82 J**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-012 Work Order #...: L37G11AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-012 **Work Order #...:** L37G11AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	86	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	88	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-014 **Work Order #...:** L37G31AC **Matrix.....:** WG
Date Sampled...: 07/14/10 13:38 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 940 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.7 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-014 **Work Order #...:** L37G31AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-014 **Work Order #...:** L37G31AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	82	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-016 **Work Order #...:** L37G51AC **Matrix.....:** WG
Date Sampled...: 07/14/10 16:48 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**3.4 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-016 Work Order #...: L37G51AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-016 Work Order #...: L37G51AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	66	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-019 **Work Order #...:** L37G81AE **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**0.88 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-019 Work Order #...: L37G81AE Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-019 **Work Order #...:** L37G81AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	87	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	63	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-021 **Work Order #...:** L37HC1AC **Matrix.....:** WG
Date Sampled...: 07/14/10 13:20 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.80 J**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-021 Work Order #...: L37HC1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-021 Work Order #...: L37HC1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
Terphenyl-d14	82	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	59	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-023 **Work Order #...:** L37HF1AC **Matrix.....:** WG
Date Sampled...: 07/14/10 15:20 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.6 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-023 Work Order #...: L37HF1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-023 Work Order #...: L37HF1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	72	(50 - 150)
Phenol-d5	61	(50 - 150)
2-Fluorophenol	52	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-025 **Work Order #...:** L37HK1AC **Matrix.....:** WG
Date Sampled...: 07/14/10 16:50 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**0.96 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-025 **Work Order #...:** L37HK1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	**1.5 J**	**5.0**	**ug/L**	**0.27**
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150401-025 Work Order #...: L37HK1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	38 *	(50 - 150)
2-Fluorophenol	33 *	(50 - 150)
2,4,6-Tribromophenol	39 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L39D11AA **Matrix.....:** WATER
MB Lot-Sample #: A0G160000-036

Prep Date.....: 07/17/10 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/21/10 **Prep Batch #...:** 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzoic acid	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**1.2 J**	**10**	**ug/L**	**SW846 8270C**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L39D11AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	82	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	62	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L39D11AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	61	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150401 Work Order #...: L39D11AC Matrix.....: WATER
LCS Lot-Sample#: A0G160000-036
Prep Date.....: 07/17/10 Analysis Date..: 07/21/10
Prep Batch #...: 0197036
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	62	(30 - 120)	SW846 8270C
Acenaphthene	73	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	86	(34 - 151)	SW846 8270C
Pyrene	70	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	79	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	67	(30 - 115)	SW846 8270C
Pentachlorophenol	53	(30 - 150)	SW846 8270C
Phenol	76	(30 - 115)	SW846 8270C
2-Chlorophenol	76	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	76	(31 - 121)	SW846 8270C
4-Nitrophenol	72	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	66	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	60	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	76	(36 - 135)	SW846 8270C
4-Methylphenol	69	(31 - 115)	SW846 8270C
4-Nitroaniline	83	(30 - 140)	SW846 8270C
Acenaphthylene	76	(37 - 115)	SW846 8270C
Anthracene	70	(45 - 118)	SW846 8270C
Benzo(a)anthracene	72	(43 - 138)	SW846 8270C
Benzo(a)pyrene	61	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	68	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	70	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	80	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	81	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	79	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	79	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	82	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150401 Work Order #...: L39D11AC Matrix.....: WATER
LCS Lot-Sample#: A0G160000-036

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	72	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	77	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	67	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	34	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	93	(43 - 122)	SW846 8270C
2-Chloronaphthalene	72	(35 - 115)	SW846 8270C
2-Methylnaphthalene	75	(32 - 115)	SW846 8270C
2-Methylphenol	76	(30 - 116)	SW846 8270C
2-Nitroaniline	79	(36 - 140)	SW846 8270C
2-Nitrophenol	77	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	52	(30 - 160)	SW846 8270C
3-Nitroaniline	82	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	64	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	78	(43 - 118)	SW846 8270C
4-Chloroaniline	72	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	77	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	77	(37 - 136)	SW846 8270C
Carbazole	75	(49 - 126)	SW846 8270C
Chrysene	67	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	71	(38 - 130)	SW846 8270C
Dibenzofuran	73	(40 - 115)	SW846 8270C
Diethyl phthalate	81	(43 - 132)	SW846 8270C
Dimethyl phthalate	82	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	76	(36 - 151)	SW846 8270C
Fluoranthene	73	(47 - 132)	SW846 8270C
Fluorene	76	(41 - 115)	SW846 8270C
Hexachlorobenzene	75	(42 - 123)	SW846 8270C
Hexachlorobutadiene	48	(30 - 120)	SW846 8270C
Hexachloroethane	51	(30 - 120)	SW846 8270C
Isophorone	77	(33 - 115)	SW846 8270C
Naphthalene	72	(30 - 119)	SW846 8270C
Nitrobenzene	83	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	74	(35 - 124)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L39D11AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G160000-036

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	**71**	**(45 - 117)**	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	**69**	**(37 - 130)**	**SW846 8270C**
Di-n-butyl phthalate	**79**	**(46 - 123)**	**SW846 8270C**
Hexachlorocyclopenta-diene	**51**	**(30 - 115)**	**SW846 8270C**
Benzoic acid	**14 a**	**(30 - 136)**	**SW846 8270C**
Benzyl alcohol	**74**	**(29 - 115)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	82	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
Terphenyl-d14	85	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	79	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L37G81AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150401-019 L37G81AG-MSD
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0197036
Dilution Factor: 1 **Initial Wgt/Vol:** 500 mL **Final Wgt/Vol..:** 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	52	(45 - 135)			SW846 8270C
	56	(45 - 135)	8.2	(0-40)	SW846 8270C
Acenaphthene	63	(45 - 135)			SW846 8270C
	67	(45 - 135)	6.4	(0-40)	SW846 8270C
2,4-Dinitrotoluene	77	(45 - 135)			SW846 8270C
	79	(45 - 135)	2.4	(0-40)	SW846 8270C
Pyrene	61	(45 - 135)			SW846 8270C
	63	(45 - 135)	2.6	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	66	(45 - 135)			SW846 8270C
	69	(45 - 135)	5.0	(0-40)	SW846 8270C
1,4-Dichlorobenzene	55	(45 - 135)			SW846 8270C
	59	(45 - 135)	8.2	(0-40)	SW846 8270C
Pentachlorophenol	47	(45 - 135)			SW846 8270C
	45	(45 - 135)	3.4	(0-40)	SW846 8270C
Phenol	65	(45 - 135)			SW846 8270C
	69	(45 - 135)	5.4	(0-40)	SW846 8270C
2-Chlorophenol	67	(45 - 135)			SW846 8270C
	68	(45 - 135)	1.9	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	67	(45 - 135)			SW846 8270C
	69	(45 - 135)	3.8	(0-40)	SW846 8270C
4-Nitrophenol	63	(45 - 135)			SW846 8270C
	64	(45 - 135)	1.7	(0-40)	SW846 8270C
Acenaphthylene	64	(45 - 135)			SW846 8270C
	69	(45 - 135)	7.5	(0-40)	SW846 8270C
Anthracene	58	(45 - 135)			SW846 8270C
	59	(45 - 135)	0.38	(0-40)	SW846 8270C
Benzo(a)anthracene	62	(45 - 135)			SW846 8270C
	60	(45 - 135)	3.4	(0-40)	SW846 8270C
Benzo(b)fluoranthene	63	(45 - 135)			SW846 8270C
	62	(45 - 135)	2.7	(0-40)	SW846 8270C
Benzo(k)fluoranthene	70	(45 - 135)			SW846 8270C
	74	(45 - 135)	5.3	(0-40)	SW846 8270C
Benzo(ghi)perylene	63	(45 - 135)			SW846 8270C
	65	(45 - 135)	2.8	(0-40)	SW846 8270C
Benzo(a)pyrene	54	(45 - 135)			SW846 8270C
	54	(45 - 135)	0.23	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L37G81AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150401-019 L37G81AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	72	(45 - 135)			SW846 8270C
	74	(45 - 135)	2.5	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	74	(45 - 135)			SW846 8270C
	74	(45 - 135)	0.58	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	63	(45 - 135)			SW846 8270C
	67	(45 - 135)	7.3	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	71	(45 - 135)			SW846 8270C
	76	(45 - 135)	6.8	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	68	(45 - 135)			SW846 8270C
	70	(45 - 135)	2.4	(0-40)	SW846 8270C
Butyl benzyl phthalate	68	(45 - 135)			SW846 8270C
	70	(45 - 135)	1.5	(0-40)	SW846 8270C
Carbazole	67	(45 - 135)			SW846 8270C
	69	(45 - 135)	3.3	(0-40)	SW846 8270C
4-Chloroaniline	64	(45 - 135)			SW846 8270C
	63	(45 - 135)	1.6	(0-40)	SW846 8270C
2-Chloronaphthalene	62	(45 - 135)			SW846 8270C
	66	(45 - 135)	7.1	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	68	(45 - 135)			SW846 8270C
	71	(45 - 135)	4.7	(0-40)	SW846 8270C
Chrysene	62	(45 - 135)			SW846 8270C
	64	(45 - 135)	2.1	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	63	(45 - 135)			SW846 8270C
	64	(45 - 135)	1.8	(0-40)	SW846 8270C
Dibenzofuran	64	(45 - 135)			SW846 8270C
	68	(45 - 135)	6.1	(0-40)	SW846 8270C
Di-n-butyl phthalate	71	(45 - 135)			SW846 8270C
	73	(45 - 135)	2.5	(0-40)	SW846 8270C
1,2-Dichlorobenzene	53	(45 - 135)			SW846 8270C
	57	(45 - 135)	8.0	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L37G81AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150401-019 L37G81AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	48	(45 - 135)			SW846 8270C
	53	(45 - 135)	9.8	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	30 a	(45 - 135)			SW846 8270C
	17 a,p	(45 - 135)	53	(0-40)	SW846 8270C
2,4-Dichlorophenol	69	(45 - 135)			SW846 8270C
	72	(45 - 135)	4.0	(0-40)	SW846 8270C
Diethyl phthalate	73	(45 - 135)			SW846 8270C
	76	(45 - 135)	4.6	(0-40)	SW846 8270C
2,4-Dimethylphenol	60	(45 - 135)			SW846 8270C
	56	(45 - 135)	7.3	(0-40)	SW846 8270C
Dimethyl phthalate	72	(45 - 135)			SW846 8270C
	75	(45 - 135)	4.3	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	60	(45 - 135)			SW846 8270C
	60	(45 - 135)	0.35	(0-40)	SW846 8270C
2,4-Dinitrophenol	37 a	(45 - 135)			SW846 8270C
	34 a	(45 - 135)	8.9	(0-40)	SW846 8270C
2,6-Dinitrotoluene	81	(45 - 135)			SW846 8270C
	85	(45 - 135)	5.3	(0-40)	SW846 8270C
Di-n-octyl phthalate	66	(45 - 135)			SW846 8270C
	67	(45 - 135)	1.6	(0-40)	SW846 8270C
Fluoranthene	65	(45 - 135)			SW846 8270C
	66	(45 - 135)	2.0	(0-40)	SW846 8270C
Fluorene	66	(45 - 135)			SW846 8270C
	69	(45 - 135)	5.4	(0-40)	SW846 8270C
Hexachlorobenzene	66	(45 - 135)			SW846 8270C
	68	(45 - 135)	2.7	(0-40)	SW846 8270C
Hexachlorobutadiene	41 a	(45 - 135)			SW846 8270C
	43 a	(45 - 135)	4.6	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	38 a	(45 - 135)			SW846 8270C
	43 a	(45 - 135)	12	(0-40)	SW846 8270C
Hexachloroethane	41 a	(45 - 135)			SW846 8270C
	45	(45 - 135)	9.2	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	62	(45 - 135)			SW846 8270C
	63	(45 - 135)	1.1	(0-40)	SW846 8270C
Isophorone	69	(45 - 135)			SW846 8270C
	71	(45 - 135)	2.8	(0-40)	SW846 8270C
2-Methylnaphthalene	64	(45 - 135)			SW846 8270C
	68	(45 - 135)	6.3	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L37G81AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150401-019 L37G81AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	71	(45 - 135)			SW846 8270C
	77	(45 - 135)	8.7	(0-40)	SW846 8270C
4-Methylphenol	61	(45 - 135)			SW846 8270C
	63	(45 - 135)	3.9	(0-40)	SW846 8270C
Naphthalene	62	(45 - 135)			SW846 8270C
	66	(45 - 135)	7.5	(0-40)	SW846 8270C
2-Nitroaniline	65	(45 - 135)			SW846 8270C
	69	(45 - 135)	5.7	(0-40)	SW846 8270C
3-Nitroaniline	69	(45 - 135)			SW846 8270C
	69	(45 - 135)	0.15	(0-50)	SW846 8270C
4-Nitroaniline	70	(45 - 135)			SW846 8270C
	72	(45 - 135)	2.4	(0-40)	SW846 8270C
Nitrobenzene	73	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.7	(0-40)	SW846 8270C
2-Nitrophenol	70	(45 - 135)			SW846 8270C
	73	(45 - 135)	4.4	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	53	(45 - 135)			SW846 8270C
	52	(45 - 135)	3.0	(0-40)	SW846 8270C
Phenanthrene	62	(45 - 135)			SW846 8270C
	65	(45 - 135)	4.1	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	67	(45 - 135)			SW846 8270C
	70	(45 - 135)	5.3	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	63	(45 - 135)			SW846 8270C
	65	(45 - 135)	3.1	(0-40)	SW846 8270C
Benzoic acid	18 a	(45 - 135)			SW846 8270C
	21 a	(45 - 135)	17	(0-40)	SW846 8270C
Benzyl alcohol	60	(45 - 135)			SW846 8270C
	61	(45 - 135)	2.1	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
	78	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
	68	(50 - 150)
Terphenyl-d14	76	(50 - 150)
	78	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L37G81AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150401-019 L37G81AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	65	(50 - 150)
	68	(50 - 150)
2-Fluorophenol	61	(50 - 150)
	65	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)
	73	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 and 4.4 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Was a DDT standard analyzed every 12 hours? Was the DDT %breakdown < 15%?	✓				LCG Table 4 >15%=J/R
8. Was an endrin standard analyzed every 12 hours? Was endrin %breakdown <15%?	✓				LCG Table 4 >15%=J/R
9. Does the initial calibration curve consist of 5 concentration levels?	✓			Instrument A2HP3 7/26/10 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 4 R
10. Were the %RSDs for each analyte ≤ 20%? OR was the average %RSD ≤ 20% with the r^2 >0.990?	✓				LCG Table 4 RSD>20% or r<0.99=J/R
11. Was a blank run prior to the initial calibration?			✓	No data provided to evaluate.	
12. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			4/14/10 @ 2010	LCG Table 4 R
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?	✓			7/29/10 @ 1150, 2100 and 7/30/10 @ 0400, 1129	LCG Table 4 >130%=J; 65-70%%=J/UJ; <65%=J/R
14. Was a second source (ICV) verification analyzed after the ICAL? Were results 85-115%?	✓			7/26/10 @ 2007	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a CCV run every 12 hours?	✓			7/29/10 @ 1125, 1216, 2010, 2035 and 7/30/10 @ 0311, 0834, 1038, 1103	LCG Table 4
16. Was the %D for all target analytes ≤15%? OR was the average %D ≤ 15% with no individual analyte >30%?	✓			For the CCVs analyzed 7/30 (both front and back) individual targets had a %D >15%, but no qualification was made as the average %D was ≤ 15%.	LCG Table 4 D>30% (neg) =J/R D>30% (pos) = J
17. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 4
18. Were target analytes < ½ the MRL?	✓				LCG Table 4 <5x=B
19. Was a field blank collected and analyzed?	✓				
20. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓				<5x =B
21. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 4
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 50-150% and RPD ≤20%?		✓		Checked by ADR. The matrix spike and spike duplicate analyzed on sample FWGLL1mw-064c-1521-GW had an RPD above control limits at 31%. No qualification was required as the LCS recovered within limits.	*Was QAPP Table 3-2*, Pj
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in sample FWGLL1mw-065c-1522-GW at 40%, FWGLL1mw-078c-1524-GW at 40% and FWGSCFmw-001-1515-GW at 41%. The associated results were qualified as estimated, "J/UJ".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Only sample results above the RL were evaluated.	QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPD's ≤ 40?		✓		The second column confirmation analyzed for sample FWGLL1mw-084c-1529-GW for beta-BHC had an RPD above 40%. The beta-BHC result for FWGLL1mw-084c-1529-GW was qualified as estimated, "J".	LCG Table 4 >40 RPD=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Were reported sample concentrations within calibration range?	✓				
30. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
31. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 4 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-002 **Work Order #...:** L37GG1AD **Matrix.....:** WG
Date Sampled...: 07/14/10 10:29 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197027
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	72	(50 - 150)
Decachlorobiphenyl	72	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

GC Semivolatiles

Lot-Sample #...:	A0G150401-004	**Work Order #...:**	L37GK1AD	**Matrix.....:**	WG
Date Sampled...:	07/14/10 12:11	**Date Received..:**	07/15/10		
Prep Date.....:	07/17/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0197027				
Dilution Factor:	2	**Initial Wgt/Vol:**	1020 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.060	ug/L	0.014
beta-BHC	**0.048 J**	**0.060**	**ug/L**	**0.017**
delta-BHC	**0.019 J**	**0.060**	**ug/L**	**0.017**
gamma-BHC (Lindane)	ND	0.060	ug/L	0.013
Heptachlor	ND	0.060	ug/L	0.016
Aldrin	ND	0.060	ug/L	0.016
Heptachlor epoxide	ND	0.060	ug/L	0.014
Endosulfan I	ND	0.050	ug/L	0.026
Dieldrin	ND	0.060	ug/L	0.015
4,4'-DDE	ND	0.060	ug/L	0.019
Endrin	ND	0.060	ug/L	0.022
Endosulfan II	ND	0.050	ug/L	0.024
4,4'-DDD	ND	0.060	ug/L	0.019
Endosulfan sulfate	ND	0.060	ug/L	0.022
4,4'-DDT	ND	0.060	ug/L	0.032
Methoxychlor	ND	0.20	ug/L	0.064
Endrin ketone	ND	0.060	ug/L	0.016
Endrin aldehyde	ND	0.060	ug/L	0.022
alpha-Chlordane	ND	0.060	ug/L	0.028
gamma-Chlordane	ND	0.060	ug/L	0.024
Toxaphene	ND	4.0	ug/L	0.64

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
Decachlorobiphenyl	99	(50 - 150)

NOTE(S):

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-006 **Work Order #...:** L37GM1AD **Matrix.....:** WG
Date Sampled...: 07/14/10 14:53 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197027
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	70	(50 - 150)
Decachlorobiphenyl	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-008 **Work Order #...:** L37GP1AD **Matrix.....:** WG
Date Sampled...: 07/14/10 15:47 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197027
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	51	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-010 **Work Order #...:** L37GV1AD **Matrix.....:** WQ
Date Sampled...: 07/14/10 17:07 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197027
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-012 **Work Order #...:** L37G11AD **Matrix.....:** WG
Date Sampled...: 07/14/10 09:14 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197027
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
Decachlorobiphenyl	76	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-014 **Work Order #...:** L37G31AD **Matrix.....:** WG
Date Sampled...: 07/14/10 13:38 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197027
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	**0.027 J**	**0.030**	**ug/L**	**0.0078**
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	55	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-016 **Work Order #...:** L37G51AD **Matrix.....:** WG
Date Sampled...: 07/14/10 16:48 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0197027
Dilution Factor: 5 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.15	ug/L	0.035
beta-BHC	**0.26 PG**	**0.15**	**ug/L**	**0.042**
delta-BHC	ND	0.15	ug/L	0.044
gamma-BHC (Lindane)	ND	0.15	ug/L	0.032
Heptachlor	ND	0.15	ug/L	0.040
Aldrin	ND	0.15	ug/L	0.041
Heptachlor epoxide	ND	0.15	ug/L	0.036
Endosulfan I	ND	0.12	ug/L	0.065
Dieldrin	ND	0.15	ug/L	0.038
4,4'-DDE	ND	0.15	ug/L	0.048
Endrin	ND	0.15	ug/L	0.055
Endosulfan II	ND	0.12	ug/L	0.060
4,4'-DDD	ND	0.15	ug/L	0.048
Endosulfan sulfate	ND	0.15	ug/L	0.055
4,4'-DDT	ND	0.15	ug/L	0.080
Methoxychlor	ND	0.50	ug/L	0.16
Endrin ketone	ND	0.15	ug/L	0.039
Endrin aldehyde	ND	0.15	ug/L	0.055
alpha-Chlordane	ND	0.15	ug/L	0.070
gamma-Chlordane	ND	0.15	ug/L	0.060
Toxaphene	ND	10	ug/L	1.6

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	95 DIL	(50 - 150)
Decachlorobiphenyl	97 DIL	(50 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-019 **Work Order #...:** L37G81AH **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197027
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(50 - 150)
Decachlorobiphenyl	76	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-021 **Work Order #...:** L37HC1AD **Matrix.....:** WG
Date Sampled...: 07/14/10 13:20 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197027
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-023 **Work Order #...:** L37HF1AD **Matrix.....:** WG
Date Sampled...: 07/14/10 15:20 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197027
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.011 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	65	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-025 **Work Order #...:** L37HK1AD **Matrix.....:** WG
Date Sampled...: 07/14/10 16:50 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0197027
Dilution Factor: 10 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.30	ug/L	0.070
beta-BHC	ND	0.30	ug/L	0.084
delta-BHC	ND	0.30	ug/L	0.087
gamma-BHC (Lindane)	ND	0.30	ug/L	0.064
Heptachlor	ND	0.30	ug/L	0.080
Aldrin	ND	0.30	ug/L	0.082
Heptachlor epoxide	ND	0.30	ug/L	0.071
Endosulfan I	ND	0.25	ug/L	0.13
Dieldrin	ND	0.30	ug/L	0.075
4,4'-DDE	ND	0.30	ug/L	0.097
Endrin	ND	0.30	ug/L	0.11
Endosulfan II	ND	0.25	ug/L	0.12
4,4'-DDD	ND	0.30	ug/L	0.096
Endosulfan sulfate	ND	0.30	ug/L	0.11
4,4'-DDT	ND	0.30	ug/L	0.16
Methoxychlor	ND	1.0	ug/L	0.32
Endrin ketone	ND	0.30	ug/L	0.078
Endrin aldehyde	ND	0.30	ug/L	0.11
alpha-Chlordane	ND	0.30	ug/L	0.14
gamma-Chlordane	ND	0.30	ug/L	0.12
Toxaphene	ND	20	ug/L	3.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94 DIL	(50 - 150)
Decachlorobiphenyl	63 DIL	(50 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L39DN1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G160000-027

Prep Date.....: 07/17/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/29/10 **Prep Batch #...:** 0197027
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
alpha-BHC	ND	0.030	ug/L	SW846 8081A
beta-BHC	ND	0.030	ug/L	SW846 8081A
delta-BHC	ND	0.030	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.030	ug/L	SW846 8081A
Heptachlor	ND	0.030	ug/L	SW846 8081A
Aldrin	ND	0.030	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.030	ug/L	SW846 8081A
Endosulfan I	ND	0.025	ug/L	SW846 8081A
Dieldrin	ND	0.030	ug/L	SW846 8081A
4,4'-DDE	ND	0.030	ug/L	SW846 8081A
Endrin	ND	0.030	ug/L	SW846 8081A
Endosulfan II	ND	0.025	ug/L	SW846 8081A
4,4'-DDD	ND	0.030	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.030	ug/L	SW846 8081A
4,4'-DDT	ND	0.030	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Endrin ketone	ND	0.030	ug/L	SW846 8081A
Endrin aldehyde	ND	0.030	ug/L	SW846 8081A
alpha-Chlordane	ND	0.030	ug/L	SW846 8081A
gamma-Chlordane	ND	0.030	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(50 - 150)
Decachlorobiphenyl	84	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L39DN1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G160000-027
Prep Date.....: 07/17/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0197027
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	84	(44 - 137)	**SW846 8081A**
beta-BHC	82	(50 - 135)	**SW846 8081A**
delta-BHC	89	(58 - 160)	**SW846 8081A**
gamma-BHC (Lindane)	80	(58 - 127)	**SW846 8081A**
Heptachlor	93	(48 - 150)	**SW846 8081A**
Aldrin	81	(53 - 128)	**SW846 8081A**
Heptachlor epoxide	82	(50 - 127)	**SW846 8081A**
Endosulfan I	56	(50 - 160)	**SW846 8081A**
Dieldrin	85	(50 - 124)	**SW846 8081A**
4,4'-DDE	83	(50 - 130)	**SW846 8081A**
Endrin	82	(50 - 137)	**SW846 8081A**
Endosulfan II	62	(50 - 144)	**SW846 8081A**
4,4'-DDD	86	(50 - 137)	**SW846 8081A**
Endosulfan sulfate	85	(50 - 160)	**SW846 8081A**
4,4'-DDT	76	(50 - 145)	**SW846 8081A**
Methoxychlor	75	(50 - 160)	**SW846 8081A**
Endrin ketone	76	(50 - 150)	**SW846 8081A**
Endrin aldehyde	69	(30 - 160)	**SW846 8081A**
alpha-Chlordane	84	(50 - 122)	**SW846 8081A**
gamma-Chlordane	84	(50 - 130)	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	62	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G150401 Work Order #...: L37G81AJ-MS Matrix.....: WG
MS Lot-Sample #: A0G150401-019 L37G81AK-MSD
Date Sampled...: 07/14/10 10:50 Date Received..: 07/15/10
Prep Date.....: 07/17/10 Analysis Date..: 07/29/10
Prep Batch #...: 0197027
Dilution Factor: 2 Initial Wgt/Vol: 525 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	90	(50 - 150)			SW846 8081A
	82	(50 - 150)	9.0	(0-50)	SW846 8081A
beta-BHC	88	(50 - 150)			SW846 8081A
	90	(50 - 150)	2.7	(0-50)	SW846 8081A
delta-BHC	94	(50 - 150)			SW846 8081A
	97	(50 - 150)	4.1	(0-50)	SW846 8081A
gamma-BHC (Lindane)	84	(50 - 150)			SW846 8081A
	83	(50 - 150)	1.9	(0-50)	SW846 8081A
Heptachlor	82	(50 - 150)			SW846 8081A
	112	(50 - 150)	31	(0-50)	SW846 8081A
Aldrin	86	(50 - 150)			SW846 8081A
	82	(50 - 150)	4.1	(0-50)	SW846 8081A
Heptachlor epoxide	87	(50 - 150)			SW846 8081A
	90	(50 - 150)	3.1	(0-50)	SW846 8081A
Endosulfan I	60	(50 - 150)			SW846 8081A
	65	(50 - 150)	7.8	(0-50)	SW846 8081A
Dieldrin	91	(50 - 150)			SW846 8081A
	96	(50 - 150)	4.7	(0-50)	SW846 8081A
4,4'-DDE	89	(50 - 150)			SW846 8081A
	93	(50 - 150)	3.8	(0-50)	SW846 8081A
Endrin	92	(50 - 150)			SW846 8081A
	86	(50 - 150)	7.2	(0-50)	SW846 8081A
Endosulfan II	63	(50 - 150)			SW846 8081A
	67	(50 - 150)	6.7	(0-50)	SW846 8081A
4,4'-DDD	94	(50 - 150)			SW846 8081A
	96	(50 - 150)	2.5	(0-50)	SW846 8081A
Endosulfan sulfate	88	(50 - 150)			SW846 8081A
	92	(50 - 150)	3.8	(0-50)	SW846 8081A
4,4'-DDT	75	(50 - 150)			SW846 8081A
	81	(50 - 150)	7.9	(0-50)	SW846 8081A
Methoxychlor	77	(50 - 150)			SW846 8081A
	77	(50 - 150)	1.2	(0-50)	SW846 8081A
Endrin ketone	76	(50 - 150)			SW846 8081A
	79	(50 - 150)	3.0	(0-50)	SW846 8081A
Endrin aldehyde	68	(50 - 150)			SW846 8081A
	71	(50 - 150)	4.7	(0-50)	SW846 8081A
alpha-Chlordane	89	(50 - 150)			SW846 8081A
	91	(50 - 150)	2.3	(0-50)	SW846 8081A
gamma-Chlordane	89	(50 - 150)			SW846 8081A
	93	(50 - 150)	3.9	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L37G81AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150401-019 L37G81AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
	77	(50 - 150)
Decachlorobiphenyl	96	(50 - 150)
	125	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

PESTICIDES IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

FWGLL1MW-084C-1529-

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A0G150401

Lab Sample ID: L37G51AD Date(s) Analyzed: 07/30/10 07/30/10

Instrument ID (1): A2HP3 Instrument ID (2): A2HP3

GC Column(1): CLP PESTICIDES ID: 0.53(mm) GC Column(2): CLP PESTICIDES II ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Endrin ketone	1	12.36	12.35	12.41	0.01071	
	2	13.37	13.34	13.40	0.02010	87.7
Methoxychlor	1	11.89	11.89	11.95	0.05169	
	2	13.16	13.13	13.19	0.06961	34.7
beta-BHC	1	6.63	6.61	6.67	0.2639	
	2	7.81	7.81	7.87	13.52	5023
delta-BHC	1	6.89	6.85	6.91	0.07139	
	2	8.52	8.47	8.53	0.003802	1778
4,4'-DDT	1	11.23	11.20	11.26	0.005552	
	2	12.39	12.34	12.40	0.04682	743.3
4,4'-DDE	1	9.92	9.87	9.93	5.170	
	2	11.26	11.22	11.28	0.002878	179539
Kepone	1					
	2					
	1					
	2					

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 and 4.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Does the initial calibration curve consist of 5 concentration levels of Aroclors 1016 and 1260?	✓			Instrument A2HP13; ICAL on 7/20/10 Stds = 0.05, 0.1, 0.2, 0.5, 1.0, 2.0	LCG Table 3 R
8. Was the % RSD ≤ 20%? Were the r^2s >0.990?	✓				LCG Table 3 RSD>20% or r<0.99= J/R
9. Was a MDL Level Verification performed once per quarter? Were all target analytes detected?	✓			No data provided for evaluation.	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			7/21/10@ 0320	LCG Table 3 >115%=J; 80-85%=J/UJ; <80%=J/R
12. Were single standards of the other five Aroclors run to aid in pattern recognition and to determine a single point calibration factor?	✓				Method 8082 Section 5.6.2
13. Was a CCV run every 12 hours?	✓				LCG Table 3

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the % D ≤ 15 % for each analyte or the average %D across all analytes ≤ 15% with a maximum %D for each target analyte ≤30%?	✓				LCG Table 3 D>30% (neg) =J/R D>30% (pos) =J
15. Was a method blank prepared and analyzed with each batch?	✓			Section checked by ADR	LCG Table 5
16. Were target analytes <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was an equipment blank collected and analyzed?	✓				
18. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓			Section checked by ADR	<5x = B
19. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 3
20. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C >UL=J; LL-30%=J/UJ; <30%=J/R
21. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?	✓				
23. Were MS/MSD recoveries 50-150% and RPD ≤20%?		✓		Checked by ADR. The Aroclor 1016 MS/MSD RPD was above limits at 29%. No qualifications were made as the LCS recovered within limits.	QAPP Table 3-2 Pj
24. Was the surrogate spiked into all samples?	✓				
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in sample FWGLL1mw-065c-1522-GW at 45%, FWGLL1mw-078c-1524-GW at 40% and FWGSCFmw-001-1515-GW at 38%. The associated results were qualified as estimated, "J/UJ".	LCG Table 3 >150%=J; 10-50%=J/UJ; <10%=R
26. Was a field duplicate analyzed? Were the RPDs <30%?	✓				QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
27. Were all positive results verified by a second dissimilar column confirmation? Was the RPD ≤ 40?			✓	No detected concentrations were reported.	LCG Table 3 RPD>40=J
28. Were reported sample concentrations within calibration range?			✓	No detected concentrations were reported.	
29. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.	✓			See narrative for surrogate outliers.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 3 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GW

GC Semivolatiles

Lot-Sample #...:	A0G150401-002	**Work Order #...:**	L37GG1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/10 10:29	**Date Received..:**	07/15/10		
Prep Date.....:	07/17/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0197028				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

GC Semivolatiles

Lot-Sample #...:	A0G150401-004	**Work Order #...:**	L37GK1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/10 12:11	**Date Received..:**	07/15/10		
Prep Date.....:	07/17/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0197028				
Dilution Factor:	1	**Initial Wgt/Vol:**	1020 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GW

GC Semivolatiles

Lot-Sample #...:	A0G150401-006	**Work Order #...:**	L37GM1AF	**Matrix.....:**	WG
Date Sampled...:	07/14/10 14:53	**Date Received..:**	07/15/10		
Prep Date.....:	07/17/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0197028				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	75	(50 - 150)
Decachlorobiphenyl	45 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-008	**Work Order #...:** L37GP1AF	**Matrix.....:** WG	
Date Sampled...: 07/14/10 15:47	**Date Received..:** 07/15/10		
Prep Date.....: 07/17/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0197028			
Dilution Factor: 1	**Initial Wgt/Vol:** 1040 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-010 **Work Order #...:** L37GV1AG **Matrix.....:** WQ
Date Sampled...: 07/14/10 17:07 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0197028
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(50 - 150)
Decachlorobiphenyl	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GW

GC Semivolatiles

Lot-Sample #...:	A0G150401-012	**Work Order #...:**	L37G11AG	**Matrix.....:**	WG
Date Sampled...:	07/14/10 09:14	**Date Received..:**	07/15/10		
Prep Date.....:	07/17/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0197028				
Dilution Factor:	1	**Initial Wgt/Vol:**	950 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(50 - 150)
Decachlorobiphenyl	76	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-014	**Work Order #...:** L37G31AG	**Matrix.....:** WG	
Date Sampled...: 07/14/10 13:38	**Date Received..:** 07/15/10		
Prep Date.....: 07/17/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0197028			
Dilution Factor: 1	**Initial Wgt/Vol:** 950 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	72	(50 - 150)
Decachlorobiphenyl	38 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-016 **Work Order #...:** L37G51AG **Matrix.....:** WG
Date Sampled...: 07/14/10 16:48 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0197028
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	74	(50 - 150)
Decachlorobiphenyl	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-019 **Work Order #...:** L37G81AP **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0197028
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	70	(50 - 150)
Decachlorobiphenyl	74	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-021	**Work Order #...:** L37HC1AF	**Matrix.....:** WG	
Date Sampled...: 07/14/10 13:20	**Date Received..:** 07/15/10		
Prep Date.....: 07/17/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0197028			
Dilution Factor: 1	**Initial Wgt/Vol:** 990 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-023	**Work Order #...:** L37HF1AF		**Matrix.....:** WG
Date Sampled...: 07/14/10 15:20	**Date Received..:** 07/15/10		
Prep Date.....: 07/17/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0197028			
Dilution Factor: 1	**Initial Wgt/Vol:** 960 mL		**Final Wgt/Vol..:** 5 mL
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	70	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GW

GC Semivolatiles

Lot-Sample #...: A0G150401-025	**Work Order #...:** L37HK1AF		**Matrix.....:** WG
Date Sampled...: 07/14/10 16:50	**Date Received..:** 07/15/10		
Prep Date.....: 07/17/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0197028			
Dilution Factor: 1	**Initial Wgt/Vol:** 1030 mL		**Final Wgt/Vol..:** 5 mL
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
Decachlorobiphenyl	60	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L39DP1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G160000-028

Prep Date.....: 07/17/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/27/10 **Prep Batch #...:** 0197028
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/L	SW846 8082
Aroclor 1221	ND	0.50	ug/L	SW846 8082
Aroclor 1232	ND	0.50	ug/L	SW846 8082
Aroclor 1242	ND	0.50	ug/L	SW846 8082
Aroclor 1248	ND	0.50	ug/L	SW846 8082
Aroclor 1254	ND	0.50	ug/L	SW846 8082
Aroclor 1260	ND	0.50	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	67	(50 - 150)
Decachlorobiphenyl	87	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L39DP1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G160000-028
Prep Date.....: 07/17/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0197028
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**85**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**89**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G150401 **Work Order #...:** L37G81AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150401-019 L37G81AR-MSD
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10
Prep Date.....: 07/17/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0197028
Dilution Factor: 2 **Initial Wgt/Vol:** 495 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**96**	**(50 - 150)**			**SW846 8082**
	71	**(50 - 150)**	**29**	**(0-50)**	**SW846 8082**
Aroclor 1260	**107**	**(50 - 150)**			**SW846 8082**
	94	**(50 - 150)**	**13**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
	87	(50 - 150)
Decachlorobiphenyl	118	(50 - 150)
	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 and 4.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			ICP- 5/17/10 ICPMS-7/16/2010	LCG Table 7 R
11. Was a MRL Level Verification performed at the beginning of the daily sequence? Were results 70-130%?	✓				LCG Table 7 >130%=J; 65-70%=J/UJ; <65%=J/R
12. Was the ICV (second source verification) analyzed after the ICAL?	✓				LCG Table 7
13. Were all analytes within 90-110% in the ICV?	✓				LCG Table 7 J>110%=J; 90-85%=J/UJ; <85%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		ICP The ICB analyzed 7/21/10 had detected potassium at 134ug/L. Potassium results for samples FWGLL1mw-067c-1523-GF and FWGLL1mw-064c-1521-GF were qualified "B" as the detected concentration were <5x contamination. ICPMS The ICB analyzed 7/30/10 had thallium detected at 0.23ug/L. The thallium results for samples FWGLL1mw-067c-1523-GF, FWGLL1mw-080c-1525-GF, FWGLL1mw-084c-1529-GF, FWGLL1mw-078c-1524-GF, FWGLL1mw-081c-1526-GF and FWGLL1mw-083c-1528-GF were <5x the ICB contamination and were qualified, "U". No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U
15. Were CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 7
16. Were CCV results within 90 to 110%?		✓		ICP The CCV analyzed 7/21/2010 at 1834 had a potassium recovery below control limits at 88% and sodium at 89%. No qualifications were made as the reported sodium and potassium results were not bracketed by these CCVs. ICPMS The CCVs analyzed 7/30/2010 at 2245 and 7/31/10 at 0048 had recoveries above control limits for beryllium at 111% and 112%, respectively. Sample FWGLL1mw-083c-1528-GF was qualified as estimated, "J". No additional qualifications were made as there were no other detected beryllium concentrations reported.	LCG Table 7 >110%=J 90-85%=J/UJ; <85%=J/R
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICP The CCBs analyzed 7/21/10 had detected potassium from 138ug/L to 180ug/L. No additional potassium qualifications other than those made for the ICB contamination were made. ICPMS The CCBs analyzed 7/30/2010 had beryllium detected from 0.021 to 0.027ug/L, antimony at 0.04ug/L, cadmium at 0.012-0.037ug/L, iron from 9.3ug/L to 10.2ug/L and thallium from 0.25ug/L to 0.29ug/L. No additional thallium qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all bracketed detected contaminants were >5x the blank contamination.	LCG Table 7 <5x = U
18. Was an Interelement Check Standard run at the beginning of the analytical sequence?	✓				LCG Table 7

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
19. Was the ICS recovery within 80 to 120% of true value for each element of interest?	✓				LCG Table 7 >120%=J; 50-79%=J/UJ; <50%=Pj/R
21. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 7
22. Were target analytes <1/2 the MRL in the method blank?	✓			ADR checked section;	LCG Table 7 <5x = B
23. Was a field blank collected and analyzed?	✓				
24. Were target analytes reported in the field blank analyses >1/2 the MRL?		✓		ADR checked section;	<5x=B
25. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 7
26. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 60%-LL= J/UJ; <60%=J/R
27. Was a MS prepared with each batch?	✓				LCG Table 7
28. Was the MS and Lab Duplicate parent a Ravenna sample?	✓				
29. Were the MS recoveries within 75-125%?	✓			Checked by ADR.	LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤20%?	✓				LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	Not evaluated as the MS/MSD results were acceptable.	LCG Table 7 >125%=J; 30-75%=J/UJ; <30%=R
32. Was a serial dilution performed as needed?	✓				
33. Was the 4 fold dilution within ± 10% of the original result?	✓				LCG Table 7 >10%=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
34. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR. Only results where both sample results were detected above the RL were evaluated.	QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				
36. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
37. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 7 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 and 4.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG:** A0G150401 R0
Sample Event: July 2010 **Analysis:** SW846 7470A
Data Reviewer/Date: Angye Dragotta/ August 27, 2010

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Were the CCBs analyzed every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?	✓			No qualifications were made for due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
16. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 9
17. Were target analytes detected in the method blank <1/2 the MRL?	✓				LCG Table 9 <5x = B
18. Was a field blank collected and analyzed?	✓				
19. Were target analytes reported in the field blank analyses at <1/2 the MRL?	✓				<5x=B
20. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 9
21. Were the LCS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 J>120%=J; 50-79%=J/UJ; <50%=R
22. Was a MS prepared with each batch?	✓				LCG Table 9
23. Was the MS and Lab Duplicate parent sample a Ravenna sample?	✓				
24. Were the MS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 >125% = J 30% - 75% = J/UJ <30% = J/R
25. Was the Matrix Duplicate RPD ± 20%?	✓				LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR.	QAPP Table 3-2
27. Were sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 27, 2010

SDG: A0G150401 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 9 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GF

TOTAL Metals

Lot-Sample #...: A0G150401-003 **Matrix.....:** WG
Date Sampled...: 07/14/10 10:29 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GJ1AM
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L37GJ1AA
		Dilution Factor: 1		Analysis Time..: 23:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GJ1AJ
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**11.2**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GJ1AN**
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37GJ1AC
		Dilution Factor: 1		Analysis Time..: 23:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**29400**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GJ1AP**
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L37GJ1AD
		Dilution Factor: 1		Analysis Time..: 23:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GJ1AQ
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GJ1AR
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GJ1AT
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GF

TOTAL Metals

Lot-Sample #...: A0G150401-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L37GJ1AE
		Dilution Factor: 1		Analysis Time..: 23:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37GJ1A2
		Dilution Factor: 1		Analysis Time..: 13:24	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**589 B**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GJ1AU**
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**10400**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GJ1AV**
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**13.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GJ1AW**
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1590**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GJ1AX**
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**21.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GJ1A0**
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L37GJ1AK
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L37GJ1AF
		Dilution Factor: 1		Analysis Time..: 23:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GJ1AL
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GF

TOTAL Metals

Lot-Sample #...: A0G150401-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.25 B**	**1.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L37GJ1AH**
		Dilution Factor: 1		Analysis Time..: 23:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37GJ1A1
		Dilution Factor: 1		Analysis Time..: 15:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L37GJ1AG
		Dilution Factor: 1		Analysis Time..: 23:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GF

TOTAL Metals

Lot-Sample #...: A0G150401-005 **Matrix.....:** WG
Date Sampled...: 07/14/10 12:11 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GL1AQ
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**45.2 B**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L37GL1AE**
		Dilution Factor: 1		Analysis Time..: 23:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GL1AM
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**26.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GL1AR**
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37GL1AF
		Dilution Factor: 1		Analysis Time..: 23:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**130000**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GL1AT**
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L37GL1AG
		Dilution Factor: 1		Analysis Time..: 23:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GL1AU
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GL1AV
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GL1AW
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GF

TOTAL Metals

Lot-Sample #...: A0G150401-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L37GL1AH
		Dilution Factor: 1		Analysis Time..: 23:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37GL1AD
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**3310**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GL1AX**
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**9180**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GL1A0**
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**25.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GL1A1**
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**4320**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GL1A2**
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/22/10	L37GL1AA
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/22/10	L37GL1AN
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L37GL1AJ
		Dilution Factor: 1		Analysis Time..: 23:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GL1AP
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GF

TOTAL Metals

Lot-Sample #...: A0G150401-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.19 B**	**1.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L37GL1AL**
		Dilution Factor: 1		Analysis Time..: 23:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/22/10	L37GL1AC
		Dilution Factor: 1		Analysis Time..: 06:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L37GL1AK
		Dilution Factor: 1		Analysis Time..: 23:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GF

TOTAL Metals

Lot-Sample #...: A0G150401-007 **Matrix.....:** WG
Date Sampled...: 07/14/10 14:53 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GN1AM
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L37GN1AA
		Dilution Factor: 1		Analysis Time..: 23:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GN1AJ
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**48.6**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GN1AN**
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37GN1AC
		Dilution Factor: 1		Analysis Time..: 23:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**79300**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GN1AP**
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L37GN1AD
		Dilution Factor: 1		Analysis Time..: 23:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GN1AQ
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GN1AR
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GN1AT
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GF

TOTAL Metals

Lot-Sample #...: A0G150401-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**127**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L37GN1AE**
		Dilution Factor: 1		Analysis Time..: 23:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37GN1A2
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**845 B**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GN1AU**
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**19900**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GN1AV**
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**256**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GN1AW**
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**10700**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37GN1AX**
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37GN1A0
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L37GN1AK
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L37GN1AF
		Dilution Factor: 1		Analysis Time..: 23:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GN1AL
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GF

TOTAL Metals

Lot-Sample #...: A0G150401-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37GN1AH
		Dilution Factor: 1		Analysis Time..: 23:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37GN1A1
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L37GN1AG
		Dilution Factor: 1		Analysis Time..: 23:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GF

TOTAL Metals

Lot-Sample #...: A0G150401-009 **Matrix.....:** WG
Date Sampled...: 07/14/10 15:47 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GT1AQ
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L37GT1AE
		Dilution Factor: 1		Analysis Time..: 23:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GT1AM
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**49.5**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GT1AR**
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37GT1AF
		Dilution Factor: 1		Analysis Time..: 23:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**77400**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GT1AT**
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L37GT1AG
		Dilution Factor: 1		Analysis Time..: 23:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GT1AU
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GT1AV
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GT1AW
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GF

TOTAL Metals

Lot-Sample #...: A0G150401-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**117**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L37GT1AH**
		Dilution Factor: 1		Analysis Time..: 23:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37GT1AD
		Dilution Factor: 1		Analysis Time..: 13:37	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**893 B**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GT1AX**
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**19100**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GT1A0**
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**249**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GT1A1**
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**11000**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/22/10**	**L37GT1A2**
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/22/10	L37GT1AA
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/22/10	L37GT1AN
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L37GT1AJ
		Dilution Factor: 1		Analysis Time..: 23:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/22/10	L37GT1AP
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GF

TOTAL Metals

Lot-Sample #...: A0G150401-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37GT1AL
		Dilution Factor: 1		Analysis Time..: 23:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/22/10	L37GT1AC
		Dilution Factor: 1		Analysis Time..: 06:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L37GT1AK
		Dilution Factor: 1		Analysis Time..: 23:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

TOTAL Metals

Lot-Sample #...: A0G150401-010 **Matrix.....:** WQ
Date Sampled...: 07/14/10 17:07 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GV1AU
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L37GV1AH
		Dilution Factor: 1		Analysis Time..: 23:36	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GV1AQ
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37GV1AV
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37GV1AJ
		Dilution Factor: 1		Analysis Time..: 23:36	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L37GV1AW
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L37GV1AK
		Dilution Factor: 1		Analysis Time..: 23:36	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GV1AX
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GV1A0
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GV1A1
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

TOTAL Metals

Lot-Sample #...: A0G150401-010 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L37GV1AL
		Dilution Factor: 1		Analysis Time..: 23:36	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37GV1A8
		Dilution Factor: 1		Analysis Time..: 13:39	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L37GV1A2
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L37GV1A3
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37GV1A4
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L37GV1A5
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37GV1A6
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L37GV1AR
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L37GV1AM
		Dilution Factor: 1		Analysis Time..: 23:36	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37GV1AT
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

TOTAL Metals

Lot-Sample #...: A0G150401-010 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37GV1AP
		Dilution Factor: 1		Analysis Time..: 23:36	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37GV1A7
		Dilution Factor: 1		Analysis Time..: 16:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L37GV1AN
		Dilution Factor: 1		Analysis Time..: 23:36	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GF

TOTAL Metals

Lot-Sample #...: A0G150401-013 **Matrix.....:** WG
Date Sampled...: 07/14/10 09:14 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G21AQ
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L37G21AE
		Dilution Factor: 1		Analysis Time..: 23:40	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**12.5**	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G21AM
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**38.0**	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37G21AR
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37G21AF
		Dilution Factor: 1		Analysis Time..: 23:40	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**83400**	1000	ug/L	SW846 6010B	07/16-07/21/10	L37G21AT
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L37G21AG
		Dilution Factor: 1		Analysis Time..: 23:40	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G21AU
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G21AV
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G21AW
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GF

TOTAL Metals

Lot-Sample #...: A0G150401-013 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**233**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L37G21AH**
		Dilution Factor: 1		Analysis Time..: 23:40	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37G21AD
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2190**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G21AX**
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**27000**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G21A0**
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**67.3**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G21A1**
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**20500**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G21A2**
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37G21AA
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L37G21AN
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.15 B**	**2.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L37G21AJ**
		Dilution Factor: 1		Analysis Time..: 23:40	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G21AP
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GF

TOTAL Metals

Lot-Sample #...: A0G150401-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37G21AL
		Dilution Factor: 1		Analysis Time..: 23:40	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37G21AC
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L37G21AK
		Dilution Factor: 1		Analysis Time..: 23:40	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GF

TOTAL Metals

Lot-Sample #...: A0G150401-015 **Matrix.....:** WG
Date Sampled...: 07/14/10 13:38 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G41AQ
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L37G41AE
		Dilution Factor: 1		Analysis Time..: 23:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**13.1**	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G41AM
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**39.4**	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37G41AR
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37G41AF
		Dilution Factor: 1		Analysis Time..: 23:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**102000**	1000	ug/L	SW846 6010B	07/16-07/21/10	L37G41AT
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L37G41AG
		Dilution Factor: 1		Analysis Time..: 23:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G41AU
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G41AV
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G41AW
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GF

TOTAL Metals

Lot-Sample #...: A0G150401-015 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**814**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L37G41AH**
		Dilution Factor: 1		Analysis Time..: 23:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37G41AD
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1670**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G41AX**
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**28600**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G41A0**
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**194**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G41A1**
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**13000**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G41A2**
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**3.3 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G41AA**
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L37G41AN
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L37G41AJ
		Dilution Factor: 1		Analysis Time..: 23:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G41AP
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GF

TOTAL Metals

Lot-Sample #...: A0G150401-015 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L37G41AL
		Dilution Factor: 1		Analysis Time..: 23:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37G41AC
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L37G41AK
		Dilution Factor: 1		Analysis Time..: 23:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GF

TOTAL Metals

Lot-Sample #...: A0G150401-017 **Matrix.....:** WG
Date Sampled...: 07/14/10 16:48 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G61AQ
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**335**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37G61AE**
		Dilution Factor: 1		Analysis Time..: 00:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G61AM
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**14.0**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G61AR**
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/31/10	L37G61AF
		Dilution Factor: 1		Analysis Time..: 00:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**45600**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G61AT**
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	**1.6**	**0.50**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37G61AG**
		Dilution Factor: 1		Analysis Time..: 00:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**15.7**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G61AU**
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G61AV
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	**5.4**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G61AW**
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GF

TOTAL Metals

Lot-Sample #...: A0G150401-017 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/31/10	L37G61AH
		Dilution Factor: 1		Analysis Time..: 00:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37G61AD
		Dilution Factor: 1		Analysis Time..: 13:23	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2260**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G61AX**
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**2710**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G61A0**
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**196**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G61A1**
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2630**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G61A2**
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**26.8**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G61AA**
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L37G61AN
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/31/10	L37G61AJ
		Dilution Factor: 1		Analysis Time..: 00:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G61AP
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GF

TOTAL Metals

Lot-Sample #...: A0G150401-017 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.39 B**	**1.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37G61AL**
		Dilution Factor: 1		Analysis Time..: 00:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37G61AC
		Dilution Factor: 1		Analysis Time..: 16:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**58.5**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37G61AK**
		Dilution Factor: 1		Analysis Time..: 00:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-064C-1521-GF

TOTAL Metals

Lot-Sample #...: A0G150401-020 **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G91CL
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/31/10	L37G91AL
		Dilution Factor: 1		Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G91CA
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**44.5**	10.0	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G91CP**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/31/10	L37G91AP
		Dilution Factor: 1		Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**54300**	1000	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G91CT**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/31/10	L37G91AT
		Dilution Factor: 1		Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G91CW
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G91C1
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G91C4
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GF

TOTAL Metals

Lot-Sample #...: A0G150401-020 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**517**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37G91AW**
		Dilution Factor: 1		Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37G91AH
		Dilution Factor: 1		Analysis Time..: 13:18	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**643 B**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G91C7**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**9330**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G91DA**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**112**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G91DE**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**4890**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37G91DH**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37G91AA
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L37G91CE
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/31/10	L37G91A1
		Dilution Factor: 1		Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37G91CH
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GF

TOTAL Metals

Lot-Sample #...: A0G150401-020 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/31/10	L37G91A7
		Dilution Factor: 1		Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37G91AE
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/31/10	L37G91A4
		Dilution Factor: 1		Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GF

TOTAL Metals

Lot-Sample #...: A0G150401-022 **Matrix.....:** WG
Date Sampled...: 07/14/10 13:20 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HE1AQ
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**110**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37HE1AE**
		Dilution Factor: 1		Analysis Time..: 00:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HE1AM
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**16.2**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HE1AR**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/31/10	L37HE1AF
		Dilution Factor: 1		Analysis Time..: 00:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**47300**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HE1AT**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/31/10	L37HE1AG
		Dilution Factor: 1		Analysis Time..: 00:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HE1AU
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HE1AV
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HE1AW
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GF

TOTAL Metals

Lot-Sample #...: A0G150401-022 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/31/10	L37HE1AH
		Dilution Factor: 1		Analysis Time..: 00:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37HE1AD
		Dilution Factor: 1		Analysis Time..: 13:38	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**3100**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HE1AX**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**7390**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HE1A0**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**71.0**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HE1A1**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**3770**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HE1A2**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**4.5 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HE1AA**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L37HE1AN
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/31/10	L37HE1AJ
		Dilution Factor: 1		Analysis Time..: 00:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HE1AP
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GF

TOTAL Metals

Lot-Sample #...: A0G150401-022 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.68 B**	**1.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37HE1AL**
		Dilution Factor: 1		Analysis Time..: 00:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37HE1AC
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/31/10	L37HE1AK
		Dilution Factor: 1		Analysis Time..: 00:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GF

TOTAL Metals

Lot-Sample #...: A0G150401-024 **Matrix.....:** WG
Date Sampled...: 07/14/10 15:20 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HH1AQ
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/31/10	L37HH1AE
		Dilution Factor: 1		Analysis Time..: 00:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HH1AM
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**18.2**	10.0	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HH1AR**
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/31/10	L37HH1AF
		Dilution Factor: 1		Analysis Time..: 00:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**54300**	1000	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HH1AT**
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/31/10	L37HH1AG
		Dilution Factor: 1		Analysis Time..: 00:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**6.2**	5.0	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HH1AU**
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HH1AV
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HH1AW
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GF

TOTAL Metals

Lot-Sample #...: A0G150401-024 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**4200**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37HH1AH**
		Dilution Factor: 1		Analysis Time..: 00:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37HH1AD
		Dilution Factor: 1		Analysis Time..: 13:34	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2350**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HH1AX**
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**12000**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HH1A0**
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1830**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HH1A1**
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2050**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HH1A2**
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**11.0**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HH1AA**
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L37HH1AN
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/31/10	L37HH1AJ
		Dilution Factor: 1		Analysis Time..: 00:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HH1AP
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GF

TOTAL Metals

Lot-Sample #...: A0G150401-024 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.24 B**	**1.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37HH1AL**
		Dilution Factor: 1		Analysis Time..: 00:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37HH1AC
		Dilution Factor: 1		Analysis Time..: 17:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**48.5**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37HH1AK**
		Dilution Factor: 1		Analysis Time..: 00:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GF

TOTAL Metals

Lot-Sample #...: A0G150401-026 **Matrix.....:** WG
Date Sampled...: 07/14/10 16:50 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197016						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HL1AQ
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**813**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37HL1AE**
		Dilution Factor: 1		Analysis Time..: 00:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HL1AM
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**15.8**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HL1AR**
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	**0.33 B**	**1.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37HL1AF**
		Dilution Factor: 1		Analysis Time..: 00:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**23200**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HL1AT**
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	**0.70**	**0.50**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37HL1AG**
		Dilution Factor: 1		Analysis Time..: 00:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**11.1**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HL1AU**
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HL1AV
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HL1AW
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GF

TOTAL Metals

Lot-Sample #...: A0G150401-026 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/31/10	L37HL1AH
		Dilution Factor: 1		Analysis Time..: 00:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L37HL1AD
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2230**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HL1AX**
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**4910**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HL1A0**
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**497**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HL1A1**
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**9730**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HL1A2**
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**34.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L37HL1AA**
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L37HL1AN
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/31/10	L37HL1AJ
		Dilution Factor: 1		Analysis Time..: 00:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L37HL1AP
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GF

TOTAL Metals

Lot-Sample #...: A0G150401-026 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.16 B**	**1.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37HL1AL**
		Dilution Factor: 1		Analysis Time..: 00:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L37HL1AC
		Dilution Factor: 1		Analysis Time..: 17:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**40.1**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/31/10**	**L37HL1AK**
		Dilution Factor: 1		Analysis Time..: 00:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G150401 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A0G160000-016 **Prep Batch #...:** 0197016						
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L39C01AA
		Dilution Factor: 1				
		Analysis Time..: 23:05		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L39C01AF
		Dilution Factor: 1				
		Analysis Time..: 23:05		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39C01AJ
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L39C01AN
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/31/10	L39C01AC
		Dilution Factor: 1				
		Analysis Time..: 16:35		Analyst ID.....: 001576	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L39C01AD
		Dilution Factor: 1				
		Analysis Time..: 23:05		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L39C01AP
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39C01AR
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39C01AQ
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39C01AT
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L39C01AE
		Dilution Factor: 1				
		Analysis Time..: 23:05		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G150401 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L39C01AK
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L39C01AV
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L39C01AW
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L39C01A2
		Dilution Factor: 1				
		Analysis Time..: 13:15		Analyst ID.....: 001576	Instrument ID..: H1	
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L39C01A0
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L39C01AU
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39C01AL
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39C01AM
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L39C01AX
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L39C01AH
		Dilution Factor: 1				
		Analysis Time..: 23:05		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L39C01A1
		Dilution Factor: 1				
		Analysis Time..: 15:43		Analyst ID.....: 001637	Instrument ID..: I5	
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L39C01AG
		Dilution Factor: 1				
		Analysis Time..: 23:05		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G150401 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150401 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A0G160000-016 **Prep Batch #...:** 0197016					
Aluminum	102	(80 - 120)	SW846 6020	07/16-07/30/10	L39C01A3
		Dilution Factor: 1	Analysis Time..: 23:09	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	102	(80 - 120)	SW846 6020	07/16-07/31/10	L39C01A4
		Dilution Factor: 1	Analysis Time..: 16:39	Analyst ID.....: 001576	
		Instrument ID..: I8			
Cadmium	106	(80 - 120)	SW846 6020	07/16-07/30/10	L39C01A5
		Dilution Factor: 1	Analysis Time..: 23:09	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	83	(80 - 120)	SW846 6020	07/16-07/30/10	L39C01A6
		Dilution Factor: 1	Analysis Time..: 23:09	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	102	(80 - 120)	SW846 6020	07/16-07/30/10	L39C01A7
		Dilution Factor: 1	Analysis Time..: 23:09	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	109	(80 - 120)	SW846 6020	07/16-07/30/10	L39C01A8
		Dilution Factor: 1	Analysis Time..: 23:09	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	101	(80 - 120)	SW846 6020	07/16-07/30/10	L39C01A9
		Dilution Factor: 1	Analysis Time..: 23:09	Analyst ID.....: 000079	
		Instrument ID..: I8			
Arsenic	101	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CA
		Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637	
		Instrument ID..: I5			
Lead	102	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CC
		Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637	
		Instrument ID..: I5			
Selenium	106	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CD
		Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150401 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	102	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CE
	Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637		
	Instrument ID..: I5				
Barium	100	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CF
	Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637		
	Instrument ID..: I5				
Calcium	99	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CG
	Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637		
	Instrument ID..: I5				
Cobalt	102	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CH
	Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637		
	Instrument ID..: I5				
Chromium	98	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CJ
	Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637		
	Instrument ID..: I5				
Copper	101	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CK
	Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637		
	Instrument ID..: I5				
Potassium	94	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CL
	Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637		
	Instrument ID..: I5				
Magnesium	102	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CM
	Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637		
	Instrument ID..: I5				
Manganese	102	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CN
	Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637		
	Instrument ID..: I5				
Sodium	98	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CP
	Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637		
	Instrument ID..: I5				
Nickel	105	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CQ
	Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637		
	Instrument ID..: I5				

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150401 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	98	(80 - 120)	SW846 6010B	07/16-07/21/10	L39C01CR
		Dilution Factor: 1	Analysis Time..: 15:49	Analyst ID.....: 001637	
		Instrument ID..: I5			
Mercury	99	(80 - 120)	SW846 7470A	07/16-07/19/10	L39C01CT
		Dilution Factor: 1	Analysis Time..: 13:16	Analyst ID.....: 001576	
		Instrument ID..: H1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150401 **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A0G150401-020 **Prep Batch #...:** 0197016					
Aluminum	105	(75 - 125)	SW846 6020	07/16-07/31/10	L37G91AM
		Dilution Factor: 1	Analysis Time..: 00:07	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	103	(75 - 125)	SW846 6020	07/16-07/31/10	L37G91A2
		Dilution Factor: 1	Analysis Time..: 00:07	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	103	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91CC
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Barium	101	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91CQ
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Beryllium	120	(75 - 125)	SW846 6020	07/16-07/31/10	L37G91AQ
		Dilution Factor: 1	Analysis Time..: 00:07	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	105	(75 - 125)	SW846 6020	07/16-07/31/10	L37G91AU
		Dilution Factor: 1	Analysis Time..: 00:07	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	103	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91CU
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Chromium	98	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91C2
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Cobalt	103	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91CX
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Copper	102	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91C5
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150401 **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	82	(75 - 125)	SW846 6020	07/16-07/31/10	L37G91AX
		Dilution Factor: 1	Analysis Time..: 00:07	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	102	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91CF
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Magnesium	104	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91DC
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Manganese	104	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91DF
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Mercury	104	(80 - 120)	SW846 7470A	07/16-07/19/10	L37G91AJ
		Dilution Factor: 1	Analysis Time..: 13:18	Instrument ID..: H1	
		Analyst ID.....: 001576			
Nickel	106	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91AC
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Potassium	96	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91C8
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Selenium	105	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91CJ
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Silver	104	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91CM
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Sodium	99	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91DJ
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Thallium	103	(75 - 125)	SW846 6020	07/16-07/31/10	L37G91A8
		Dilution Factor: 1	Analysis Time..: 00:07	Instrument ID..: I8	
		Analyst ID.....: 000079			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150401 **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	98	(75 - 125)	SW846 6010B	07/16-07/21/10	L37G91AF
		Dilution Factor: 1	Analysis Time..: 16:54	Instrument ID..: I5	
		Analyst ID.....: 001637			
Zinc	109	(75 - 125)	SW846 6020	07/16-07/31/10	L37G91A5
		Dilution Factor: 1	Analysis Time..: 00:07	Instrument ID..: I8	
		Analyst ID.....: 000079			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A0G150401 **Work Order #...:** L37G9-SMP L37G9-DUP **Matrix.....:** WG

Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/31/10	0197016
		Dilution Factor: 1				Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Barium						SD Lot-Sample #: A0G150401-020		
	44.5	45.5	ug/L	2.3	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/31/10	0197016
		Dilution Factor: 1				Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #: A0G150401-020		
	54300	55600	ug/L	2.3	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/31/10	0197016
		Dilution Factor: 1				Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G150401-000 **Work Order #...:** L37G9-SMP L37G9-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A0G150401-020		
	517	536	ug/L	3.6	(0-20)	SW846 6020	07/16-07/31/10	0197016
		Dilution Factor: 1				Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/16-07/19/10	0197016
		Dilution Factor: 1				Analysis Time..: 13:18	Analyst ID.....: 001576	
		Instrument ID..: H1						
Potassium						SD Lot-Sample #: A0G150401-020		
	643 B	649 B	ug/L	0.86	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A0G150401-020		
	9330	9540	ug/L	2.3	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A0G150401-020		
	112	115	ug/L	2.2	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A0G150401-020		
	4890	4850	ug/L	0.87	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Nickel						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G150401-000 **Work Order #...:** L37G9-SMP L37G9-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/31/10	0197016
		Dilution Factor: 1				Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8						
Selenium						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Thallium						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/31/10	0197016
		Dilution Factor: 1				Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8						
Vanadium						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197016
		Dilution Factor: 1				Analysis Time..: 16:54	Analyst ID.....: 001637	
		Instrument ID..: I5						
Zinc						SD Lot-Sample #: A0G150401-020		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/31/10	0197016
		Dilution Factor: 1				Analysis Time..: 00:07	Analyst ID.....: 000079	
		Instrument ID..: I8						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50721A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 07/21/10 10:42 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	4.4	U								
Barium	493.409	10	0.3	U								
Calcium	317.933	1000	**-30.0**	**B**								
Chromium	267.716	5	1.4	U								
Cobalt	228.616	5	1.3	U								
Copper	324.753	5	2.1	U								
Lead	220.353	3	1.5	U								
Magnesium	279.078	1000	14.8	U								
Manganese	257.61	10	0.3	U								
Nickel	231.604	10	2.3	U								
Potassium	766.491	1000	**134.0**	**B**								
Selenium	196.026	5	3.4	U								
Silver	328.068	5	1.3	U								
Sodium	330.232	1000	750.0	U								
Vanadium	292.402	10	2.0	U								

IC L6710 ug/L
- 1523
- 1521

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50721A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/21/10 11:47 AM Found	Q	CCB 07/21/10 3:19 PM Found	Q	CCB 07/21/10 4:30 PM Found	Q	CCB 07/21/10 5:41 PM Found	Q	CCB 07/21/10 6:40 PM Found	Q
Arsenic	189.042	5	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
Barium	493.409	10	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Calcium	317.933	1000	**-26.0**	**B**	**-38.0**	**B**	**-37.0**	**B**	**-32.0**	**B**	**-30.0**	**B**
Chromium	267.716	5	1.4	U	1.4	U	1.4	U	**2.6**	**B**	1.4	U
Cobalt	228.616	5	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
Copper	324.753	5	2.1	U	**-2.2**	**B**	2.1	U	2.1	U	**-3.8**	**B**
Lead	220.353	3	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Magnesium	279.078	1000	14.8	U	14.8	U	14.8	U	14.8	U	14.8	U
Manganese	257.61	10	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Nickel	231.604	10	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U
Potassium	766.491	1000	**138.0**	**B**	**136.0**	**B**	**134.0**	**B**	**180.0**	**B**	**146.0**	**B**
Selenium	196.026	5	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U
Silver	328.068	5	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
Sodium	330.232	1000	750.0	U	750.0	U	750.0	U	750.0	U	750.0	U
Vanadium	292.402	10	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U

K 4900

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50721A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/22/10 5:59 AM Found	Q	CCB 07/22/10 6:23 AM Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	4.4	U	4.4	U						
Barium	493.409	10	0.3	U	0.3	U						
Calcium	317.933	1000	**-20.0**	**B**	**-16.0**	**B**						
Chromium	267.716	5	1.4	U	1.4	U						
Cobalt	228.616	5	1.3	U	1.3	U						
Copper	324.753	5	2.1	U	**-2.2**	**B**						
Lead	220.353	3	1.5	U	1.5	U						
Magnesium	279.078	1000	14.8	U	14.8	U						
Manganese	257.61	10	0.3	U	0.3	U						
Nickel	231.604	10	2.3	U	2.3	U						
Potassium	766.491	1000	**142.0**	**B**	**139.0**	**B**						
Selenium	196.026	5	3.4	U	3.4	U						
Silver	328.068	5	1.3	U	1.3	U						
Sodium	330.232	1000	750.0	U	750.0	U						
Vanadium	292.402	10	2.0	U	2.0	U						

U Result is less than the IDL

B Result is between IDL and RL

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST **Units:** ug/L

Chart Number: I50721A.ARC **Acceptable Range:** 90% - 110%

Standard Source: **Standard ID:**

Element	WL/ Mass	True Conc	CCV 07/21/10 11:41 AM Found	% Rec	CCV 07/21/10 3:13 PM Found	% Rec	CCV 07/21/10 4:24 PM Found	% Rec	CCV 07/21/10 5:35 PM Found	% Rec	CCV 07/21/10 6:34 PM Found	% Rec
Arsenic	189.042	500.0	505.02	**101.0**	507.74	**101.5**	489.49	**97.9**	508.21	**101.6**	523.46	**104.7**
Barium	493.409	2000.0	2034.35	**101.7**	1959.11	**98.0**	2008.30	**100.4**	1967.17	**98.4**	1854.99	**92.7**
Calcium	317.933	50000.0	49747.77	**99.5**	50481.17	**101.0**	48227.51	**96.5**	50335.30	**100.7**	52744.04	**105.5**
Chromium	267.716	2000.0	1902.42	**95.1**	1918.73	**95.9**	1854.66	**92.7**	1915.82	**95.8**	1984.67	**99.2**
Cobalt	228.616	2000.0	1985.12	**99.3**	2013.77	**100.7**	1928.23	**96.4**	2000.51	**100.0**	2103.98	**105.2**
Copper	324.753	2000.0	2002.47	**100.1**	1971.82	**98.6**	2011.52	**100.6**	1975.57	**98.8**	1907.60	**95.4**
Lead	220.353	500.0	507.28	**101.5**	513.82	**102.8**	486.64	**97.3**	510.39	**102.1**	539.68	**107.9**
Magnesium	279.078	50000.0	49411.51	**98.8**	50675.93	**101.4**	47665.39	**95.3**	50515.47	**101.0**	54809.85	**109.6**
Manganese	257.61	2000.0	1959.07	**98.0**	1981.56	**99.1**	1922.25	**96.1**	1976.92	**98.8**	2025.61	**101.3**
Nickel	231.604	2000.0	1955.22	**97.8**	2050.30	**102.5**	1971.08	**98.6**	2018.57	**100.9**	2184.59	**109.2**
Potassium	766.491	50000.0	49424.48	**98.8**	47370.69	**94.7**	50246.58	**100.5**	47913.59	**95.8**	44035.00	**88.1**
Selenium	196.026	500.0	505.44	**101.1**	509.37	**101.9**	494.38	**98.9**	501.80	**100.4**	521.23	**104.2**
Silver	328.068	1000.0	983.28	**98.3**	988.26	**98.8**	994.71	**99.5**	992.87	**99.3**	987.00	**98.7**
Sodium	330.232	50000.0	48458.29	**96.9**	46858.20	**93.7**	47822.60	**95.6**	47020.00	**94.0**	44581.30	**89.2**
Vanadium	292.402	2000.0	1940.81	**97.0**	1917.74	**95.9**	1879.65	**94.0**	1914.72	**95.7**	1915.86	**95.8**

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 07/30/10 10:47 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	4.2	U								
Antimony	121	2	0.038	U								
Beryllium	9	1	0.0076	U								
Cadmium	111	0.5	0.0074	U								
Iron	56	50	3.2	U								
Thallium	205	1	**0.23**	**B**								
Zinc	66	10	8	U								

Tl < 1.15

1523
1525
1529
1524
1526
1528

5.04.5

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 07/30/10 11:16 AM Found	Q	CCB 11 07/30/10 10:50 PM Found	Q	CCB 12 07/30/10 11:52 PM Found	Q	CCB 13 07/31/10 12:55 AM Found	Q	Found	Q
Aluminum	27	50	4.2	U	4.2	U	4.2	U	4.2	U		
Antimony	121	2	0.038	U	0.038	U	0.038	U	**0.04**	**B**		
Beryllium	9	1	0.0076	U	**0.021**	**B**	**0.027**	**B**	**0.022**	**B**		
Cadmium	111	0.5	**0.012**	**B**	**0.016**	**B**	**0.023**	**B**	**0.037**	**B**		
Iron	56	50	3.2	U	**9.3**	**B**	**9.6**	**B**	**10.2**	**B**		
Thallium	205	1	**0.27**	**B**	**0.29**	**B**	**0.25**	**B**	**0.25**	**B**		
Zinc	66	10	8	U	8	U	8	U	8	U		

Tl No additional quals.

Fe < 51 ug/L NA

Cd < 0.185 NA.

Be < 0.135 NA

Sb < 0.2. NA

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv **Acceptable Range:** 90% - 110%

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	True Conc	CCV 07/30/10 11:09 AM Found	% Rec	CCV 11 07/30/10 10:43 PM Found	% Rec	CCV 12 07/30/10 11:45 PM Found	% Rec	CCV 13 07/31/10 12:48 AM Found	% Rec	Found	% Rec
Aluminum	27	500.0	515.27	**103.1**	494.97	**99.0**	507.00	**101.4**	502.67	**100.5**		
Antimony	121	100.0	99.55	**99.6**	99.68	**99.7**	99.79	**99.8**	100.13	**100.1**		
Beryllium	9	100.0	106.80	**106.8**	108.10	**108.1**	110.63	**110.6**	112.17	**112.2**		
Cadmium	111	100.0	101.93	**101.9**	101.97	**102.0**	100.89	**100.9**	100.97	**101.0**		
Iron	56	25000.0	25176.67	**100.7**	24803.33	**99.2**	24910.00	**99.6**	25163.33	**100.7**		
Thallium	205	100.0	92.10	**92.1**	96.93	**96.9**	97.53	**97.5**	98.25	**98.3**		
Zinc	66	100.0	101.73	**101.7**	101.27	**101.3**	100.37	**100.4**	99.80	**99.8**		

A0G160000 MB	016	L39C0	TOTAL	I5	07/21/10	15:43

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G160000 LCS	016	L39C0	TOTAL	I5	07/21/10	15:49

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	003	L37GJ	TOTAL	I5	07/21/10	15:55

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	007	L37GN	TOTAL	I5	07/21/10	16:07

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	010	L37GV	TOTAL	I5	07/21/10	16:18

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	013	L37G2	TOTAL	I5	07/21/10	16:36

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	015	L37G4	TOTAL	I5	07/21/10	16:42

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	017	L37G6	TOTAL	I5	07/21/10	16:48

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	020	L37G9	TOTAL	I5	07/21/10	16:54

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401 DUP	020	L37G9	TOTAL	I5	07/21/10	17:06

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401 MS	020	L37G9	TOTAL	I5	07/21/10	17:12

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	022	L37HE	TOTAL	I5	07/21/10	17:18

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	024	L37HH	TOTAL	I5	07/21/10	17:23

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	026	L37HL	TOTAL	I5	07/21/10	17:29

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	005	L37GL	TOTAL	I5	07/22/10	06:05

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G150401	009	L37GT	TOTAL	I5	07/22/10	06:11

AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX

A0G160000 MB	016	L39C0 TOTAL *AL CD FE SB TL ZN*	I8	07/30/10	23:05
A0G160000 LCS	016	L39C0 TOTAL *AL CD FE SB TL ZN*	I8	07/30/10	23:09
A0G150401	003	L37GJ TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	23:16
A0G150401	005	L37GL TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	23:21
A0G150401	007	L37GN TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	23:26
A0G150401	009	L37GT TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	23:31
A0G150401	010	L37GV TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	23:36
A0G150401	013	L37G2 TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	23:40
A0G150401	015	L37G4 TOTAL *AL BE CD FE SB TL ZN*	I8	07/30/10	23:57
A0G150401	017	L37G6 TOTAL *AL BE CD FE SB TL ZN*	I8	07/31/10	00:02
A0G150401	020	L37G9 TOTAL *AL BE CD FE SB TL ZN*	I8	07/31/10	00:07
A0G150401 DUP	020	L37G9 TOTAL *AL BE CD FE SB TL ZN*	I8	07/31/10	00:16
A0G150401 MS	020	L37G9 TOTAL *AL BE CD FE SB TL ZN*	I8	07/31/10	00:21
A0G150401	022	L37HE TOTAL *AL BE CD FE SB TL ZN*	I8	07/31/10	00:28
A0G150401	024	L37HH TOTAL *AL BE CD FE SB TL ZN*	I8	07/31/10	00:33
A0G150401	026	L37HL TOTAL *AL BE CD FE SB TL ZN*	I8	07/31/10	00:38

A0G160000 MB	016 *BE*	L39C0	TOTAL	I8	07/31/10	16:35
A0G160000 LCS	016 *BE*	L39C0	TOTAL	I8	07/31/10	16:39

EXECUTIVE SUMMARY - Detection Highlights

A0G150401

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGTEAM1-TRIP 07/14/10 08:00 001				
Acetone U	1.9 J	10	ug/L	SW846 8260B
FWGLL1mw-067C-1523-GW 07/14/10 10:29 002				
bis(2-Ethylhexyl) phthalate	2.1 J,B	10	ug/L	SW846 8270C
FWGLL1mw-067C-1523-GF 07/14/10 10:29 003				
Thallium U	0.25 B	1.0	ug/L	SW846 6020
Barium	11.2	10.0	ug/L	SW846 6010B
Calcium	29400	1000	ug/L	SW846 6010B
Potassium U	589 B	1000	ug/L	SW846 6010B
Magnesium	10400	1000	ug/L	SW846 6010B
Manganese	13.1	10.0	ug/L	SW846 6010B
Sodium	1590	1000	ug/L	SW846 6010B
Nickel	21.5	10.0	ug/L	SW846 6010B
FWGLL1mw-080C-1525-GW 07/14/10 12:11 004				
beta-BHC	0.048 J	0.060	ug/L	SW846 8081A
delta-BHC	0.019 J	0.060	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	4.2 J,B	10	ug/L	SW846 8270C
FWGLL1mw-080C-1525-GF 07/14/10 12:11 005				
Aluminum	45.2 B	50.0	ug/L	SW846 6020
Thallium U	0.19 B	1.0	ug/L	SW846 6020
Barium	26.5	10.0	ug/L	SW846 6010B
Calcium	130000	1000	ug/L	SW846 6010B
Potassium	3310	1000	ug/L	SW846 6010B
Magnesium	9180	1000	ug/L	SW846 6010B
Manganese	25.5	10.0	ug/L	SW846 6010B
Sodium	4320	1000	ug/L	SW846 6010B
FWGLL1mw-065C-1522-GW 07/14/10 14:53 006				
bis(2-Ethylhexyl) phthalate	1.4 J,B	10	ug/L	SW846 8270C

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G150401

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL1mw-065C-1522-GF 07/14/10 14:53	**007**			
Iron	127	50.0	ug/L	SW846 6020
Barium	48.6	10.0	ug/L	SW846 6010B
Calcium	79300	1000	ug/L	SW846 6010B
Potassium	845 B	1000	ug/L	SW846 6010B
Magnesium	19900	1000	ug/L	SW846 6010B
Manganese	256	10.0	ug/L	SW846 6010B
Sodium	10700	1000	ug/L	SW846 6010B
FWGLL1mw-DUP1-1566-GW 07/14/10 15:47	**008**			
bis(2-Ethylhexyl) phthalate	8.6 J,B	10	ug/L	SW846 8270C
FWGLL1mw-DUP1-1566-GF 07/14/10 15:47	**009**			
Iron	117	50.0	ug/L	SW846 6020
Barium	49.5	10.0	ug/L	SW846 6010B
Calcium	77400	1000	ug/L	SW846 6010B
Potassium	893 B	1000	ug/L	SW846 6010B
Magnesium	19100	1000	ug/L	SW846 6010B
Manganese	249	10.0	ug/L	SW846 6010B
Sodium	11000	1000	ug/L	SW846 6010B
FWGEQUIPRINSE4-1581-GW 07/14/10 17:07	**010**			
bis(2-Ethylhexyl) phthalate	1.8 J,B	10	ug/L	SW846 8270C
Methylene chloride U	1.4 J,B	2.0	ug/L	SW846 8260B
Acetone U	13	10	ug/L	SW846 8260B
2-Butanone U	15	10	ug/L	SW846 8260B
Toluene	0.32 J	1.0	ug/L	SW846 8260B
FWGTEAM2-TRIP 07/14/10 08:00	**011**			
Acetone U	1.9 J	10	ug/L	SW846 8260B
FWGSCFmw-002-1516-GW 07/14/10 09:14	**012**			
bis(2-Ethylhexyl) phthalate	2.5 J,B	10	ug/L	SW846 8270C
Di-n-butyl phthalate	0.82 J	1.0	ug/L	SW846 8270C
Carbon disulfide	0.34 J	1.0	ug/L	SW846 8260B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G150401

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGSCFmw-002-1516-GF 07/14/10 09:14	**013**			
Iron	233	50.0	ug/L	SW846 6020
Antimony	0.15 B	2.0	ug/L	SW846 6020
Arsenic	12.5	5.0	ug/L	SW846 6010B
Barium	38.0	10.0	ug/L	SW846 6010B
Calcium	83400	1000	ug/L	SW846 6010B
Potassium	2190	1000	ug/L	SW846 6010B
Magnesium	27000	1000	ug/L	SW846 6010B
Manganese	67.3	10.0	ug/L	SW846 6010B
Sodium	20500	1000	ug/L	SW846 6010B
FWGSCFmw-001-1515-GW 07/14/10 13:38	**014**			
Endrin ketone	0.027 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.7 J,B	10	ug/L	SW846 8270C
Carbon disulfide	0.69 J	1.0	ug/L	SW846 8260B
Nitrate-Nitrite	0.02 B	0.1	mg/L	MCAWW 353.2
FWGSCFmw-001-1515-GF 07/14/10 13:38	**015**			
Iron	814	50.0	ug/L	SW846 6020
Arsenic	13.1	5.0	ug/L	SW846 6010B
Barium	39.4	10.0	ug/L	SW846 6010B
Calcium	102000	1000	ug/L	SW846 6010B
Potassium	1670	1000	ug/L	SW846 6010B
Magnesium	28600	1000	ug/L	SW846 6010B
Manganese	194	10.0	ug/L	SW846 6010B
Sodium	13000	1000	ug/L	SW846 6010B
Nickel	3.3 B	10.0	ug/L	SW846 6010B
FWGLL1mw-084C-1529-GW 07/14/10 16:48	**016**			
beta-BHC	0.26 PG	0.15	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	3.4 J,B	10	ug/L	SW846 8270C
FWGLL1mw-084C-1529-GF 07/14/10 16:48	**017**			
Aluminum	335	50.0	ug/L	SW846 6020
Cadmium	1.6	0.50	ug/L	SW846 6020
Thallium	0.39 B	1.0	ug/L	SW846 6020
Zinc	58.5	10.0	ug/L	SW846 6020
Barium	14.0	10.0	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0G150401

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL1mw-084C-1529-GF 07/14/10 16:48 017				
Calcium	45600	1000	ug/L	SW846 6010B
Cobalt	15.7	5.0	ug/L	SW846 6010B
Copper	5.4	5.0	ug/L	SW846 6010B
Potassium	2260	1000	ug/L	SW846 6010B
Magnesium	2710	1000	ug/L	SW846 6010B
Manganese	196	10.0	ug/L	SW846 6010B
Sodium	2630	1000	ug/L	SW846 6010B
Nickel	26.8	10.0	ug/L	SW846 6010B
FWGTEAM3-TRIP 07/14/10 08:00 018				
Acetone U	1.8 J	10	ug/L	SW846 8260B
FWGLL1mw-064C-1521-GW 07/14/10 10:50 019				
bis(2-Ethylhexyl) phthalate	0.88 J,B	10	ug/L	SW846 8270C
FWGLL1mw-064C-1521-GF 07/14/10 10:50 020				
Iron	517	50.0	ug/L	SW846 6020
Barium	44.5	10.0	ug/L	SW846 6010B
Calcium	54300	1000	ug/L	SW846 6010B
Potassium U	643 B	1000	ug/L	SW846 6010B
Magnesium	9330	1000	ug/L	SW846 6010B
Manganese	112	10.0	ug/L	SW846 6010B
Sodium	4890	1000	ug/L	SW846 6010B
FWGLL1mw-078C-1524-GW 07/14/10 13:20 021				
bis(2-Ethylhexyl) phthalate	1.5 J,B	10	ug/L	SW846 8270C
Di-n-butyl phthalate	0.80 J	1.0	ug/L	SW846 8270C
FWGLL1mw-078C-1524-GF 07/14/10 13:20 022				
Aluminum	110	50.0	ug/L	SW846 6020
Thallium U	0.68 B	1.0	ug/L	SW846 6020
Barium	16.2	10.0	ug/L	SW846 6010B
Calcium	47300	1000	ug/L	SW846 6010B
Potassium	3100	1000	ug/L	SW846 6010B
Magnesium	7390	1000	ug/L	SW846 6010B
Manganese	71.0	10.0	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0G150401

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL1mw-078C-1524-GF 07/14/10 13:20	**022**			
Sodium	3770	1000	ug/L	SW846 6010B
Nickel	4.5 B	10.0	ug/L	SW846 6010B
FWGLL1mw-081C-1526-GW 07/14/10 15:20	**023**			
beta-BHC	0.011 J	0.030	ug/L	SW846 8081A
bis(2-Ethylhexyl) phthalate	1.6 J,B	10	ug/L	SW846 8270C
FWGLL1mw-081C-1526-GF 07/14/10 15:20	**024**			
Iron	4200	50.0	ug/L	SW846 6020
Thallium U	0.24 B	1.0	ug/L	SW846 6020
Zinc	48.5	10.0	ug/L	SW846 6020
Barium	18.2	10.0	ug/L	SW846 6010B
Calcium	54300	1000	ug/L	SW846 6010B
Cobalt	6.2	5.0	ug/L	SW846 6010B
Potassium	2350	1000	ug/L	SW846 6010B
Magnesium	12000	1000	ug/L	SW846 6010B
Manganese	1830	10.0	ug/L	SW846 6010B
Sodium	2050	1000	ug/L	SW846 6010B
Nickel	11.0	10.0	ug/L	SW846 6010B
FWGLL1mw-083C-1528-GW 07/14/10 16:50	**025**			
bis(2-Ethylhexyl) phthalate	0.96 J,B	10	ug/L	SW846 8270C
2,4-Dinitrotoluene	1.5 J	5.0	ug/L	SW846 8270C
FWGLL1mw-083C-1528-GF 07/14/10 16:50	**026**			
Aluminum	813	50.0	ug/L	SW846 6020
Beryllium (J)	0.33 B	1.0	ug/L	SW846 6020
Cadmium	0.70	0.50	ug/L	SW846 6020
Thallium U	0.16 B	1.0	ug/L	SW846 6020
Zinc	40.1	10.0	ug/L	SW846 6020
Barium	15.8	10.0	ug/L	SW846 6010B
Calcium	23200	1000	ug/L	SW846 6010B
Cobalt	11.1	5.0	ug/L	SW846 6010B
Potassium	2230	1000	ug/L	SW846 6010B
Magnesium	4910	1000	ug/L	SW846 6010B
Manganese	497	10.0	ug/L	SW846 6010B
Sodium	9730	1000	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0G150401

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL1mw-083C-1528-GF 07/14/10 16:50	**026**			
Nickel	34.1	10.0	ug/L	SW846 6010B

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ August 30, 2010

SDG: A0G150401 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
1. Did Chain-of-Custody information agree with laboratory report?		X		The COC incorrectly had sample FWGLL1MW-084C-1529-GW listed for nitrate analysis. No bottle was rec'd by the lab, so no analysis was performed.	
2. Were samples preserved properly and received in good condition?	X			The coolers were received between 0.4 and 4.4°C.	QAPP Table 4-2
3. Were holding times met?	X				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	X				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	X				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	X				QAPP Table 3-9
7. Was the Linear Calibration Range verified using 3 standards and 1 blank? Was the ICV within 10% of the initial values?	X				Method EPA 353.2 Section 9.2.2 J
8. Were the calibration standards verified by preparation and analysis of a Quality Control Sample? Were results within 10% of the stated values?	X				Method EPA 353.2 Section 9.2.3 Pj
9. Was an Instrument Performance Check Solution (CCV) analyzed immediately following daily calibration, after every 10th sample, and at the end of the analytical sequence?	X				Method EPA 353.2 Section 9.3.4
10. Was the CCV a mid-level standard from the initial calibration curve?	X				Method EPA 353.2 Section 9.3.4
11. Were the CCVs 90-110%?	X				Method EPA 353.2 Section 9.3.4 >110%=J; 85-90%=J/UJ; <85%=J/R
12. Was a method blank and a calibration blank prepared and analyzed with each batch?	X				Method EPA 353.2 Section 9.3.1, 9.3.4

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG:** A0G150401 Rev 0
Sample Event: July 2010 **Analysis:** EPA 353.2
Data Reviewer/Date: Angye Dragotta/ August 30, 2010

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
13. Were target analytes detected in the method blank or calibration blank >1/2 the MRL?		X		ADR checked section. The ICB had a detected nitrate concentration of 0.088mg/L and following CCB at 0.0773mg/L. The nitrate/nitrite result for sample FWGSCFmw-001c-1515-GW was qualified, "U".	LCG Attachment A Section 11 <5x = U
14. Was a field blank (trip or equipment) collected and analyzed?	X				
15. Were target analytes reported in the field blank analyses (trip or equipment) >1/2 the MRL?		X			*<5x=B*
16. Was a field duplicate analyzed? Were the RPDs acceptable?	X				
17. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within 90-110%?	X				Method EPA 353.2 Section 9.3.3 J/UJ; <50%= R
18. Was a MS/MSD pair prepared with each batch?	X				*Method EPA 353.2 Section 9.4.1*
19. Was the MS/MSD parent sample a Ravenna sample?	X				
20. Were MS/MSD recoveries and RPD within acceptance criteria?	X				*Method EPA 353.2 Section 9.4.2 Pj*
21. Were sample concentrations within calibration range?	X				
22. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		X			
23. Were lab comments included in report? If yes, summarize contents.	X			See narrative.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004
Additional Comments:

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 30, 2010

SDG: A0G150401 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 and 4.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-9
7. Does the initial calibration curve consist of at least 6 standards and one blank?	✓				LCG Table 10 R
8. Was the correlation coefficient R ≥ 0.995?	✓				LCG Table 10 R<0.995=-J/R
9. Were % RSDs ≤ 10% in all standards and ICV/CCVs?	✓				LCG Table 10 RSD%>10=J
10. Were a high and low standard distilled and compared to the undistilled standard? Were the results within ± 10%?			✓	No data provided to evaluate.	LCG Table 10 R
11. Was an MDL Level Verification performed at least once per quarter with all target analytes detected?	✓			7/22/10	LCG Table 10 R
12. Was a MRL Level Verification performed at the beginning of every daily sequence? Were results within 70-130%?	✓				LCG Table 10 >130%=J; 65-70%=J/UJ; <65%=J/R
13. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓				LCG Table 10 >115%=J; 80-85%=J/UJ; <80%=J/R
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				LCG Table 7 < 5x = U
15. Was a CCV run at the beginning and end of the analytical sequence?	✓				LCG Table 10

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 30, 2010

SDG: A0G150401 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
16. Were the CCV results 80-120%?	✓				LCG Table 10 >120%=J; 75-80%=J/UJ; <75%=J/R
17. Was a method blank prepared and analyzed with each batch?	✓				
18. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR.	LCG Table 10 <5x=B
19. Was a field blank collected and analyzed?	✓				
20. Were target analytes in the field blank analyses <1/2 the MRL?	✓				<5x=B
21. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Checked by ADR.	QAPP Table 3-2 >30% = J
22. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 10
23. Were the LCS recoveries 80-120%?	✓			Checked by ADR.	LCG Table 10 >120%=J; 50-79%=J/UJ; <50%=R
24. Was a MS prepared once per every 10 samples?	✓				LCG Table 10
25. Was the MS parent a Ravenna sample?	✓				
26. Were MS recoveries 75-125%?	✓				QAPP Table 3-2 >125%=J; 30-75%=J/UJ; <30%=J/R
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/August 30, 2010

SDG: A0G150401 R0
Analysis: SW846 9012

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 10 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GW

General Chemistry

Lot-Sample #...: A0G150401-002 **Work Order #...:** L37GG **Matrix.....:** WG
Date Sampled...: 07/14/10 10:29 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

General Chemistry

Lot-Sample #...: A0G150401-004 **Work Order #...:** L37GK **Matrix.....:** WG
Date Sampled...: 07/14/10 12:11 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GW

General Chemistry

Lot-Sample #...: A0G150401-006 **Work Order #...:** L37GM **Matrix.....:** WG
Date Sampled...: 07/14/10 14:53 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GW

General Chemistry

Lot-Sample #...: A0G150401-008 **Work Order #...:** L37GP **Matrix.....:** WG
Date Sampled...: 07/14/10 15:47 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

General Chemistry

Lot-Sample #...: A0G150401-010 **Work Order #...:** L37GV **Matrix.....:** WQ
Date Sampled...: 07/14/10 17:07 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1		MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GW

General Chemistry

Lot-Sample #...: A0G150401-012 **Work Order #...:** L37G1 **Matrix.....:** WG
Date Sampled...: 07/14/10 09:14 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1		MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GW

General Chemistry

Lot-Sample #...: A0G150401-014 **Work Order #...:** L37G3 **Matrix.....:** WG
Date Sampled...: 07/14/10 13:38 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	**0.02 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**07/27/10**	**0208347**
		Dilution Factor: 1		MDL.....: 0.02		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

General Chemistry

Lot-Sample #...: A0G150401-016 **Work Order #...:** L37G5 **Matrix.....:** WG
Date Sampled...: 07/14/10 16:48 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GW

General Chemistry

Lot-Sample #...: A0G150401-019 **Work Order #...:** L37G8 **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GW

General Chemistry

Lot-Sample #...: A0G150401-021 **Work Order #...:** L37HC **Matrix.....:** WG
Date Sampled...: 07/14/10 13:20 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GW

General Chemistry

Lot-Sample #...: A0G150401-023 **Work Order #...:** L37HF **Matrix.....:** WG
Date Sampled...: 07/14/10 15:20 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GW

General Chemistry

Lot-Sample #...: A0G150401-025 **Work Order #...:** L37HK **Matrix.....:** WG
Date Sampled...: 07/14/10 16:50 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259

Dilution Factor: 1 MDL.....: 0.0050

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0G150401 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: L4QWM1AA		MB Lot-Sample #:	A0G270000-383	
	ND	0.010	mg/L	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1				
Cyanide, Total		Work Order #: L4R0D1AA		MB Lot-Sample #:	A0G280000-259	
	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259
		Dilution Factor: 1				
Nitrate-Nitrite		Work Order #: L4QMK1AA		MB Lot-Sample #:	A0G270000-347	
	ND	0.1	mg/L	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G150401 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: L4QWM1AC	LCS Lot-Sample#: A0G270000-383		
	94	(80 - 120)	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1			
Cyanide, Total		Work Order #: L4R0D1AC	LCS Lot-Sample#: A0G280000-259		
	85	(80 - 120)	SW846 9012A	07/28/10	0209259
		Dilution Factor: 1			
Nitrate-Nitrite		Work Order #: L4QMK1AC	LCS Lot-Sample#: A0G270000-347		
	99	(79 - 117)	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G150401 **Matrix.....:** WATER
Date Sampled...: 07/13/10 12:58 **Date Received..:** 07/14/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: L35M41AQ-MS/L35M41AR-MSD				MS Lot-Sample #: A0G140402-002	
	69 N	(80 - 120)			SW846 9012A	07/27/10	0208383
	75 N	(80 - 120)	8.1	(0-20)	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1					
Cyanide, Total		WO#: L35NJ1AQ-MS/L35NJ1AR-MSD				MS Lot-Sample #: A0G140402-015	
	62 N	(80 - 120)			SW846 9012A	07/27/10	0208383
	99 *	(80 - 120)	43	(0-20)	SW846 9012A	07/27/10	0208383
		Dilution Factor: 1					
Nitrate-Nitrite		WO#: L35NG1AH-MS/L35NG1AJ-MSD				MS Lot-Sample #: A0G140402-013	
	134 N	(34 - 125)			MCAWW 353.2	07/27/10	0208347
	124	(34 - 125)	6.9	(0-20)	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G150401 **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: L37G81AM-MS/L37G81AN-MSD				MS Lot-Sample #: A0G150401-019	
	85	(80 - 120)			SW846 9012A	07/28/10	0209259
	88	(80 - 120)	3.1	(0-20)	SW846 9012A	07/28/10	0209259
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150401										
353.2	FWGSCFmw-001-1515-GW	AQ	N							
				Nitrate as N (NO3-N)	0.1	0.02B		UJ	mg/L	Cb,L
6010B	FWGLL1mw-064C-1521-GF	AQ	N							
				Potassium	1000	643B		UJ	ug/L	Cb,L
6010B	FWGLL1mw-065C-1522-GF	AQ	N							
				Potassium	1000	845B		J	ug/L	L
6010B	FWGLL1mw-067C-1523-GF	AQ	N							
				Potassium	1000	589B		UJ	ug/L	Cb,L
6010B	FWGLL1mw-078C-1524-GF	AQ	N							
				Nickel	10.0	4.5B		J	ug/L	L
6010B	FWGLL1mw-DUP1-1566-GF	AQ	FD							
				Potassium	1000	893B		J	ug/L	L
6010B	FWGSCFmw-001-1515-GF	AQ	N							
				Nickel	10.0	3.3B		J	ug/L	L
6020	FWGLL1mw-067C-1523-GF	AQ	N							
				Thallium	1.0	0.25B		UJ	ug/L	Cb,L
6020	FWGLL1mw-078C-1524-GF	AQ	N							
				Thallium	1.0	0.68B		UJ	ug/L	Cb,L
6020	FWGLL1mw-080C-1525-GF	AQ	N							
				Aluminum	50.0	45.2B		J	ug/L	L
				Thallium	1.0	0.19B		UJ	ug/L	Cb,L
6020	FWGLL1mw-081C-1526-GF	AQ	N							
				Thallium	1.0	0.24B		UJ	ug/L	Cb,L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150401										
6020	FWGLL1mw-083C-1528-GF	AQ	N							
				Beryllium	1.0	0.33B		J	ug/L	L,W
				Thallium	1.0	0.16B		UJ	ug/L	Cb,L
6020	FWGLL1mw-084C-1529-GF	AQ	N							
				Thallium	1.0	0.39B		UJ	ug/L	Cb,L
6020	FWGSCFmw-002-1516-GF	AQ	N							
				Antimony	2.0	0.15B		J	ug/L	L
8081A	FWGLL1mw-065C-1522-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150401										
8081A	FWGLL1mw-078C-1524-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8081A	FWGLL1mw-080C-1525-GW	AQ	N							
				beta-BHC	0.060	0.048J		J	ug/L	L
				delta-BHC	0.060	0.019J		J	ug/L	L
8081A	FWGLL1mw-081C-1526-GW	AQ	N							
				beta-BHC	0.030	0.011J		J	ug/L	L
8081A	FWGLL1mw-084C-1529-GW	AQ	N							
				beta-BHC	0.15	0.26PG		J	ug/L	Pj

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150401										
8081A	FWGSCFmw-001-1515-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.027J		J	ug/L	G,L
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8082	FWGLL1mw-065C-1522-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150401										
8082	FWGLL1mw-078C-1524-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGSCFmw-001-1515-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8260B	FWGEQUIPRINSE4-1581-GW	AQ	EB							
				2-Butanone	10	15		J	ug/L	Pj
				Acetone	10	13		JB	ug/L	Pj,O
				Methylene chloride	2.0	1.4J B		JB	ug/L	Pj,F,L
				Toluene	1.0	0.32J		J	ug/L	L
8260B	FWGSCFmw-001-1515-GW	AQ	N							
				Carbon disulfide	1.0	0.69J		J	ug/L	L,J
8260B	FWGSCFmw-002-1516-GW	AQ	N							
				Carbon disulfide	1.0	0.34J		J	ug/L	L,J
8260B	FWGTEAM1-TRIP	AQ	TB							
				Acetone	10	1.9J		J	ug/L	Pj,L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150401										
8260B	FWGTEAM2-TRIP	AQ	TB							
				Acetone	10	1.9J		J	ug/L	Pj,L
8260B	FWGTEAM3-TRIP	AQ	TB							
				Acetone	10	1.8J		J	ug/L	Pj,L
8270C	FWGEQUIPRINSE4-1581-GW	AQ	EB							
				bis(2-Ethylhexyl) phthalate	10	1.8J B		JB	ug/L	L,F
8270C	FWGLL1mw-064C-1521-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	0.88J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
8270C	FWGLL1mw-065C-1522-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.4J B		JB	ug/L	L,N,P,F
8270C	FWGLL1mw-067C-1523-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.1J B		JB	ug/L	L,N,F
8270C	FWGLL1mw-078C-1524-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.5J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.80J		J	ug/L	L
8270C	FWGLL1mw-080C-1525-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	4.2J B		JB	ug/L	L,N,F
8270C	FWGLL1mw-081C-1526-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.6J B		JB	ug/L	L,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150401										
8270C	FWGLL1mw-083C-1528-GW	AQ	N							
				2,4,5-Trichlorophenol	5.0	5.0U		UJ	ug/L	G
				2,4,6-Trichlorophenol	5.0	5.0U		UJ	ug/L	G
				2,4-Dichlorophenol	2.0	2.0U		UJ	ug/L	G
				2,4-Dimethylphenol	2.0	2.0U		UJ	ug/L	G
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	G
				2,4-Dinitrotoluene	5.0	1.5J		J	ug/L	L
				2-Chlorophenol	1.0	1.0U		UJ	ug/L	G
				2-Methylphenol	1.0	1.0U		UJ	ug/L	G
				2-Nitrophenol	2.0	2.0U		UJ	ug/L	G
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	G
				4-Chloro-3-methylphenol	2.0	2.0U		UJ	ug/L	G
				4-Methylphenol	1.0	1.0U		UJ	ug/L	G
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	G
				Benzoic acid	10	10U		UJ	ug/L	G
				Benzyl alcohol	5.0	5.0U		UJ	ug/L	G
				bis(2-Ethylhexyl) phthalate	10	0.96J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Pj
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	G
				Phenol	1.0	1.0U		UJ	ug/L	G
8270C	FWGLL1mw-084C-1529-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	3.4J B		JB	ug/L	L,N,F
8270C	FWGLL1mw-DUP1-1566-GW	AQ	FD							
				bis(2-Ethylhexyl) phthalate	10	8.6J B		JB	ug/L	L,N,F
8270C	FWGSCFmw-001-1515-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.7J B		JB	ug/L	L,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150401										
8270C	FWGSCFmw-002-1516-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	2.5J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.82J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE4-1581-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401010

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
2-Butanone	15		ug/L		YES	J															Pj
Acetone	13		ug/L		YES	UJ DB										J B					Pj,O
Methylene chloride	1.4		ug/L	J B	YES	UJ DB			J B					J							Pj,F,L
Toluene	0.32		ug/L	J	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.8		ug/L	J B	YES	UJ DB			J B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-064C-1521-GF **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150401020

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	643		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-064C-1521-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401019

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C																					
									Dilution: 1												
bis(2-Ethylhexyl) phthalate	0.88		ug/L	J B	YES	UJ			JB					J		JB					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-065C-1522-GF **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150401007

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	845		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-065C-1522-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401006

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-065C-1522-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401006

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C																					
									Dilution: 1												
bis(2-Ethylhexyl) phthalate	1.4		ug/L	J B	YES	UJ JB			JB					J		JB					L,N,P,F

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW 11-7-07

ADR 8.1 Report Date: 8/30/2010 09:10

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-067C-1523-GF **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150401003

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	589		ug/L	B	YES	UJ								J							Cb,L
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.25		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-067C-1523-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401002

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C																					
bis(2-Ethylhexyl) phthalate	2.1		ug/L	J B	YES	J JB			JB					J		JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-078C-1524-GF **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150401022

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	4.5		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.68		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-078C-1524-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401021

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-078C-1524-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401021

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.5		ug/L	J B	YES	~~UJ~~ JB			JB					J		JB					L,N,F
Di-n-butyl phthalate	0.80		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-080C-1525-GF **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150401005

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Aluminum	45.2		ug/L	B	YES	J								J							L
Thallium	0.19		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-080C-1525-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150401004

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 2**															
beta-BHC	0.048		ug/L	J	YES	J								J							L
delta-BHC	0.019		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-080C-1525-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401004

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C																					
														Dilution: 1							
bis(2-Ethylhexyl) phthalate	4.2		ug/L	J B	YES	J JB			JB					J		JB					L,N,F

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW 11-7-07

ADR 8.1 Report Date: 8/30/2010 09:10

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-081C-1526-GF **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150401024

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020																					
														Dilution: 1							
Thallium	0.24		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-081C-1526-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401023

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
beta-BHC	0.011		ug/L	J	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.6		ug/L	J B	YES	UJ JB			JB					J		JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-083C-1528-GF **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150401026

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Beryllium	0.33		ug/L	B	YES	J								J						J	L,W
Thallium	0.16		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-083C-1528-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401025

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4,5-Trichlorophenol	5.0		ug/L	U	YES	UJ							UJ								G
2,4,6-Trichlorophenol	5.0		ug/L	U	YES	UJ							UJ								G
2,4-Dichlorophenol	2.0		ug/L	U	YES	UJ							UJ								G
2,4-Dimethylphenol	2.0		ug/L	U	YES	UJ							UJ								G
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ							UJ								G
2,4-Dinitrotoluene	1.5		ug/L	J	YES	J								J							L
2-Chlorophenol	1.0		ug/L	U	YES	UJ							UJ								G
2-Methylphenol	1.0		ug/L	U	YES	UJ							UJ								G
2-Nitrophenol	2.0		ug/L	U	YES	UJ							UJ								G
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ							UJ								G
4-Chloro-3-methylphenol	2.0		ug/L	U	YES	UJ							UJ								G
4-Methylphenol	1.0		ug/L	U	YES	UJ							UJ								G
4-Nitrophenol	5.0		ug/L	U	YES	UJ							UJ								G
Benzoic acid	10		ug/L	U	YES	UJ							UJ								G
Benzyl alcohol	5.0		ug/L	U	YES	UJ							UJ								G
bis(2-Ethylhexyl) phthalate	0.96		ug/L	J B	YES	~~UJ~~ J B			J B					J		J B					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ															Pj
Pentachlorophenol	5.0		ug/L	U	YES	UJ							UJ								G
Phenol	1.0		ug/L	U	YES	UJ							UJ								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-084C-1529-GF **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150401017

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.39		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-084C-1529-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150401016

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 5**															
beta-BHC	0.26		ug/L	PG	YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-084C-1529-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401016

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C									**Dilution: 1**												
bis(2-Ethylhexyl) phthalate	3.4		ug/L	J B	YES	UJ BB			UB					J		UB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-DUP1-1566-GF **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150401009

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Potassium	893		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-DUP1-1566-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401008

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C																					
									Dilution: 1												
bis(2-Ethylhexyl) phthalate	8.6		ug/L	J B	YES	UJ JB			JB					J		JB					L,N,F

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW 11-7-07

ADR 8.1 Report Date: 8/30/2010 09:10

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-001-1515-GF **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150401015

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Nickel	3.3		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-001-1515-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401014

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 353.2						**Dilution: 1**															
Nitrate as N (NO3-N)	0.02		mg/L	B	YES	UJ								J							Cb,L
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.027		ug/L	J	YES	J							J	J							G,L
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-001-1515-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401014

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															
Carbon disulfide	0.69		ug/L	J	YES	J				J				J							L,J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.7		ug/L	J B	YES	UJ JB			JB					J		JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-002-1516-GF **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150401013

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.15		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-002-1516-GW **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401012

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Carbon disulfide	0.34		ug/L	J	YES	J				J				J							L,J
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	2.5		ug/L	J B	YES	UJ BB			JB					J		UJB					L,N,F
Di-n-butyl phthalate	0.82		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM1-TRIP **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401001

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B																					
														Dilution: 1							
Acetone	1.9		ug/L	J	YES	J								J							Pj,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM2-TRIP **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401011

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B																					
														Dilution: 1							
Acetone	1.9		ug/L	J	YES	J								J							Pj,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM3-TRIP **Lab Report Batch :** A0G150401 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150401018

Reviewed By / Date : ASD 8/30/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.8		ug/L	J	YES	J								J							Pj,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G150401 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE4-1581	A0G150401010	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Potassium	U	1000	200.00	ug/L
				Sodium	U	1000	200.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0G150401 **Lab ID:** TALCAN
Method/Preparation Batch : 0207253 / 0207253 **Analysis Date :** 07/26/2010
Client Sample ID : FWGEQUIPRINSE4-1581-GW **Preparation Date :** 07/26/2010
Lab Sample ID : A0G150401010 **Preparation Type :** 5030B

Analysis Method : 8260B

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	15	10	ug/L		Common Contaminant

2-Butanone contamination found in the equipment blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	13	10	ug/L		Common Contaminant

Acetone contamination found in the equipment blank did not qualify any samples.

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.4	2.0	ug/L	J B	Common Contaminant

Methylene chloride contamination found in the equipment blank did not qualify any samples.

Toluene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.32	1.0	ug/L	J	Common Contaminant

Toluene contamination found in the equipment blank did not qualify any samples.

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.8	10	ug/L	J B	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL1mw-064C-1521-GW	A0G150401019	1	0.88	J B	ug/L
FWGLL1mw-065C-1522-GW	A0G150401006	1	1.4	J B	ug/L
FWGLL1mw-067C-1523-GW	A0G150401002	1	2.1	J B	ug/L
FWGLL1mw-078C-1524-GW	A0G150401021	1	1.5	J B	ug/L
FWGLL1mw-080C-1525-GW	A0G150401004	1	4.2	J B	ug/L
FWGLL1mw-081C-1526-GW	A0G150401023	1	1.6	J B	ug/L
FWGLL1mw-083C-1528-GW	A0G150401025	1	0.96	J B	ug/L
FWGLL1mw-084C-1529-GW	A0G150401016	1	3.4	J B	ug/L
FWGLL1mw-DUP1-1566-GW	A0G150401008	1	8.6	J B	ug/L
FWGSCFmw-001-1515-GW	A0G150401014	1	1.7	J B	ug/L
FWGSCFmw-002-1516-GW	A0G150401012	1	2.5	J B	ug/L

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G150401 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE4-1581	A0G150401010	8260B	AQ	Methylene chloride	J B	1.4	2.0	ug/L
				Toluene	J	0.32	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.8	10	ug/L
FWGLL1mw-064C-1521-G	A0G150401020	6010B		Potassium	B	643	1000	ug/L
FWGLL1mw-064C-1521-G	A0G150401019	8270C		bis(2-Ethylhexyl) phthalate	J B	0.88	10	ug/L
FWGLL1mw-065C-1522-G	A0G150401007	6010B		Potassium	B	845	1000	ug/L
FWGLL1mw-065C-1522-G	A0G150401006	8270C		bis(2-Ethylhexyl) phthalate	J B	1.4	10	ug/L
FWGLL1mw-067C-1523-G	A0G150401003	6010B		Potassium	B	589	1000	ug/L
		6020		Thallium	B	0.25	1.0	ug/L
FWGLL1mw-067C-1523-G	A0G150401002	8270C		bis(2-Ethylhexyl) phthalate	J B	2.1	10	ug/L
FWGLL1mw-078C-1524-G	A0G150401022	6010B		Nickel	B	4.5	10.0	ug/L
		6020		Thallium	B	0.68	1.0	ug/L
FWGLL1mw-078C-1524-G	A0G150401021	8270C		bis(2-Ethylhexyl) phthalate	J B	1.5	10	ug/L
				Di-n-butyl phthalate	J	0.80	1.0	ug/L
FWGLL1mw-080C-1525-G	A0G150401005	6020		Aluminum	B	45.2	50.0	ug/L
				Thallium	B	0.19	1.0	ug/L
FWGLL1mw-080C-1525-G	A0G150401004	8081A		beta-BHC	J	0.048	0.060	ug/L
				delta-BHC	J	0.019	0.060	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	4.2	10	ug/L
FWGLL1mw-081C-1526-G	A0G150401024	6020		Thallium	B	0.24	1.0	ug/L
FWGLL1mw-081C-1526-G	A0G150401023	8081A		beta-BHC	J	0.011	0.030	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.6	10	ug/L
FWGLL1mw-083C-1528-G	A0G150401026	6020		Beryllium	B	0.33	1.0	ug/L
				Thallium	B	0.16	1.0	ug/L
FWGLL1mw-083C-1528-G	A0G150401025	8270C		2,4-Dinitrotoluene	J	1.5	5.0	ug/L
				bis(2-Ethylhexyl) phthalate	J B	0.96	10	ug/L
FWGLL1mw-084C-1529-G	A0G150401017	6020		Thallium	B	0.39	1.0	ug/L
FWGLL1mw-084C-1529-G	A0G150401016	8270C		bis(2-Ethylhexyl) phthalate	J B	3.4	10	ug/L
FWGLL1mw-DUP1-1566-	A0G150401009	6010B		Potassium	B	893	1000	ug/L
FWGLL1mw-DUP1-1566-	A0G150401008	8270C		bis(2-Ethylhexyl) phthalate	J B	8.6	10	ug/L
FWGSCFmw-001-1515-G	A0G150401015	6010B		Nickel	B	3.3	10.0	ug/L
FWGSCFmw-001-1515-G	A0G150401014	353.2		Nitrate as N (NO3-N)	B	0.02	0.1	mg/L
		8081A		Endrin ketone	J	0.027	0.030	ug/L
		8260B		Carbon disulfide	J	0.69	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.7	10	ug/L
FWGSCFmw-002-1516-G	A0G150401013	6020		Antimony	B	0.15	2.0	ug/L

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G150401 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGSCFmw-002-1516-G	A0G150401012	8260B	AQ	Carbon disulfide	J	0.34	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	2.5	10	ug/L
				Di-n-butyl phthalate	J	0.82	1.0	ug/L
FWGTEAM1-TRIP	A0G150401001	8260B		Acetone	J	1.9	10	ug/L
FWGTEAM2-TRIP	A0G150401011			Acetone	J	1.9	10	ug/L
FWGTEAM3-TRIP	A0G150401018			Acetone	J	1.8	10	ug/L

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0207253 **Analysis Method :** 8260B **Analysis Date :** 07/26/2010

Preparation Batch : 0207253 **Preparation Type :** 5030B **Preparation Date :** 07/26/2010

Lab Reporting Batch : A0G150401 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	Matrix	Analyte Name	Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0G260000253C	AQ	Carbon disulfide	132		30.00	40.00	123.00	30.00
A0G260000253L		Carbon disulfide	130	1.7	30.00	40.00	123.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE4-1581-GW	A0G150401010
FWGLL1mw-064C-1521-GW	A0G150401019
FWGLL1mw-065C-1522-GW	A0G150401006
FWGLL1mw-078C-1524-GW	A0G150401021
FWGLL1mw-081C-1526-GW	A0G150401023
FWGLL1mw-083C-1528-GW	A0G150401025
FWGLL1mw-084C-1529-GW	A0G150401016
FWGLL1mw-DUP1-1566-GW	A0G150401008
FWGSCFmw-001-1515-GW	A0G150401014
FWGSCFmw-002-1516-GW	A0G150401012
FWGTEAM2-TRIP	A0G150401011
FWGTEAM3-TRIP	A0G150401018

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

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Method Blank Outlier Report

Lab Reporting Batch : A0G150401 **Lab ID:** TALCAN

Analysis Method : 8260B **Analysis Date :** 07/26/2010

Preparation Type : 5030B **Preparation Date :** 07/26/2010

Method Blank Lab Sample ID : A0G260000253B **Preparation Batch :** 0207253

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.88	2.0	ug/L	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE4-1581-G	A0G150401010	1	1.4	J B	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A0G150401
Lab ID: TALCAN
Analysis Method : 8260B
Analysis Date : 07/23/2010
Preparation Type : 5030B
Preparation Date : 07/23/2010
Method Blank Lab Sample ID : A0G230000233B
Preparation Batch : 0204233

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.76	2.0	ug/L	J	Common Contaminant

Methylene chloride contamination found in the method blank did not qualify any samples.

QC Outlier Report: Trip Blank

Lab Reporting Batch : A0G150401
Lab ID: TALCAN
Method/Preparation Batch : 0204233 / 0204233
Analysis Date : 07/23/2010
Client Sample ID : FWGTEAM1-TRIP
Preparation Date : 07/23/2010
Lab Sample ID : A0G150401001
Preparation Type : 5030B

Analysis Method : 8260B

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.9	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGEQUIPRINSE4-1581-G	A0G150401010	1	13		ug/L

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.9	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.8	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0197036 **Analysis Method :** 8270C **Analysis Date :** 07/22/2010

Preparation Batch : 0197036 **Preparation Type :** 3520C **Preparation Date :** 07/17/2010

Lab Reporting Batch : A0G150401 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL1mw-064C-1521-	A0G150401019S	AQ	2,4-Dinitrophenol	37		0.00	45.00	135.00	20.00
			3,3'-Dichlorobenzidine	30		0.00	45.00	135.00	20.00
			Benzoic acid	18		0.00	45.00	135.00	20.00
			Hexachlorobutadiene	41		0.00	45.00	135.00	20.00
			Hexachlorocyclopentadiene	38		0.00	45.00	135.00	20.00
			Hexachloroethane	41		0.00	45.00	135.00	20.00
FWGLL1mw-064C-1521-	A0G150401019D		2,4-Dinitrophenol	34		0.00	45.00	135.00	20.00
			3,3'-Dichlorobenzidine	17	53	0.00	45.00	135.00	20.00
			Benzoic acid	21		0.00	45.00	135.00	20.00
			Hexachlorobutadiene	43		0.00	45.00	135.00	20.00
			Hexachlorocyclopentadiene	43		0.00	45.00	135.00	20.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL1mw-064C-1521-GW	A0G150401019

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.

** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A0G150401 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
8270C	AQ	bis(2-Ethylhexyl) phthalate	FWGLL1mw-065C	RES	1.4	J B	FWGLL1mw-DUP	RES	8.6	J B	144.0	30	ug/L

Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.

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QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0G150401 **Lab ID:** TALCAN
Method/Preparation Batch : 0207253 / 0207253 **Analysis Date :** 07/26/2010
Client Sample ID : FWGEQUIPRINSE4-1581-GW **Preparation Date :** 07/26/2010
Lab Sample ID : A0G150401010 **Preparation Type :** 5030B

Analysis Method : 8260B

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	15	10	ug/L		Common Contaminant

2-Butanone contamination found in the equipment blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	13	10	ug/L		Common Contaminant

Acetone contamination found in the equipment blank did not qualify any samples.

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.4	2.0	ug/L	J B	Common Contaminant

Methylene chloride contamination found in the equipment blank did not qualify any samples.

Toluene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.32	1.0	ug/L	J	Common Contaminant

Toluene contamination found in the equipment blank did not qualify any samples.

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.8	10	ug/L	J B	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL1mw-064C-1521-GW	A0G150401019	1	0.88	J B	ug/L
FWGLL1mw-065C-1522-GW	A0G150401006	1	1.4	J B	ug/L
FWGLL1mw-067C-1523-GW	A0G150401002	1	2.1	J B	ug/L
FWGLL1mw-078C-1524-GW	A0G150401021	1	1.5	J B	ug/L
FWGLL1mw-080C-1525-GW	A0G150401004	1	4.2	J B	ug/L
FWGLL1mw-081C-1526-GW	A0G150401023	1	1.6	J B	ug/L
FWGLL1mw-083C-1528-GW	A0G150401025	1	0.96	J B	ug/L
FWGLL1mw-084C-1529-GW	A0G150401016	1	3.4	J B	ug/L
FWGLL1mw-DUP1-1566-GW	A0G150401008	1	8.6	J B	ug/L
FWGSCFmw-001-1515-GW	A0G150401014	1	1.7	J B	ug/L
FWGSCFmw-002-1516-GW	A0G150401012	1	2.5	J B	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A0G150401
Lab ID: TALCAN
Analysis Method : 8270C
Analysis Date : 07/21/2010
Preparation Type : 3520C
Preparation Date : 07/17/2010
Method Blank Lab Sample ID : A0G160000036B
Preparation Batch : 0197036

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.2	10	ug/L	J	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE4-1581-G	A0G150401010	1	1.8	J B	ug/L
FWGLL1mw-064C-1521-GW	A0G150401019	1	0.88	J B	ug/L
FWGLL1mw-065C-1522-GW	A0G150401006	1	1.4	J B	ug/L
FWGLL1mw-067C-1523-GW	A0G150401002	1	2.1	J B	ug/L
FWGLL1mw-078C-1524-GW	A0G150401021	1	1.5	J B	ug/L
FWGLL1mw-080C-1525-GW	A0G150401004	1	4.2	J B	ug/L
FWGLL1mw-081C-1526-GW	A0G150401023	1	1.6	J B	ug/L
FWGLL1mw-083C-1528-GW	A0G150401025	1	0.96	J B	ug/L
FWGLL1mw-084C-1529-GW	A0G150401016	1	3.4	J B	ug/L
FWGLL1mw-DUP1-1566-GW	A0G150401008	1	8.6	J B	ug/L
FWGSCFmw-001-1515-GW	A0G150401014	1	1.7	J B	ug/L
FWGSCFmw-002-1516-GW	A0G150401012	1	2.5	J B	ug/L

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0197027 **Analysis Method :** 8081A **Analysis Date :** 07/29/2010

Preparation Batch : 0197027 **Preparation Type :** 3520C **Preparation Date :** 07/17/2010

Lab Reporting Batch : A0G150401 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL1mw-064C-1521-	A0G150401019D	AQ	Heptachlor		31	0.00	40.00	140.00	20.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL1mw-064C-1521-GW	A0G150401019

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Surrogate Recovery Outlier Report

Lab Report Batch: A0G150401 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGLL1mw-065C-1522-GW	A0G150401006	8081A	1	AQ	Decachlorobiphenyl	40	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	45	50.0	150.0	10.0	All Target
FWGLL1mw-078C-1524-GW	A0G150401021	8081A	1	AQ	Decachlorobiphenyl	40	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	40	50.0	150.0	10.0	All Target
FWGLL1mw-083C-1528-GW	A0G150401025	8270C	1	AQ	2,4,6-Tribromophenol	39	50.0	150.0	10.0	Acid
					2-Fluorophenol	33	50.0	150.0	10.0	Acid
					Phenol-d5	38	50.0	150.0	10.0	Acid
FWGSCFmw-001-1515-GW	A0G150401014	8081A	1	AQ	Decachlorobiphenyl	41	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	38	50.0	150.0	10.0	All Target

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0197028 **Analysis Method :** 8082 **Analysis Date :** 07/27/2010

Preparation Batch : 0197028 **Preparation Type :** 3520C **Preparation Date :** 07/17/2010

Lab Reporting Batch : A0G150401 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL1mw-064C-1521-	A0G150401019D	AQ	Aroclor 1016		29	0.00	40.00	140.00	20.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL1mw-064C-1521-GW	A0G150401019

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** September 3, 2010
STL Sample Delivery Group: A0G150403 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 14, 2010, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0G150403.

Field Sample ID	Analytes	Method
FWGLL1mw-067c-1523-GW	Explosives	SW846 8330
FWGLL1mw-080c-1525-GW	Nitroguanidine	SW846 M8330
FWGLL1mw-065c-1522-GW	Nitrocellulose	TAL- SOP WS-WC-0050
FWGLL1mw-DUP1-1566-GW		
FWGEQUIPRinse4-1581-GW		
FWGSCFmw-002-1516-GW		
FWGSCFmw-001-1515-GW		
FWGLL1mw-084c-1529-GW		
FWGLL1mw-064c-1521-GW		
FWGLL1mw-078c-1524-GW		
FWGLL1mw-081c-1526-GW		
FWGLL1mw-083c-1528-GW		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004, Analytical Methods, and Laboratory Standard Operating Procedures.* These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010 **Date:** September 3, 2010
STL Sample Delivery Group: A0G150403 **Revision:** 0

Explosives- 8330
The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration Criteria
- ICV and CCV criteria
- Retention time criteria
- MDL Verification
- MS Recovery Criteria
- LCS Recovery Criteria

LC9-4-Nitrotoluene appears to not have been spiked and/or recover in the calibration verifications or MRL verifications; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation and the %D for 2-nitrotoluene were within criteria.

Blanks

- Due to excessive particulates, samples FWGLL1mw-078c-1524-GW, required filtration. A filter blank was prepared and analyzed with no detected concentrations reported.
- 1,3,5-Trinitrobenzene was detected in the method blank at 0.045ug/L. Samples FWGLL1mw-067c-1523-GW and FWGLL1mw-078c-1524-GW were qualified, "B" as the detected concentrations were <5x blank contamination.
- Sample FWGEQUIPRinse4-1581-GW had detected concentrations of 2,4-dinitritoluene at 0.071ug/L and 0.060ug/L HMX. The 2,4-dinitritoluene result for sample FWGLL1mw-081c-1526 and the HMX results for FWGLL1mw-081c-1526, FWGLL1mw-083c-1528 and FWGLL1mw-084c-1529 were qualified, "B" as the detected concentrations were <5x blank contamination

Field Duplicate RPD
Sample FWGLL12mw-DUP4-1569-GW was the field duplicate for FWGLL12mw-107c-1547-GW. The duplicate RPD was above control limits for 1, 3,5-trinitrobenzene and tetryl at 200%. The 1, 3,5-trinitrobenzene and tetryl results for FWGLL12mw-107c-1547-GW were qualified as estimated, "J".

Confirmation Analysis
Confirmation analysis on sample FWGLL1mw-080c-1525-GW had an RPD above 40% for 1,3,5-trinitirotoluene and for the 1,3,5-trinitirotoluene, 1,3-dinitrobenzene and HMX results for sample FWGLL1mw-084c-1529-GW. Results with confirmation analysis outliers were qualified as estimated, "J".

Matrix Spike RPD
The RPD for matrix spike analysis performed on sample FWGLL1mw-064c-1521-GW was above control limits for PETN, however no qualification was made as the LCS and spike recoveries were within control limits.

Surrogate Recovery
Samples FWGLL1mw-080c-1525-GW, FWGLL1mw-083c-1528-GW and FWGLL1mw-084c-1529-GW were diluted 10x and the surrogate did not recover. The straight analysis for sample FWGLL1mw-084c-1529-GW had a surrogate recovery of 409% and for FWGLL1mw-083c-1528-GW the surrogate did not recover. This was due to the surrogate peak co-eluting with 4-amino-2,6-dinitrotoluene and/or 2-amino-4,6-dinitrotoluene. Results for samples FWGLL1mw-080c-1525-GW and FWGLL1mw-083c-1528-GW

with surrogate outliers were qualified as estimated, "J/UJ". The detected results for sample FWGLL1mw-084c-1529-GW were qualified estimated, "J"

Nitroguanidine- 8330M

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MRL level verification criteria
- MDL verification criteria
- ICV and CCV criteria
- The method blank and equipment blanks were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Matrix spike recovery criteria

No QC outliers were noted.

Nitrocellulose - 353.2

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Sample preparation criteria
- Initial Calibration criteria
- ICV and CCV criteria
- The method and equipment blanks were free from contamination
- MRL Level Verification criteria
- ICB and CCBs were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- MS/MSD percent recoveries
- Nitrocellulose assay criteria

No QC outliers were noted.

Data Reviewer: 9/3/10
Date:

2nd Level Data Review: Eric Corbin
Date: 9/9/10

CASE NARRATIVE

A0G150403

The following report contains the analytical results for twelve water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 15, 2010, according to documented sample acceptance procedures.

The 8330 Explosives, Nitroguanidine, and 353.2 Nitrocellulose as N analyses were performed at the TestAmerica West Sacramento laboratory. Refer to TestAmerica West Sacramento narrative included in their data package for additional information.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 06, 2010. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 0.4 to 4.4°C.

See TestAmerica's Cooler Receipt Form for additional information.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The analyses reported herein were performed using an instrument that has two columns(GC) or detectors(HPLC), one of which is used to confirm the results of the other. Peak interferences may result in some cases, which cause a quantitation difference between the two columns/detectors. If the difference between the two results is greater than 40%, the higher of the two results or the primary column/detector is normally reported. The reported results are flagged with "PG".

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

Case Narrative

TestAmerica West Sacramento Project Number A0G150403

General Comments

Following US EPA Region V guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. The reasons for manual integration have been documented on the affected chromatograms, which are provided in the raw data package. The raw data also includes the original chromatograms prior to any manual integrations being performed. The following samples and analytes required manual integrations:

Instrument LC-11
Continuing calibration verification (CCV) standard (analyzed on 7/29/10 @ 12:25) - 3,4-Dinitrotoluene & 4-Amino-2,6-Dinitrotoluene
CCV standard (analyzed on 7/30/10 @ 00:15) - 3,4-Dinitrotoluene & 4-Amino-2,6-Dinitrotoluene
CCV standard (analyzed on 7/30/10 @ 12:04) - 3,4-Dinitrotoluene & 4-Amino-2,6-Dinitrotoluene
CCV standard (analyzed on 7/31/10 @ 01:05) - 3,4-Dinitrotoluene, Nitrobenzene & 4-Amino-2,6-Dinitrotoluene
MRL standard (analyzed on 7/29/10 @ 13:36) - Nitrobenzene, 3,4-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
MRL standard (analyzed on 7/30/10 @ 01:25) - Nitrobenzene, 3,4-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
MRL standard (analyzed on 7/30/10 @ 13:15) - Nitrobenzene, 3,4-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
MRL standard (analyzed on 7/31/10 @ 02:16) - Nitrobenzene, 3,4-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
Sample 2 - 3,4-Dinitrotoluene, 1,3,5-Trinitrobenzene, & 4-Amino-2,6-Dinitrotoluene
Sample 8 - 3,4-Dinitrotoluene & 4-Amino-2,6-Dinitrotoluene
Sample 9MS & 9 MSD - 3,4-Dinitrotoluene and 4-Amino-2,6-Dinitrotoluene
Sample 11 - HMX, RDX, 3,4-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene

Instrument LC9
MRL standard (analyzed on 7/29/10 @ 16:11) - 2,4,6-Trinitrotoluene & 3,4-Dinitrotoluene
MRL standard (analyzed on 7/29/10 @ 23:52) - 2,4,6-Trinitrotoluene & 3,4-Dinitrotoluene
MRL standard (analyzed on 7/30/10 @ 10:51) - 2,4,6-Trinitrotoluene & 3,4-Dinitrotoluene
MRL standard (analyzed on 7/30/10 @ 15:15) - PETN , 2,4,6-Trinitrotoluene, & 3,4-Dinitrotoluene
MRL standard (analyzed on 7/31/10 @ 03:23) - 2,4,6-Trinitrotoluene & 3,4-Dinitrotoluene

Case Narrative

TestAmerica West Sacramento Project Number A0G150403

CCV standard (analyzed on 7/31/10 @ 02:16) - 2,4,6-Trinitrotoluene
MRL standard (analyzed on 8/04/10 @ 13:29) - 2,4,6-Trinitrotoluene & 3,4-Dinitrotoluene
MRL standard (analyzed on 8/04/10 @ 17:52) – 4-Amino-2,6-Dinitrotoluene, 2,4,6-Trinitrotoluene & 3,4-Dinitrotoluene
2X Method Detection Limit standard (analyzed on 8/5/10 @ 04:47) – 3- Nitrotoluene, 2,4,6-Trinitrotoluene, & 3,4-Dinitrotoluene
CCV standard (analyzed on 8/4/10 @ 12:24) – 2,4,6-Trinitrotoluene

Instrument LC10

Initial calibration (ICAL) Level 3 - PETN
ICAL Level 8 - Nitroglycerin
Sample 12 (10X dilution) – 2,4,6-Trinitrotoluene, 4-Amino-2,6-Dinitrotoluene, & 2-Amino-4,6-Dinitrotoluene
MRL standard (analyzed on 8/4/10 @ 14:37) – 3,4-Dinitrotoluene

WATER, 8330, Explosives
Samples: 10
This sample was filtered prior to extraction since it contained excessive sediment/particulates. A filtered blank was included with the batch.

Samples: 2 (10X dilution), 8 (10X dilution), & 12 (10X dilution)
The surrogate recoveries were diluted out on these samples.

Sample(s): 8
This sample has a high recovery for the 3,4-Dinitrotoluene surrogate due to visible chromatographic interferences. Results for this sample may be biased high. The surrogate recoveries in the associated method blank and laboratory control sample (LCS) were within established control limits.

Sample(s): 12
This sample has no recovery for the 3,4-Dinitroltoluene surrogate due to visible matrix interferences (the surrogate peak was masked by the presence of a large target analyte peak). Results for this sample may be biased low. The surrogate recoveries in the associated method blank and laboratory control sample (LCS) were within established control limits.

Case Narrative

TestAmerica West Sacramento Project Number A0G150403

Sample(s): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
The MRL bracketing standard on the confirmation column (analyzed on 08/04/2010 @ 13:29 and @ 17:52) failed for 2,4,6-Trinitrotoluene due to poor peak resolution with the 3,4-Dinitrotoluene surrogate. A 2X MDL standard was added to the run sequence for corrective action.

There were no other anomalies associated with this project.

SAMPLE SUMMARY

A0G150403

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L37HP	001	FWGLL1mw-067C-1523-GW	07/14/10	10:29
L37HQ	002	FWGLL1mw-080C-1525-GW	07/14/10	12:11
L37HR	003	FWGLL1mw-065C-1522-GW	07/14/10	14:53
L37HT	004	FWGLL1mw-DUP1-1566-GW	07/14/10	15:47
L37HV	005	FWGEQUIPRINSE4-1581-GW	07/14/10	17:07
L37HW	006	FWGSCFmw-002-1516-GW	07/14/10	09:14
L37HX	007	FWGSCFmw-001-1515-GW	07/14/10	13:38
L37H0	008	FWGLL1mw-084C-1529-GW	07/14/10	16:48
L37H1	009	FWGLL1mw-064C-1521-GW	07/14/10	10:50
L37H2	010	FWGLL1mw-078C-1524-GW	07/14/10	13:20
L37H3	011	FWGLL1mw-081C-1526-GW	07/14/10	15:20
L37H4	012	FWGLL1mw-083C-1528-GW	07/14/10	16:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica 15
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: ML001
Address: 1800 Carillon Blvd.	Telephone: 513-825-7500	Telephone: 513-825-7500	Telephone: 330-497-9396	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email:			
Phone: 513-825-7500		TAT if different from below Per SOW ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab pickup			
Project Number: 30240.0006	Shipping/Tracking No:			
PO# 16726				

Analyses: VOC 8260; SVOC 8270; Pest 8081; PCB 8082; Explo 8330; Propellants; Cyanide 9012; NO2/NO3 300.0/9056; Metals 6010/7470

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	Filtered		VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	NO2/NO3 300.0/9056	Metals 6010/7470	Sample Specific Notes / Special Instructions:
FWGTeam1-Trip	7/19/10	08:00		X						2					N	G	X									123
FWGLL1mw-0607C-1523-GW	7/14/10	10:29		X					HNO3 X	3	1		9		N	G	X	X	X	X	X	X	X			123
FWGLL1mw-0607C-1523-GF	7/14/10	10:29		X						1					Y	G									X	123
FWGLL1mw-0806C-1525-GW	7/14/10	12:11		X					HNO3 X	3	1		9		N	G	X	X	X	X	X	X	X			C8
FWGLL1mw-0806C-1525-GF	7/14/10	12:11		X						1					Y	G									X	C8
FWGLL1mw-0605C-1522-GW	7/14/10	14:53		X							3	1		9	N	G	X	X	X	X	X	X	X			C99
FWGLL1mw-0605C-1522-GF	7/14/10	14:53		X						1					Y	G									X	C99
FWGLL1mw-DUP1-1526-GW	7/14/10	15:47		X							3	1		9	N	G	X	X	X	X	X	X	X			H113
FWGLL1mw-DUP1-1526-GF	7/14/10	15:47		X						1					Y	G									X	H113
FWGEQUIPRinse4-1581-GW	7/14/10	17:07		X				1			3	1		9	N	G	X	X	X	X	X	X	X	X	X	C333

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Metals are field filtered

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	EQM	7-14-10 1830	Lance Kleshock	TANCAN TWN	7-14-10 1820
Lance Kleshock	TANCAN TWN	7-14-10 7:20			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			[signature]	TAL NC	7/15/10 730

Temps may not meet requirements if sample collection is close to lab pickup time. All VOAs in cooler 123

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TAL-0018 (1008)

North Canton

Chain of Custody Record

TEST AMERICA

SEVERN TRENT STL

Severn Trent Laboratories, Inc.

16

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
EQM	JOHN MILLER	7-14-10	336186
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
1800 CARILLON BLVD	513 825 7500 (7495 FAX)	330497396	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
CINCINNATI / OH / 45240	E. CORBIN	M. LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP Ravenna OHIO	LAB PICK UP		
Contract/Purchase Order/Quote No.			
PO 16726 PN 30240.0006			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis: VOC	SVOC	PEST	PCB	Explo	Propellants	Cyanide	Metals	NO_2/NO_3	Special Instructions/ Conditions of Receipt
FWG TEAM 2-TRIP	7-14-10	0800		X						2			2									Cooler IDH C111
FWGSCFmw-002-1516-GW	1	914		X			9	1		3	1		3	2	2	2	1	2	1		1	12
FWGSCFmw-002-1516-GF	1	1		X					1											1		12
FWGSCFmw-001-1515-GW	1	1338		X			9	1		3	1		3	2	2	2	1	2	1		1	179
FWGSCFmw-001-1515-GF	1	1		X					1											1		179
FWGWMW-084C-1529-GW	1	1618		X			9	1		3	1		3	2	2	2	1	2	1		1	C111
FWGWMW-084C-1529-GF	1	1							1											1		C111

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metal GF are field filtered.

	Date	Time		Date	Time
1. Relinquished By	7-14-10	1830	1. Received By Lance Hedman	7-14-10	18:30
2. Relinquished By Lance Heal	7-14-10	1720	2. Received By	7/15/10	730
3. Relinquished By			3. Received By		

Comments: Temps may not meet requirements of lab pickup as close to sample collection time.

All VOAs in cooler 1 IT

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	E. Corbin	M. Loeb	15003
Address: 1800 Carillon Blvd	Telephone: 513 825 7500	Telephone: 513 825 7500	Telephone: 330 497 9396	____ of ____ COCs
City/State/Zip: Cincinnati OH 45240	Email: JMiller@eqm.com			
Phone: 513 825 7500				
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Pick up			
Project Number: 03024.0001e	Shipping/Tracking No: NA			
PO# 116726				

TAT Requested (days):
TAT if different from below _____
☒ 3 weeks
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered	Composite	Analyses: 8260B	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants 8095	Cyanide 9012	Metals 6010B/7470		Sample Specific Notes / Special Instructions:
FWGTeam3-Trip	7-14-10	0800		X						2							X									pH12
FWGLLIMW04C-1521GW		1050		X					9 2	1 5 1			27				X	X	X	X	X	X	X			13, AD 7, 54
FWGLLIMW04C-1521GF		1050		X					3															X		13, AD 7, 54
FWGLLIMW08SC-1524GW		1320		X						3	1		9				X	X	X	X	X	X	X			C113
FWGLLIMW08SC-1524GF		1320		X					1			1 5	7H10											X		C113
FWGLLIMW08IC-1526GW		1520		X						3	1		9				X	X	X	X	X	X	X			404
FWGLLIMW08IC-1526GF		1520		X					1															X		404
FWGLLIMW08DC-1528GW		1650		X						3	1		9				X	X	X	X	X	X	X			pH12
FWGLLIMW08DC-1528GF		1650		X					1															X		pH12
					X			See COC																		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
All Metals are field filtered
Temps may not meet requirements if sample collection is close to pick up time
* ALL VOAS IN COOLER PH12 *

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EQM	7-14-10 1830	Lance Hiel	TAL CAN	7-14-10 1830
Relinquished by: Lance Hiel	Company: TAL CANTON	Date/Time: 7-14-10 7:20	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL NC	7/15/10 730

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TAL-0018 (1008)

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number: ADG150403**

North Canton Facility

Client EQM Project RVAAP By: _____

Cooler Received on 7/15/10 Opened on 7/15/10 (Signature)

FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☒ TestAmerica Courier ☐ Other _____

TestAmerica Cooler # _____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 14 Quantity Unsalvageable _____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? _____
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other _____
6. Cooler temperature upon receipt _____ °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ _____
   COOLANT: Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM MJL Date 7/15/10 by gm via Verbal ☒ Voice Mail ☐ Other ☐

Concerning #14

14. CHAIN OF CUSTODY

The following discrepancies occurred:

Did not receive NO_2/NO_3 bottle for sample FWGLLImw-084C-1529-GW. Will not log.

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 051010-HNO_3; Sulfuric Acid Lot# 121709-H_2SO_4; Sodium Hydroxide Lot# 100108-NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
067C-1523	<2 >12	7/15/10	gm
080C-1525	<2 >12		
065C-1522	<2 >12		
DUP1-1566	<2 >12		
EquipRinse4-1581	<2 <2 >12		
002-1516	<2 <2 >12		
001-1515	<2 <2 >12		
084C-1529	<2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
064C-1521	<2 <2 <2 >12 >12 >12	7/15/10	JW
078C-1524	<2 >12		
081C-1526	<2 >12		
083C-1528	<2 >12		

Cooler #	Temp. °C	Method	Coolant
123	2.2	IR	Wet. ice
C8	2.5		
C99	0.4		
H113	2.6		
C333	2.9		
C111	1.6		
12	4.4		
179	3.4		
DH12	1.4		
13	3.2		
AD7	2.4		
54	1.7		

Discrepancies Cont'd:

TestAmerica Multiple Cooler Receipt Form/Narrative — Lot Number: 406150403
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
C113	1.4	IR	Wet ice	
404	1.6	"	"	
~~H113~~	~~3.9~~			
9 7/15/10	9 7/15/10			

8330 EXPLOSIVES DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

SDG: A0G150403 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 and 4.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓				LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			LC11 6/23/10, LC10 7/30/10 , LC9 7/21/10	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve).			✓		STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			LC10 7/31/10 @0246, LC11 6/23/10 @0849 LC9 7/22/10 @0641- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

SDG: A0G150403 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓			LC9- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓			Due to excessive particulates, samples FWGLL1mw-078c-1524-GW, required filtration. A filter blank was prepared and analyzed with no detected concentrations reported.	LCG Attachment A Section 5.6
16. Were target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. 1,3,5-Trinitrobenzene was detected in the method blank at 0.045ug/L. Samples FWGLL1mw-067c-1523-GW and FWGLL1mw-078c-1524-GW were qualified, "B" as the detected concentrations were <5x blank contamination.	LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓				
18. Were target analytes in the field blank analyses < ½ the MRL?	✓			Checked by ADR. Sample FWGEQUIPRinse4-1581-GW had detected concentrations of 2,4-dinitritoluene at 0.071ug/L and 0.060ug/L HMX. The 2,4-dinitritoluene result for sample FWGLL1mw-081c-1526 and the HMX results for FWGLL1mw-081c-1526, FWGLL1mw-083c-1528 and FWGLL1mw-084c-1529 were qualified, "B" as the detected concentrations were <5x blank contamination	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?		✓		Sample FWGLL12mw-DUP4-1569-GW was the field duplicate for FWGLL12mw-107c-1547-GW. The duplicate RPD was above control limits for 1, 3,5-trinitrobenzene and tetryl at 200%. The 1, 3,5-trinitrobenzene and tetryl results for FWGLL12mw-107c-1547-GW were qualified as estimated, "J".	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Were the RPDs ≤ 40%?		✓		Confirmation analysis on sample FWGLL1mw-080c-1525-GW had an RPD above 40% for 1,3,5-trinitirotoluene and for the 1,3,5-trinitirotoluene, 1,3-dinitrobenzene and HMX results for sample FWGLL1mw-084c-1529-GW. Results with confirmation analysis outliers were qualified as estimated, "J".	LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.2, 2010

SDG: A0G150403 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR. The RPD for matrix spike analysis performed on sample FWGLL1mw-064c-1521-GW was above control limits for PETN, however no qualification was made as the LCS and spike recoveries were within control limits.	QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments: Samples FWGLL1mw-080c-1525-GW, FWGLL1mw-083c-1528-GW and FWGLL1mw-084c-1529-GW were diluted 10x and the surrogate did not recover. The straight analysis for sample FWGLL1mw-084c-1529-GW had a surrogate recovery of 409% and for FWGLL1mw-083c-1528-GW the surrogate did not recover. This was due to the surrogate peak co-eluting with 4-amino-2,6-dinitrotoluene and/or 2-amino-4,6-dinitrotoluene. Results for samples FWGLL1mw-080c-1525-GW and FWGLL1mw-083c-1528-GW with surrogate outliers were qualified as estimated, "J/UJ". The detected results for sample FWGLL1mw-084c-1529-GW were qualified estimated, "J"

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GW

HPLC

Lot-Sample #...: A0G150403-001 **Work Order #...:** L37HP1AA **Matrix.....:** WG
Date Sampled...: 07/14/10 10:29 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 1.03 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.038 J**	**0.10**	**ug/L**	**0.031**
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.052
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.091
3-Nitrotoluene	ND	0.52	ug/L	0.059
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.052
4-Nitrotoluene	ND	0.52	ug/L	0.091
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.67	ug/L	0.34
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.67	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

HPLC

Lot-Sample #...: A0G150403-002 Work Order #...: L37HQ1AA Matrix.....: WG
Date Sampled...: 07/14/10 12:11 Date Received..: 07/15/10
Prep Date.....: 07/19/10 Analysis Date..: 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 1 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	1.3 PG	0.10	ug/L	0.030
1,3-Dinitrobenzene	0.93	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	5.6	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	0.92	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.71	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.89	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.088
3-Nitrotoluene	ND	0.50	ug/L	0.057
4-Amino-2,6-dinitrotoluene	7.9	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	14	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
PETN	ND	0.65	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	150	(50 - 150)

NOTE(S):

PG The percent difference between the original and confirmation analyses is greater than 40%.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

HPLC

Lot-Sample #...:	A0G150403-002	Work Order #...:	L37HQ2AA	Matrix.....:	WG
Date Sampled...:	07/14/10 12:11	Date Received..:	07/15/10		
Prep Date.....:	07/19/10	Analysis Date..:	07/30/10		
Prep Batch #...:	0200338				
Dilution Factor:	10.08	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
RDX	88 Q	1.0	ug/L	0.36

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	0.0 SRD,*	(50 - 150)

NOTE(S):

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

* Surrogate recovery is outside stated control limits.

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GW

HPLC

Lot-Sample #...: A0G150403-003 **Work Order #...:** L37HR1AA **Matrix.....:** WG
Date Sampled...: 07/14/10 14:53 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 0.99 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.099	ug/L	0.030
1,3-Dinitrobenzene	ND	0.099	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.099	ug/L	0.099
2,4,6-Trinitrotoluene	ND	0.099	ug/L	0.050
2,4-Dinitrotoluene	ND	0.099	ug/L	0.050
2,6-Dinitrotoluene	ND	0.099	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.087
3-Nitrotoluene	ND	0.50	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.099	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.087
HMX	ND	0.099	ug/L	0.036
Nitrobenzene	ND	0.099	ug/L	0.050
Nitroglycerin	ND	0.64	ug/L	0.33
RDX	ND	0.099	ug/L	0.036
PETN	ND	0.64	ug/L	0.30
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GW

HPLC

Lot-Sample #...: A0G150403-004 **Work Order #...:** L37HT1AA **Matrix.....:** WG
Date Sampled...: 07/14/10 15:47 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 1 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.088
3-Nitrotoluene	ND	0.50	ug/L	0.057
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	ND	0.65	ug/L	0.30
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

HPLC

Lot-Sample #...: A0G150403-005 **Work Order #...:** L37HV1AA **Matrix.....:** WQ
Date Sampled...: 07/14/10 17:07 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	**0.071 J**	**0.097**	**ug/L**	**0.048**
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	**0.60**	**0.097**	**ug/L**	**0.035**
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	ND	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GW

HPLC

Lot-Sample #...: A0G150403-006 **Work Order #...:** L37HW1AA **Matrix.....:** WG
Date Sampled...: 07/14/10 09:14 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 1.03 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.031
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.052
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.091
3-Nitrotoluene	ND	0.52	ug/L	0.059
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.052
4-Nitrotoluene	ND	0.52	ug/L	0.091
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	**0.37 J**	**0.67**	**ug/L**	**0.34**
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.67	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GW

HPLC

Lot-Sample #...: A0G150403-007 **Work Order #...:** L37HX1AA **Matrix.....:** WG
Date Sampled...: 07/14/10 13:38 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 1.06 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.032
1,3-Dinitrobenzene	ND	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.053
2,4-Dinitrotoluene	ND	0.11	ug/L	0.053
2,6-Dinitrotoluene	ND	0.11	ug/L	0.053
2-Nitrotoluene	ND	0.53	ug/L	0.093
3-Nitrotoluene	ND	0.53	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.053
4-Nitrotoluene	ND	0.53	ug/L	0.093
HMX	ND	0.11	ug/L	0.038
Nitrobenzene	ND	0.11	ug/L	0.053
Nitroglycerin	ND	0.69	ug/L	0.35
RDX	ND	0.11	ug/L	0.038
PETN	ND	0.69	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

HPLC

Lot-Sample #...: A0G150403-008 Work Order #...: L37H01AA Matrix.....: WG
Date Sampled...: 07/14/10 16:48 Date Received..: 07/15/10
Prep Date.....: 07/19/10 Analysis Date..: 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 1.04 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	5.9 PG	0.10	ug/L	0.031
1,3-Dinitrobenzene	0.37 PG	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	14	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	9.2	0.10	ug/L	0.052
2,4-Dinitrotoluene	1.8	0.10	ug/L	0.052
2,6-Dinitrotoluene	0.82	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.092
3-Nitrotoluene	ND	0.52	ug/L	0.059
4-Nitrotoluene	0.18 J	0.52	ug/L	0.092
HMX	0.25 PG	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.68	ug/L	0.34
RDX	0.76	0.10	ug/L	0.037
PETN	ND	0.68	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	409 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

PG The percent difference between the original and confirmation analyses is greater than 40%.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

HPLC

Lot-Sample #...:	A0G150403-008	**Work Order #...:**	L37H02AA	**Matrix.....:**	WG
Date Sampled...:	07/14/10 16:48	**Date Received..:**	07/15/10		
Prep Date.....:	07/19/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0200338				
Dilution Factor:	10	**Method.....:**	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4-Amino-2,6-dinitrotoluene	**32 Q**	**1.0**	**ug/L**	**0.50**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	0.0 SRD,*	(50 - 150)

NOTE(S):

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

* Surrogate recovery is outside stated control limits.

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GW

HPLC

Lot-Sample #...: A0G150403-009 **Work Order #...:** L37H11AA **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 1.01 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.030
1,3-Dinitrobenzene	ND	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.050
2,4-Dinitrotoluene	ND	0.10	ug/L	0.050
2,6-Dinitrotoluene	ND	0.10	ug/L	0.050
2-Nitrotoluene	ND	0.50	ug/L	0.089
3-Nitrotoluene	ND	0.50	ug/L	0.058
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.089
HMX	ND	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.66	ug/L	0.33
RDX	ND	0.10	ug/L	0.036
PETN	**1.3**	**0.66**	**ug/L**	**0.30**
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GW

HPLC

Lot-Sample #...: A0G150403-010 **Work Order #...:** L37H21AA **Matrix.....:** WG
Date Sampled...: 07/14/10 13:20 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 1.08 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**0.047 J**	**0.11**	**ug/L**	**0.032**
1,3-Dinitrobenzene	ND	0.11	ug/L	0.054
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.054
2,4-Dinitrotoluene	ND	0.11	ug/L	0.054
2,6-Dinitrotoluene	ND	0.11	ug/L	0.054
2-Nitrotoluene	ND	0.54	ug/L	0.095
3-Nitrotoluene	ND	0.54	ug/L	0.062
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.054
4-Nitrotoluene	ND	0.54	ug/L	0.095
HMX	ND	0.11	ug/L	0.039
Nitrobenzene	ND	0.11	ug/L	0.054
Nitroglycerin	ND	0.70	ug/L	0.36
RDX	**0.095 J**	**0.11**	**ug/L**	**0.039**
PETN	ND	0.70	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.054

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GW

HPLC

Lot-Sample #...: A0G150403-011 **Work Order #...:** L37H31AA **Matrix.....:** WG
Date Sampled...: 07/14/10 15:20 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 0.97 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	**1.6**	**0.097**	**ug/L**	**0.097**
2,4,6-Trinitrotoluene	ND	0.097	ug/L	0.048
2,4-Dinitrotoluene	**0.058 J**	**0.097**	**ug/L**	**0.048**
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	**2.2**	**0.097**	**ug/L**	**0.048**
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	**0.44**	**0.097**	**ug/L**	**0.035**
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	**1.0**	**0.097**	**ug/L**	**0.035**
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GW

HPLC

Lot-Sample #...: A0G150403-012 Work Order #...: L37H41AA Matrix.....: WG
Date Sampled...: 07/14/10 16:50 Date Received..: 07/15/10
Prep Date.....: 07/19/10 Analysis Date..: 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 0.98 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	**9.2**	**0.098**	**ug/L**	**0.029**
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	**16**	**0.098**	**ug/L**	**0.098**
2,4,6-Trinitrotoluene	**5.0**	**0.098**	**ug/L**	**0.049**
2,4-Dinitrotoluene	**3.1**	**0.098**	**ug/L**	**0.049**
2,6-Dinitrotoluene	**1.3**	**0.098**	**ug/L**	**0.049**
2-Nitrotoluene	**0.18 J**	**0.49**	**ug/L**	**0.086**
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	**0.061 J**	**0.098**	**ug/L**	**0.035**
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	0.0 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GW

HPLC

Lot-Sample #...:	A0G150403-012	**Work Order #...:**	L37H42AA	**Matrix.....:**	WG
Date Sampled...:	07/14/10 16:50	**Date Received..:**	07/15/10		
Prep Date.....:	07/19/10	**Analysis Date..:**	07/30/10		
Prep Batch #...:	0200338				
Dilution Factor:	10	**Method.....:**	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4-Amino-2,6-dinitrotoluene	36 Q	1.0	ug/L	0.50

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	0.0 SRD,*	(50 - 150)

NOTE(S):

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

* Surrogate recovery is outside stated control limits.

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G150403 **Work Order #...:** L4DW21AA **Matrix.....:** WATER
MB Lot-Sample #: G0G190000-338

Prep Date.....: 07/19/10
Analysis Date..: 07/29/10 **Prep Batch #...:** 0200338
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	**0.045 J**	**0.10**	**ug/L**	**SW846 8330**
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G150403 **Work Order #...:** L4DW21AD **Matrix.....:** WATER
MB Lot-Sample #: G0G190000-338

Prep Date.....: 07/19/10
Analysis Date..: 07/30/10 **Prep Batch #...:** 0200338
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	ND	0.10	ug/L	SW846 8330
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G150403 **Work Order #...:** L4DW21AC **Matrix.....:** WATER
LCS Lot-Sample#: G0G190000-338
Prep Date.....: 07/19/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	102	(53 - 135)	**SW846 8330**
1,3-Dinitrobenzene	103	(54 - 120)	**SW846 8330**
2-Amino-4,6-dinitrotoluene	102	(53 - 120)	**SW846 8330**
2,4,6-Trinitrotoluene	101	(37 - 120)	**SW846 8330**
2,4-Dinitrotoluene	102	(58 - 136)	**SW846 8330**
2,6-Dinitrotoluene	101	(52 - 144)	**SW846 8330**
2-Nitrotoluene	99	(52 - 120)	**SW846 8330**
3-Nitrotoluene	99	(48 - 136)	**SW846 8330**
4-Amino-2,6-dinitrotoluene	106	(58 - 159)	**SW846 8330**
4-Nitrotoluene	100	(46 - 136)	**SW846 8330**
HMX	102	(45 - 140)	**SW846 8330**
Nitrobenzene	108	(49 - 120)	**SW846 8330**
Nitroglycerin	99	(60 - 120)	**SW846 8330**
RDX	104	(39 - 120)	**SW846 8330**
PETN	100	(60 - 120)	**SW846 8330**
Tetryl	101	(30 - 120)	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G150403 Work Order #...: L37H11AC-MS Matrix.....: WG
MS Lot-Sample #: A0G150403-009 L37H11AD-MSD
Date Sampled...: 07/14/10 10:50 Date Received..: 07/15/10
Prep Date.....: 07/19/10 Analysis Date..: 07/30/10
Prep Batch #...: 0200338
Dilution Factor: 1.01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	96	(50 - 150)			SW846 8330
	97	(50 - 150)	3.7	(0-50)	SW846 8330
1,3-Dinitrobenzene	96	(50 - 150)			SW846 8330
	97	(50 - 150)	3.5	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	97	(50 - 150)			SW846 8330
	97	(50 - 150)	4.4	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	95	(50 - 150)			SW846 8330
	96	(50 - 150)	3.3	(0-50)	SW846 8330
2,4-Dinitrotoluene	97	(50 - 150)			SW846 8330
	98	(50 - 150)	3.8	(0-50)	SW846 8330
2,6-Dinitrotoluene	96	(50 - 150)			SW846 8330
	97	(50 - 150)	3.8	(0-50)	SW846 8330
2-Nitrotoluene	95	(50 - 150)			SW846 8330
	95	(50 - 150)	4.2	(0-50)	SW846 8330
3-Nitrotoluene	95	(50 - 150)			SW846 8330
	94	(50 - 150)	5.4	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	105	(50 - 150)			SW846 8330
	103	(50 - 150)	5.0	(0-50)	SW846 8330
4-Nitrotoluene	96	(50 - 150)			SW846 8330
	95	(50 - 150)	4.2	(0-50)	SW846 8330
HMX	95	(50 - 150)			SW846 8330
	96	(50 - 150)	3.1	(0-50)	SW846 8330
Nitrobenzene	103	(50 - 150)			SW846 8330
	104	(50 - 150)	2.8	(0-50)	SW846 8330
Nitroglycerin	98	(50 - 150)			SW846 8330
	95	(50 - 150)	7.5	(0-50)	SW846 8330
RDX	96	(50 - 150)			SW846 8330
	96	(50 - 150)	3.7	(0-50)	SW846 8330
PETN	97	(50 - 150)			SW846 8330
	77	(50 - 150)	21	(0-50)	SW846 8330
Tetryl	94	(50 - 150)			SW846 8330
	96	(50 - 150)	1.6	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G150403 **Work Order #...:** L37H11AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150403-009 L37H11AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)
	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica West Sacramento

M-000048.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 7/30/2010 23:55 Operator: RN
DataFile: LC11.\07282010A.B\M-000048.D Vial Num: 39
Instrument ID: LC11

Sample : **L37H41AA 0200338 A0G150403-12 1X**

Method File: LC11.\07282010A.B\8330METAB.M
Start Cal Date: 6/22/2010 23:00 End Cal Date: 6/23/2010 13:10

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	1012.74 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:
Samp. Info: L37H41AA 0200338 A0G150403-12 1X;0;
Misc. Info: ;;1012.74;;20;1;WATER.sub;;0;1;L37H41AA

	LC11					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene											0.0000	0.00	
HMX	20.26	-0.002	427	0.0608<							0.0267	0.10	45
RDX	22.90	0.038	1118	0.2282< not cont.							0.0642	0.10	45
Picric ACID											0.1234	0.99	
1,3,5-Trinitrobenzene	24.92	0.014	81812	9.2340< cont.							0.0306	0.10	45
1,3-Dinitrobenzene	28.83	0.041	965	0.1191<							0.0494	0.10	45
TETRYL				not cnt.							0.0494	0.10	
Nitrobenzene				OK not cont per 4/4/10							0.0494	0.10	
2,4,6-Trinitrotoluene	32.98	0.021	24260	4.9650< not cont.							0.0237	0.10	45
4-AM-2,6-DNT	35.17	0.054	98129	27.9800< OK cont							0.0217	0.10	45
2-AM-4,6-DNT	36.26	0.074	64129	16.2200<							0.0987	0.20	45
2,6-Dinitrotoluene	37.62	0.088	3428	1.2510<							0.0494	0.10	45
2,4-Dinitrotoluene	38.24	0.074	13945	3.1340<							0.0494	0.10	45
2-Nitrotoluene	42.26	0.074	333	0.1781<							0.0711	0.49	45
4-Nitrotoluene											0.0711	0.49	
3-Nitrotoluene											0.0612	0.49	
Nitroglycerin											0.3258	0.64	
PETN											0.2962	0.64	
3,5-Dinitroaniline	30.63	0.038	17914	3.3370< NA							0.0247	0.99	45

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4686		0	2.4686		0	(48-143)

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\07282010A.B\M-000048.d
Lab Smp Id: L37H41AA 0200338 A0
Inj Date : 30-JUL-2010 23:55
Operator : RN Inst ID: LC11.i
Smp Info : L37H41AA 0200338 A0G150403-12 1X;0;
Misc Info : ;;1012.74;;20;1;WATER.sub;;0;1;L37H41AA
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\07282010A.B\8330METAB.M
Meth Date : 04-Aug-2010 11:48 noonanr Quant Type: AREA%
Cal Date : 23-JUN-2010 03:22 Cal File: M-000015.d
Als bottle: 39
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATER.sub
Target Version: 4.14
Processing Host: SACP307RY

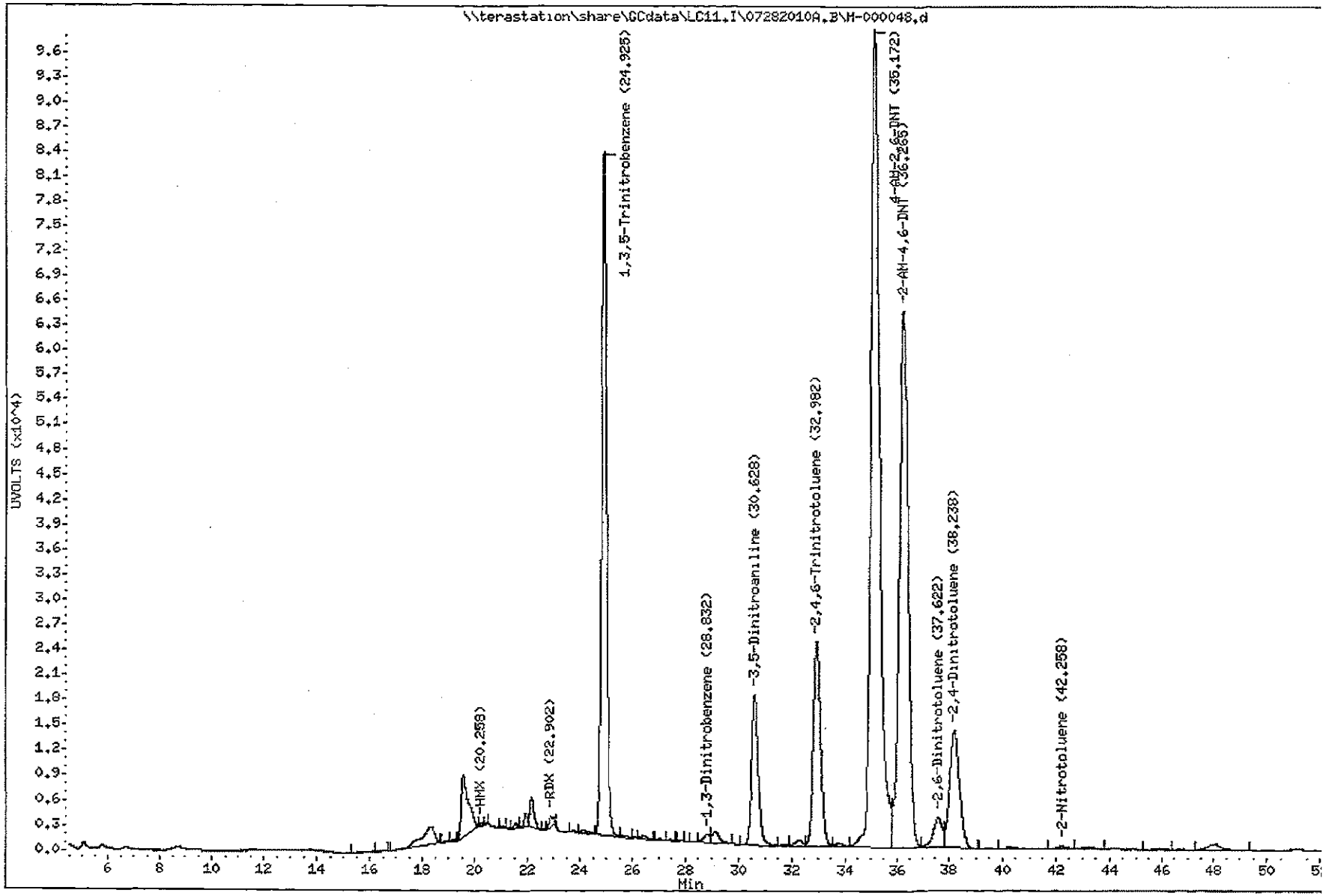
Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1012.740	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
16.128	1994	40	0.020	0.01	
16.515	543	39	0.072	0.01	
18.345	74377	2102	0.028	0.64	
18.928	1529	123	0.080	0.03	
19.205	1110	145	0.131	0.04	
19.568	144520	7253	0.050	2.21	
20.258	2078	427	0.205	0.13	4 HMX
20.465	576	80	0.139	0.02	
21.062	1807	276	0.153	0.08	
21.548	4806	535	0.111	0.16	
21.925	13384	1627	0.122	0.49	
22.155	37643	3426	0.091	1.04	
22.598	252	53	0.210	0.01	
22.902	13366	1118	0.084	0.34	7 RDX
23.818	2895	287	0.099	0.08	
24.115	7360	331	0.045	0.10	
24.925	1043601	81812	0.078	24.97	10 1,3,5-Trinitrobenze
25.638	3735	220	0.059	0.06	
26.438	5244	380	0.072	0.11	
27.018	716	71	0.099	0.02	
27.408	1527	122	0.080	0.03	
27.738	434	34	0.078	0.01	
28.412	973	117	0.120	0.03	
28.832	16747	965	0.058	0.20	12 1,2-Dinitrobenzene

Data File: \\terastation\share\GCdata\LC11.I\07282010A.B\M-000048.d
Date : 30-JUL-2010 23:55
Client ID:
Sample Info: L37H41AA 0200338 A0G150403-12 1X;0;
Volume Injected (uL): 500.0
Column phase: SYNERGI HYDRORP C18

Instrument: LC11.i
Operator: RN
Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\07282010A.B\M-000048.d\M-00004
Lab Smp Id: L37H41AA 0200338 A0
Inj Date : 30-JUL-2010 23:55
Operator : RN Inst ID: LC11.i
Smp Info : L37H41AA 0200338 A0G150403-12 1X;0;
Misc Info : ;;1012.74;;20;1;WATER.sub;;0;1;L37H41AA
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\07282010A.B\8330METAB.M\83302.
Meth Date : 04-Aug-2010 11:48 noonanr Quant Type: AREA%
Cal Date : 23-JUN-2010 22:00 Cal File: M-000032.D
Als bottle: 39
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATER.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1012.740	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.928	2437	330	0.135	0.11	
23.045	3183	283	0.089	0.09	
23.825	569	66	0.116	0.02	
24.108	1113	139	0.125	0.04	
24.915	57284	4170	0.073	1.42	
25.778	1994	142	0.071	0.04	
26.435	2966	206	0.069	0.07	
27.462	3659	210	0.057	0.07	
27.845	3212	183	0.057	0.06	
28.475	3324	303	0.091	0.10	
29.128	58536	1679	0.029	0.57	
30.628	343140	18828	0.055	6.42	
31.742	10909	408	0.037	0.13	
32.288	18418	876	0.048	0.29	
32.982	509119	25859	0.051	8.82	
33.831	21223	861	0.041	0.29	
35.172	3437952	146827	0.043	50.27	
36.265	1609343	67379	0.042	23.00	
37.622	157306	6192	0.039	2.11	
38.235	298401	11566	0.039	3.94	
39.502	4319	162	0.038	0.05	
40.348	8297	269	0.032	0.09	
42.228	44496	1512	0.034	0.51	
43.248	9926	312	0.031	0.10	

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page 2 of Batch 08022010 on Instrument LC10
For header information, refer to the first page of this batch's log.

Date	Time	Operator	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
04-AUG-2010	01:56	RN	L361V1AE 0203363 A0G140567-10	A-000051.	2.01 g	40 mL	1	
04-AUG-2010	02:43	RN	L361W1AE 0203363 A0G140567-11	A-000052.	2 g	40 mL	1	
04-AUG-2010	03:31	RN	L361X1AE 0203363 A0G140567-12	A-000053.	1.97 g	40 mL	1	
04-AUG-2010	04:19	RN	L36101AE 0203363 A0G140567-13	A-000054.	2.05 g	40 mL	1	
04-AUG-2010	05:06	RN	L36121AE 0203363 A0G140567-14	A-000055.	2.08 g	40 mL	1	
04-AUG-2010	05:54	RN	STD_04 10GCSV0216 8330 50-100n	A-000056.	0 g	0 mL	1	
04-AUG-2010	06:42	RN	L36131AE 0203363 A0G140567-15	A-000057.	2.07 g	40 mL	0.5	
04-AUG-2010	07:29	RN	L36141AE 0203363 A0G140567-16	A-000058.	2.01 g	40 mL	0.5	
04-AUG-2010	08:17	RN	L36161AE 0203363 A0G140567-17	A-000059.	2.02 g	40 mL	0.5	
04-AUG-2010	09:05	RN	L36171AE 0203363 A0G140567-18	A-000060.	2.08 g	40 mL	0.5	
04-AUG-2010	09:52	RN	L36191AE 0203363 A0G140567-19	A-000061.	2.02 g	40 mL	0.5	
04-AUG-2010	10:40	RN	L362C1AE 0203363 A0G140567-20	A-000062.	2.01 g	40 mL	0.5	
04-AUG-2010	11:27	RN	L362E1AE 0203363 A0G140567-21	A-000063.	2.11 g	40 mL	0.5	
04-AUG-2010	12:15	RN	STD_04 10GCSV0216 8330 50-100n	A-000064.	0 g	0 mL	1	
04-AUG-2010	13:02	RN	STD_MRL 10GCSV0213 8330 5ng/mL	A-000065.	0 g	0 mL	1	
04-AUG-2010	13:50	RN	L37H01AA 020033[illegible]8 A0G150403-8	A-000066.	~~986.43 mL~~	20 mL	10	956.88
04-AUG-2010	14:37	RN	L37H41AA 020033[illegible]8 A0G150403-12	A-000067.	~~986.43 mL~~	20 mL	10	1012.74
04-AUG-2010	15:27	RN	STD_04 10GCSV0216 8330 50-100n	A-000068.	0 g	0 mL	1	
04-AUG-2010	16:14	RN	STD_MRL 10GCSV0309 8330 5ng/mL	A-000069.	0 g	0 mL	1	
04-AUG-2010	17:02	RN	L4C5N1AA 0200132 G0G190000-132	A-000070.	1000 mL	20 mL	1	
04-AUG-2010	17:50	RN	L4C5N1AD 0200132 G0G190000-132	A-000071.	1000 mL	20 mL	1	
04-AUG-2010	18:37	RN	L4C5N1AC 0200132 G0G190000-132	A-000072.	1000 mL	20 mL	1	

VMN 8/5/10

VMN 8/5/10

Printed before end of sequence

DA 8-5-10

8330MOD NITROGUANIDINE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150403 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 and 4.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓			Checked by ADR.	QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			7/30/2010	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			Varian Star #1 ICAL: 4/20/10 primary column Stds: 20, 50, 100, 200, 500, 1000	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve)	✓			Linear fit used. No qualifications were made as r>0.995.	STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			4/21/10 @ 0143	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓				LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150403 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes reported in the method blank <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓				
18. Were target analytes reported in the field blank analyses < ½ the MRL?	✓				<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓				QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?			✓		LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150403 R0
Analysis: SW846 8330M Nitroguanadine

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0010 "Determination of Nitroguanidine Based on Method 8330, SW-846" April 2007, revision 2.0

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GW

Dissolved HPLC

Lot-Sample #...: A0G150403-001 Work Order #...: L37HP1AD Matrix.....: WG
Date Sampled...: 07/14/10 10:29 Date Received..: 07/15/10
Prep Date.....: 07/21/10 Analysis Date..: 07/27/10
Prep Batch #...: 0202237
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

Dissolved HPLC

Lot-Sample #...: A0G150403-002 **Work Order #...:** L37HQ1AD **Matrix.....:** WG
Date Sampled...: 07/14/10 12:11 **Date Received..:** 07/15/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0202237
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GW

Dissolved HPLC

Lot-Sample #...: A0G150403-003	**Work Order #...:** L37HR1AD	**Matrix.....:** WG	
Date Sampled...: 07/14/10 14:53	**Date Received..:** 07/15/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0202237			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GW

Dissolved HPLC

Lot-Sample #...: A0G150403-004	**Work Order #...:** L37HT1AD	**Matrix.....:** WG	
Date Sampled...: 07/14/10 15:47	**Date Received..:** 07/15/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0202237			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

Dissolved HPLC

Lot-Sample #...: A0G150403-005	**Work Order #...:** L37HV1AD		**Matrix.....:** WQ
Date Sampled...: 07/14/10 17:07	**Date Received..:** 07/15/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0202237			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GW

Dissolved HPLC

Lot-Sample #...: A0G150403-006 Work Order #...: L37HW1AD Matrix.....: WG
Date Sampled...: 07/14/10 09:14 Date Received..: 07/15/10
Prep Date.....: 07/21/10 Analysis Date..: 07/27/10
Prep Batch #...: 0202237
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GW

Dissolved HPLC

Lot-Sample #...: A0G150403-007	**Work Order #...:** L37HX1AD		**Matrix.....:** WG
Date Sampled...: 07/14/10 13:38	**Date Received..:** 07/15/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/28/10		
Prep Batch #...: 0202237			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

Dissolved HPLC

Lot-Sample #...:	A0G150403-008	**Work Order #...:**	L37H01AD	**Matrix.....:**	WG
Date Sampled...:	07/14/10 16:48	**Date Received..:**	07/15/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/28/10		
Prep Batch #...:	0202237				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GW

Dissolved HPLC

Lot-Sample #...: A0G150403-009	**Work Order #...:** L37H11AH		**Matrix.....:** WG
Date Sampled...: 07/14/10 10:50	**Date Received..:** 07/15/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/28/10		
Prep Batch #...: 0202237			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GW

Dissolved HPLC

Lot-Sample #...:	A0G150403-010	**Work Order #...:**	L37H21AD	**Matrix.....:**	WG
Date Sampled...:	07/14/10 13:20	**Date Received..:**	07/15/10		
Prep Date.....:	07/21/10	**Analysis Date..:**	07/28/10		
Prep Batch #...:	0202237				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GW

Dissolved HPLC

Lot-Sample #...: A0G150403-011 **Work Order #...:** L37H31AD **Matrix.....:** WG
Date Sampled...: 07/14/10 15:20 **Date Received..:** 07/15/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0202237
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-083C-1528-GW

Dissolved HPLC

Lot-Sample #...: A0G150403-012	**Work Order #...:** L37H41AD	**Matrix.....:** WG	
Date Sampled...: 07/14/10 16:50	**Date Received..:** 07/15/10		
Prep Date.....: 07/21/10	**Analysis Date..:** 07/28/10		
Prep Batch #...: 0202237			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G150403 **Work Order #...:** L4GGK1AA **Matrix.....:** WATER
MB Lot-Sample #: G0G210000-237

Prep Date.....: 07/21/10
Analysis Date..: 07/27/10 **Prep Batch #...:** 0202237
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitroguanidine	ND	20	ug/L	SW846 8330 (Modif

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G150403 **Work Order #...:** L4GGK1AC **Matrix.....:** WATER
LCS Lot-Sample#: G0G210000-237
Prep Date.....: 07/21/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0202237
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	114	(73 - 117)	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G150403 **Work Order #...:** L37H11AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150403-009 L37H11AK-MSD
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0202237
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**116**	**(73 - 117)**			**SW846 8330 (Modified**
	115	**(73 - 117)**	**0.76**	**(0-15)**	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
SDG: A0G150403 Rev 0
Sample Event: July 2010
Analysis: TAL-SOP WS-WC-005 Nitrocellulose
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

Review Questions:	Yes	No	N/A	Comments	Qualifier
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 and 4.4 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3.7
7. Was Acetone used to extract the samples? Was the Acetone evaporated using Nitrogen?	✓				STL SOP Sections 11.4
8. Does the initial calibration curve consist of 5 concentration levels with the low standard near but > MDL?	✓			Instrument FS4; ICAL 7/28/10 Stds- 0, 0.05, 0.2, 0.4, 1, 2	STL SOP Section 10.2 R
9. Was the correlation coefficient >0.995?	✓				STL SOP Section 10.2
10. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D <30%?	✓				LCG Table 5 >30%=J
11. Was a second source verification (ICV) analyzed after the ICAL? Were all analytes 90-110%?	✓				STL SOP Section 9.8, 10.3, LCG >110%=J; 90-85%=J/UJ; <85%=J/R
12. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 9.8, LCG < 5x = U
13. Was a CCV run every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.4
14. Was the ICV and CCV a mid-level standard from the initial calibration curve?	✓				STL SOP Section 10.3.1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150403 Rev 0
Analysis: TAL-SOP WS-WC-005 Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
15. Were all CCV calibration analytes within 90-110%?	✓				STL SOP Section 10.4, LCG >110%=J; 85-90%=J/UJ; <85%=J/R
16. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 10.4, LCG < 5x = U
17. Was the Nitrocellulose assay available and/or analyzed to be within 10%?	✓				STL SOP Section 7.14.1 R
18. Was a method blank prepared and analyzed with each batch?	✓				
19. Were target analytes reported in the method blank <1/2 the MRL?	✓			ADR checked section.	STL SOP Section 9.4, LCG <5x=B
20. Was a field blank collected and analyzed?	✓				
21. Were target analytes reported in the field blank analyses <1/2 the MRL?	✓				<5x=B
22. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			ADR checked section.	QAPP Table 3-2 RPD > 30% = J
23. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within lab's in-house limits% (26-144%)?	✓				>UL%=J; 50-LL%=J/UJ; <50%=J/R
24. Was a MS/MSD pair prepared with each batch?	✓				
25. Was the MS/MSD parent a Ravenna sample?	✓				
26. Were MS/MSD recoveries 26-144% and RPD ≤20?	✓			ADR checked section.	Method EPA 353.2 Section 9.4.2 >UL%=J; <LL%=J/UJ; RPD>20%=J/UJ
27. Were sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150403 Rev 0
Analysis: TAL-SOP WS-WC-005 Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.		✓			

References: *STL SOP SAC-WC-0050 "Preparation and Analysis of Nitrocellulose in Aqueous and Soil/Sediment Samples by Colorimetric Autoanalyzer", Jan 2007, rev. 2.0*

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:
The raw data incorrectly lists the true value of the LCS associated with this sample as 20.02mg/L with 8% recover. The reported result reflects the true value of 2.02mg/L.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1523-GW

General Chemistry

Lot-Sample #...: A0G150403-001 **Work Order #...:** L37HP **Matrix.....:** WG
Date Sampled...: 07/14/10 10:29 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-080C-1525-GW

General Chemistry

Lot-Sample #...: A0G150403-002 **Work Order #...:** L37HQ **Matrix.....:** WG
Date Sampled...: 07/14/10 12:11 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-065C-1522-GW

General Chemistry

Lot-Sample #...: A0G150403-003 **Work Order #...:** L37HR **Matrix.....:** WG
Date Sampled...: 07/14/10 14:53 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP1-1566-GW

General Chemistry

Lot-Sample #...: A0G150403-004 **Work Order #...:** L37HT **Matrix.....:** WG
Date Sampled...: 07/14/10 15:47 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1581-GW

General Chemistry

Lot-Sample #...: A0G150403-005 **Work Order #...:** L37HV **Matrix.....:** WQ
Date Sampled...: 07/14/10 17:07 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1516-GW

General Chemistry

Lot-Sample #...: A0G150403-006 **Work Order #...:** L37HW **Matrix.....:** WG
Date Sampled...: 07/14/10 09:14 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1515-GW

General Chemistry

Lot-Sample #...: A0G150403-007 **Work Order #...:** L37HX **Matrix.....:** WG
Date Sampled...: 07/14/10 13:38 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1529-GW

General Chemistry

Lot-Sample #...: A0G150403-008 Work Order #...: L37H0 Matrix.....: WG
Date Sampled...: 07/14/10 16:48 Date Received..: 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-064C-1521-GW

General Chemistry

Lot-Sample #...: A0G150403-009 Work Order #...: L37H1 Matrix.....: WG
Date Sampled...: 07/14/10 10:50 Date Received..: 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-078C-1524-GW

General Chemistry

Lot-Sample #...: A0G150403-010 **Work Order #...:** L37H2 **Matrix.....:** WG
Date Sampled...: 07/14/10 13:20 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1526-GW

General Chemistry

Lot-Sample #...: A0G150403-011 **Work Order #...:** L37H3 **Matrix.....:** WG
Date Sampled...: 07/14/10 15:20 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-083C-1528-GW

General Chemistry

Lot-Sample #...: A0G150403-012 **Work Order #...:** L37H4 **Matrix.....:** WG
Date Sampled...: 07/14/10 16:50 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266

Dilution Factor: 1 MDL.....: 0.12

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0G150403 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: L4NPG1AA		MB Lot-Sample #:	G0G260000-266	
	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/26-07/28/10	0207266
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G150403 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: L4NPG1AC LCS Lot-Sample#: G0G260000-266			
	87	(26 - 144)	TAL-SOP WS-WC-005	07/26-07/28/10	0207266
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G150403 **Matrix.....:** WG
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: L37H11AF-MS/L37H11AG-MSD			MS Lot-Sample #: A0G150403-009		
	77	(26 - 144)			TAL-SOP WS-WC-005	07/26-07/28/10	0207266
	79	(26 - 144)	1.8	(0-45)	TAL-SOP WS-WC-005	07/26-07/28/10	0207266
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automaticallly adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150403										
8330	FWGEQUIPRINSE4-1581-GW	AQ	EB							
				2,4-Dinitrotoluene	0.097	0.071J		J	ug/L	L
8330	FWGLL1mw-067C-1523-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	0.038J		JB	ug/L	L,F
8330	FWGLL1mw-078C-1524-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.11	0.047J		JB	ug/L	L,F
				RDX	0.11	0.095J		J	ug/L	L
8330	FWGLL1mw-080C-1525-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	1.3PG		J	ug/L	Pj
				RDX	1.0	88q		J	ug/L	G
8330	FWGLL1mw-081C-1526-GW	AQ	N							
				2,4-Dinitrotoluene	0.097	0.058J		JB	ug/L	L,N
				HMX	0.097	0.44		B	ug/L	N

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150403										
8330	FWGLL1mw-083C-1528-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.098	9.2		J	ug/L	G
				1,3-Dinitrobenzene	0.098	0.098U		UJ	ug/L	G
				2,4,6-TNT	0.098	5.0		J	ug/L	G
				2,4-Dinitrotoluene	0.098	3.1		J	ug/L	G
				2,6-Dinitrotoluene	0.098	1.3		J	ug/L	G
				2-Amino-4,6-dinitrotoluene	0.098	16		J	ug/L	G
				2-Nitrotoluene	0.49	0.18J		J	ug/L	G,L
				3-Nitrotoluene	0.49	0.49U		UJ	ug/L	G
				4-Amino-2,6-Dinitrotoluene	1.0	36q		J	ug/L	G
				4-Nitrotoluene	0.49	0.49U		UJ	ug/L	G
				HMX	0.098	0.061J		JB	ug/L	G,N,L
				Nitrobenzene	0.098	0.098U		UJ	ug/L	G
				NITROGLYCERINE	0.64	0.64U		UJ	ug/L	G
				Pentaerythritol Tetranitrate (PETN)	0.64	0.64U		UJ	ug/L	G
				RDX	0.098	0.098U		UJ	ug/L	G
				TETRYL	0.098	0.098U		UJ	ug/L	G
8330	FWGLL1mw-084C-1529-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	5.9PG		J	ug/L	Pj,G
				1,3-Dinitrobenzene	0.10	0.37PG		J	ug/L	Pj,G
				2,4,6-TNT	0.10	9.2		J	ug/L	G
				2,4-Dinitrotoluene	0.10	1.8		J	ug/L	G
				2,6-Dinitrotoluene	0.10	0.82		J	ug/L	G
				2-Amino-4,6-dinitrotoluene	0.10	14		J	ug/L	G
				4-Amino-2,6-Dinitrotoluene	1.0	32q		J	ug/L	G
				4-Nitrotoluene	0.52	0.18J		J	ug/L	G,L
				HMX	0.10	0.25PG		JB	ug/L	Pj,N,G
				RDX	0.10	0.76		J	ug/L	G
8330	FWGSCFmw-002-1516-GW	AQ	N							
				NITROGLYCERINE	0.67	0.37J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE4-1581-GW **Lab Report Batch :** A0G150403 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150403005

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.97**															
2,4-Dinitrotoluene	0.071		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-067C-1523-GW **Lab Report Batch :** A0G150403 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150403001

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330																					
1,3,5-Trinitrobenzene	0.038		ug/L	J	YES	UJ								J							L,F

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW 11-7-07

ADR 8.1 Report Date: 9/3/2010 12:08

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-078C-1524-GW **Lab Report Batch :** A0G150403 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150403010

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.08**															
1,3,5-Trinitrobenzene	0.047		ug/L	J	YES	~~UJ~~ J			J					J							L,F
RDX	0.095		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-080C-1525-GW **Lab Report Batch :** A0G150403 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150403002

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 10.08**															
RDX	88		ug/L	q	YES	J							J								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-080C-1525-GW **Lab Report Batch :** A0G150403 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150403002

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1**															
1,3,5-Trinitrobenzene	1.3		ug/L	PG	YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-081C-1526-GW **Lab Report Batch :** A0G150403 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150403011

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330							**Dilution: 0.97**														
2,4-Dinitrotoluene	0.058		ug/L	J	YES	UJ DB								J		U B					L,N
HMX	0.44		ug/L		YES	U B										U B					N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-083C-1528-GW **Lab Report Batch :** A0G150403 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150403012

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.98**															
1,3,5-Trinitrobenzene	9.2		ug/L		YES	J							J								G
1,3-Dinitrobenzene	0.098		ug/L	U	YES	UJ							UJ								G
2,4,6-TNT	5.0		ug/L		YES	J							J								G
2,4-Dinitrotoluene	3.1		ug/L		YES	J							J								G
2,6-Dinitrotoluene	1.3		ug/L		YES	J							J								G
2-Amino-4,6-dinitrotoluene	16		ug/L		YES	J							J								G
2-Nitrotoluene	0.18		ug/L	J	YES	J							J	J							G,L
3-Nitrotoluene	0.49		ug/L	U	YES	UJ							UJ								G
4-Nitrotoluene	0.49		ug/L	U	YES	UJ							UJ								G
HMX	0.061		ug/L	J	YES	~~UJ~~ J	SB						J	J		YB					G,N,L
Nitrobenzene	0.098		ug/L	U	YES	UJ							UJ								G
NITROGLYCERINE	0.64		ug/L	U	YES	UJ							UJ								G
Pentaerythritol Tetranitrate (PETN)	0.64		ug/L	U	YES	UJ							UJ								G
RDX	0.098		ug/L	U	YES	UJ							UJ								G
TETRYL	0.098		ug/L	U	YES	UJ							UJ								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-083C-1528-GW **Lab Report Batch :** A0G150403 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150403012

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 10**															
4-Amino-2,6-Dinitrotoluene	36		ug/L	q	YES	J							J								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-084C-1529-GW **Lab Report Batch :** A0G150403 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150403008

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.04**															
1,3,5-Trinitrobenzene	5.9		ug/L	PG	YES	J							J								Pj,G
1,3-Dinitrobenzene	0.37		ug/L	PG	YES	J							J								Pj,G
2,4,6-TNT	9.2		ug/L		YES	J							J								G
2,4-Dinitrotoluene	1.8		ug/L		YES	J							J								G
2,6-Dinitrotoluene	0.82		ug/L		YES	J							J								G
2-Amino-4,6-dinitrotoluene	14		ug/L		YES	J							J								G
4-Nitrotoluene	0.18		ug/L	J	YES	J							J	J							G,L
HMX	0.25		ug/L	PG	YES	J							J								Pj,N,G
RDX	0.76		ug/L		YES	J							J								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-084C-1529-GW **Lab Report Batch :** A0G150403 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150403008

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 10**															
4-Amino-2,6-Dinitrotoluene	32		ug/L	q	YES	J							J								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-002-1516-GW **Lab Report Batch :** A0G150403 **Lab ID :** TALCAN

Sample Date : 07/14/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150403006

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 1.03**															
NITROGLYCERINE	0.37		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G150403 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE4-1581	A0G150403005	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL1mw-064C-1521-G	A0G150403009	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL1mw-065C-1522-G	A0G150403003	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL1mw-067C-1523-G	A0G150403001	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGLL1mw-078C-1524-G	A0G150403010	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.54	0.22	ug/L
				3-Nitrotoluene	U	0.54	0.22	ug/L
				4-Nitrotoluene	U	0.54	0.22	ug/L
FWGLL1mw-080C-1525-G	A0G150403002	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL1mw-081C-1526-G	A0G150403011	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL1mw-083C-1528-G	A0G150403012	8330	AQ	3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL1mw-084C-1529-G	A0G150403008	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G150403 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGLL1mw-DUP1-1566-	A0G150403004	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGSCFmw-001-1515-G	A0G150403007	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.53	0.21	ug/L
				3-Nitrotoluene	U	0.53	0.21	ug/L
				4-Nitrotoluene	U	0.53	0.21	ug/L
FWGSCFmw-002-1516-G	A0G150403006	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G150403 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE4-1581	A0G150403005	8330	AQ	2,4-Dinitrotoluene	J	0.071	0.097	ug/L
FWGLL1mw-067C-1523-G	A0G150403001			1,3,5-Trinitrobenzene	J	0.038	0.10	ug/L
FWGLL1mw-078C-1524-G	A0G150403010			1,3,5-Trinitrobenzene	J	0.047	0.11	ug/L
				RDX	J	0.095	0.11	ug/L
FWGLL1mw-081C-1526-G	A0G150403011			2,4-Dinitrotoluene	J	0.058	0.097	ug/L
FWGLL1mw-083C-1528-G	A0G150403012			2-Nitrotoluene	J	0.18	0.49	ug/L
				HMX	J	0.061	0.098	ug/L
FWGLL1mw-084C-1529-G	A0G150403008			4-Nitrotoluene	J	0.18	0.52	ug/L
FWGSCFmw-002-1516-G	A0G150403006			NITROGLYCERINE	J	0.37	0.67	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A0G150403
Lab ID: TALCAN
Analysis Method : 8330
Analysis Date : 07/29/2010
Preparation Type : 3535
Preparation Date : 07/19/2010
Method Blank Lab Sample ID : G0G190000338B
Preparation Batch : 0200338

1,3,5-Trinitrobenzene	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	**0.045**	**0.10**	**ug/L**	**J**	

1,3,5-Trinitrobenzene was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGLL1mw-067C-1523-GW	A0G150403001	1.03	0.038	J	ug/L
FWGLL1mw-078C-1524-GW	A0G150403010	1.08	0.047	J	ug/L

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0G150403
Lab ID: TALCAN
Method/Preparation Batch : 0200338 / 0200338
Analysis Date : 07/30/2010
Client Sample ID : FWGEQUIPRINSE4-1581-GW
Preparation Date : 07/19/2010
Lab Sample ID : A0G150403005
Preparation Type : 3535

Analysis Method : 8330

2,4-Dinitrotoluene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.071	0.097	ug/L	J	

2,4-Dinitrotoluene was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL1mw-081C-1526-GW	A0G150403011	0.97	0.058	J	ug/L

HMX	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.60	0.097	ug/L		

HMX was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL1mw-081C-1526-GW	A0G150403011	0.97	0.44		ug/L
FWGLL1mw-083C-1528-GW	A0G150403012	0.98	0.061	J	ug/L
FWGLL1mw-084C-1529-GW	A0G150403008	1.04	0.25	PG	ug/L

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 0200338 **Analysis Method :** 8330 **Analysis Date :** 07/30/2010

Preparation Batch : 0200338 **Preparation Type :** 3535 **Preparation Date :** 07/19/2010

Lab Reporting Batch : A0G150403 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL1mw-064C-1521-	A0G150403009D	AQ	Pentaerythritol Tetranitrate (PETN)		21	0.00	40.00	140.00	20.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL1mw-064C-1521-GW	A0G150403009

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Surrogate Recovery Outlier Report

Lab Report Batch: A0G150403 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGLL1mw-080C-1525-GW	A0G150403002	8330	10.08	AQ	3,4-Dinitrotoluene	0.0	50.0	150.0	10.0	All Target
FWGLL1mw-083C-1528-GW	A0G150403012	8330	10	AQ	3,4-Dinitrotoluene	0.0	50.0	150.0	10.0	All Target
			0.98		3,4-Dinitrotoluene	0.0	50.0	150.0	10.0	All Target
FWGLL1mw-084C-1529-GW	A0G150403008	8330	10	AQ	3,4-Dinitrotoluene	0.0	50.0	150.0	10.0	All Target
			1.04		3,4-Dinitrotoluene	409	50.0	150.0	10.0	All Target

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010
STL Sample Delivery Group: A0G150582

Date: September 3, 2010
Revision: 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 15, 2010, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0G150582.

Field Sample ID	Analytes	Method
FWGLL1mw-085c-1530-GW	Explosives Nitroguanidine Nitrocellulose	SW846 8330 SW846 M8330 TAL- SOP WS-WC-0050
FWGLL1mw-082c-1527-GW		
FWGLL2mw-269c-1538-GW		
FWGSCFmw-005-1519-GW		
FWGSCFmw-004-1518-GW		
FWGSCFmw-DUP6-1571-GW		
FWGLL2mw-261c-1533-GW		
FWGLL2mw-270c-1539-GW		
FWGEQUIPRinse5-1582-GW		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004, Analytical Methods, and Laboratory Standard Operating Procedures*. These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Explosives- 8330

The following QC criteria were reviewed with acceptable results:

- Holding times, preservation, sample handling
- Initial Calibration Criteria
- ICV and CCV criteria
- Retention time criteria
- MDL Verification
- MS Recovery Criteria
- LCS Recovery Criteria
- Method blank free from contamination
- Surrogate recovery

- Field duplicate RPD criteria

LC9-4-Nitrotoluene appears to not have been spiked and/or recover in the calibration verifications or MRL verifications; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation and the %D for 2-nitrotoluene were within criteria.

MRL Verification
The MRL check analyzed 8/1/10 @ 0316 recovered above control limits for PETN at 140%. No qualifications were made as there were no detected PETN concentrations.

Blanks
- Due to excessive particulates, samples FWGLL1mw-082c-1527-GW and FWGLL2mw-261c-1533-GW required filtration. A filter blank was prepared and analyzed with no detected concentrations reported.
- Sample FWGEQUIPRinse5-1582-GW had detected concentrations 1,3,-dinitrobenzene at 0.060ug/L and tetryl at 0.091ug/L. The tetryl result for sample FWGLL2mw-270c-1539-GW was qualified, "B" as the detected concentration was <5x blank contamination

Nitroguanidine- 8330M
The following QC criteria were reviewed with acceptable results:
- Preservation and sample handling
- Initial Calibration criteria
- Retention time criteria
- MRL level verification criteria
- MDL verification criteria
- ICV and CCV criteria
- The method blank and equipment blanks were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Matrix spike recovery criteria

The samples were prepped at 21 days, with a holding time of 14 days to prep. The nitroguanidine results were qualified as estimated, "UJ".

Nitrocellulose - 353.2
The following QC criteria were reviewed with acceptable results:
- Holding times, preservation, sample handling
- Sample preparation criteria
- Initial Calibration criteria
- ICV and CCV criteria
- The method and equipment blanks were free from contamination
- MRL Level Verification criteria
- ICB and CCBs were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- MS/MSD percent recoveries
- Nitrocellulose assay criteria

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010
STL Sample Delivery Group: A0G150582

Date: September 3, 2010
Revision: 0

No QC outliers were noted.

Data Reviewer:
Date: 9/7/10

2nd Level Data Review:
Date: 9/9/10

CASE NARRATIVE

A0G150582

The following report contains the analytical results for nine water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 15, 2010, according to documented sample acceptance procedures.

The 8330 Explosives, Nitroguanidine, and Nitrocellulose as N analyses were performed at the TestAmerica West Sacramento laboratory. Refer to TestAmerica West Sacramento narrative included in their data package for additional information.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 09, 2010. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 1.6 to 5.2°C.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL2mw-261C-1533-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.



TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

Case Narrative

TestAmerica West Sacramento Project Number A0G150582

General Comments
Following US EPA Region V guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. The reasons for manual integration have been documented on the affected chromatograms, which are provided in the raw data package. The raw data also includes the original chromatograms prior to any manual integrations being performed. The following samples and analytes required manual integrations:

Instrument LC10
Initial calibration (ICAL) level 3 – PETN
ICAL level 8 – Nitroglycerin
Sample 1 – 3,4-Dinitrotoluene
Sample 2 - HMX
Sample 5 - Tetryl
Sample 7MSD – HMX, 1,3-Dinitrobenzene, Tetryl, Nitrobenzene, 3,4-Dinitrotoluene, 4-Amino-2,6-Dinitrotoluene, 2,3,6-Trinitrotoluene, & 2-Amino-4,6-Dinitrotolune.

WATER, 8330, Explosives
Sample(s): 2, 7, 7MS, 7MSD
These samples were filtered prior to extraction since they contained excessive sediment/particulates. A filtered blank was included with the batch.

Sample(s): 1, 2, 3, 4, 5, 6, 7, 8, 9
The beginning & ending Method Reporting Limit standards had high percent difference values for PETN. Since the associated sample results were all "ND" for this analyte, no corrective action was performed

WATER, Nitroguanidine
Sample(s): 1, 2, 3, 4, 5, 6, 7, 8, 9
The matrix spikes, which were performed on sample 7, have a high matrix spike duplicate recovery due to possible matrix interferences. Since the laboratory control sample met acceptance criteria, no corrective action was performed.

There were no other anomalies associated with this project.

SAMPLE SUMMARY

A0G150582

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L38WG	001	FWGLL1mw-085C-1530-GW	07/15/10	09:27
L38WJ	002	FWGLL1mw-082C-1527-GW	07/15/10	10:41
L38WM	003	FWGLL2mw-269C-1538-GW	07/15/10	12:47
L38WN	004	FWGSCFmw-005-1519-GW	07/15/10	09:18
L38WQ	005	FWGSCFmw-004-1518-GW	07/15/10	10:58
L38WT	006	FWGSCFmw-DUP6-1571-GW	07/15/10	12:08
L38WV	007	FWGLL2mw-261C-1533-GW	07/15/10	09:20
L38WW	008	FWGLL2mw-270C-1539-GW	07/15/10	11:50
L38WX	009	FWGEQUIPRINSE5-1582-GW	07/15/10	12:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica 14
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: ML002
Address: 1800 Carillon Blvd.	Telephone: 513-825-7500	Telephone: 513-825-7500	Telephone: 3304979396	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email:			
Phone: 513-825-7500		TAT if different from below Per SOW: ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab pickup			
Project Number: 30240.000010	Shipping/Tracking No:			
PO# 116726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Matrix	Cont.	Analyses: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/7470			Sample Specific Notes / Special Instructions: Cooler ID
FWG Team 1 - Trip	7/15/10	08:00		X						2					N	G	X										1027
FWGLL1mw-085C-1530-GW	7/15/10	09:27		X						3	1		9		N	G	X	X	X	X	X	X	X				#15
FWGLL1mw-085C-1530-GF	7/15/10	09:27		X					1						Y	G								X			#15
FWGLL1mw-082C-1527-GW	7/15/10	10:41		X						3	1		9		N	G	X	X	X	X	X	X	X				220
FWGLL1mw-082C-1527-GF	7/15/10	10:41		X					1						Y	G								X			220
FWG-LL2mw-269C-1538-GW	7/15/10	12:47		X						3	1		9		N	G	X	X	X	X	X	X	X				1027
FWGLL2mw-269C-1538-GF	7/15/10	12:47		X					1						Y	G								X			1027

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Metals are field filtered

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EQM	7/15-10 1520		TestAmerica	7/15/10 1520
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	7/15/10 1615			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TALNC	7/15/10 1615

Temps may not meet requirements if sample collection is close to lab pick up time.

ALL VOAs in cooler 1027

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TAL-0018 (1008)

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

15

TAL-4142 (0907)

Client	Project Manager	Date	Chain of Custody Number
EDM	John Miller	7-15-10	373465
Address 1800 CARILLON BLVD	**Telephone Number (Area Code)/Fax Number** 513 825 7500	**Lab Number** 330497939	**Page** 1 of 1
City Cincinnati	**State** OH	**Zip Code** 45240	**Site Contact** E CORBIN	**Lab Contact** M LOEB
Project Name and Location (State) RVAAP Ohio	**Carrier/Waybill Number** LAB PICK UP
Contract/Purchase Order/Quote No. PW30240.0006 PO116726	

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: VOC	SVOC	Pest	PCB	6010	Propellant	Cyanide	NO3	Methane	Special Instructions/ Conditions of Receipt
FWG Team 2 - Trip	7-15-10	0800		X						2			X									~~GW~~ GF 176
FWG SCFmw-005-1519-GW	7-15-10	0918		X			9	1		3	1		X	X	X	X	X	X	X	X		TS17
FWG SCFmw-005-1519-GF	"	"		X					1												X	TS17
FWG SCFmw-004-1518-GW	"	1058		X			9	1		3	1		X	X	X	X	X	X	X	X		405
FWG SCFmw-004-1518-GF	"	"		X					1												X	405
FWG SCFmw DUP 6-1571-GW	"	1208		X			9	1		3	1		X	X	X	X	X	X	X	X		176
FWG SCFmw DUP 6-1571 GF	"	1208		X					1												X	176

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other per SOW

QC Requirements (Specify) metals (GF) are field filtered

1. Relinquished By	Date	Time	1. Received By	Date	Time
	7-15-10	1520		7/15/10	1520
2. Relinquished By	Date	Time	2. Received By	Date	Time
	7/15/10	1615		7/15/10	1615
3. Relinquished By	Date	Time	3. Received By	Date	Time
-					

Comments
Temps may not meet requirements if sample collection time is close to lab pick up time. 176
All VOA in cooler ~~GW~~ GF

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica 16
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager	Site Contact	Lab Contact	COC No:
Company Name: EQM	John Muller	Bob Corbin	M. Loch	15002
Address: 1800 Carillon Blvd	Telephone: 513 825 7500	Telephone: 513 825 7500	Telephone: 330 497 9396	of ___ COCs
City/State/Zip: Cincinnati OH 45240	Email: JMuller@eqm.com			
Phone: 513 825 7500		TAT if different from below ____	Analyses	
Project Name: KVAAP (OH)	Method of Shipment/Carrier: lab Pick up	☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 03024.0006	Shipping/Tracking No: N/A			
PO# 167216				

Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Composite	VOC 8260	SVOC 8270	DRO 8015	GRO 8015	8260 List	8270 List	Cyanide 9012	Metals 6010/6020	NO2/NO3	Sample Specific Notes / Special Instructions
FWGTrip - Team3	7-15-10	0800		X						2						X									TS
FWGLL2MW261C-1533GW	7-15-10	0920		X						9	3		27			X	X	X	X	X	X	X			H112, TS, C222
FWGLL2MW261C-1533GF		0920		X					2						Y								X		H112, TS, C222
FWGLL2MW270C-1538GW		1150		X						3	1		9			X	X	X	X	X	X	X			TS2
FWGLL2MW270C-1538GF		1150		X					1						Y								X		TS2
FWGEQUIPRINSE.5-1558-GW		1230						1	1	8	2		9		N	X	X	X	X	X	X	X	X	X	173

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
All metals are field filtered, except Rinse 5 * ALL VOAS IN COOLER TS *
Temps may not meet requirements if sample collection is close to lab Pick up

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EQM	7-15-10 1520		TestAmerica	7/15/10 1520
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	7/15/10 1615			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL NC	7/15/10 1615

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TAL-0018 (1008)

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 240-150582
North Canton Facility

Client EQM Project RVAAP By: Alaina (Signature)
Cooler Received on 7/15/10 Opened on 7/15/10
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 1 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot#* 051010-HNO_3; *Sulfuric Acid Lot#* 121709-H_2SO_4; *Sodium Hydroxide Lot#* 100108 -*NaOH; Hydrochloric Acid Lot#* 092006-*HCl; Sodium Hydroxide and Zinc Acetate Lot#* 100108-$(CH_3COO)_2ZN$/*NaOH*. What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
1530 GW/GF	<2 >12	7/15/10	Alaina
1527 GW/GF	<2 >12		
1538 GW/GF	<2 >12		
1519 GW/GF	<2 <2 >12		
1518 GW/GF	<2 <2 >12		
1571 GW/GF	<2 <2 >12		
1533 GW/GF	<2 >12		
1539 GW/GF	<2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1582GW	12-2712	7/15/10	am

Cooler #	Temp. °C	Method	Coolant
ID27	1.6	IR	Wet ice
#15	3.8		
220	5.2		
T317	4.8		
405	5.1		
176	3.2		
H112	4.2		
TS	5.0		
C222	2.5		
T52	4.0		
173	3.8		Wet ice

Discrepancies Cont'd:

8330 EXPLOSIVES DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150582 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.6 and 5.2 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓				LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?		✓		The MRL check analyzed 8/1/10 @ 0316 recovered above control limits for PETN at 140%. No qualifications were made as there were no detected PETN concentrations.	LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			LC10 7/30/10 , LC9 7/21/10	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve).			✓		STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			LC10 7/31/10 @0246 LC9 7/22/10 @0641- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150582 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓			LC9- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC9 was used as confirmation.	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓			Due to excessive particulates, samples FWGLL1mw-082c-1527-GW and FWGLL2mw-261c-1533-GW required filtration. A filter blank was prepared and analyzed with no detected concentrations reported.	LCG Attachment A Section 5.6
16. Were target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR	LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓				
18. Were target analytes in the field blank analyses < ½ the MRL?	✓			Checked by ADR. Sample FWGEQUIPRinse5-1582-GW had detected concentrations 1,3,-dinitrobenzene at 0.060ug/L and tetryl at 0.091ug/L. The tetryl result for sample FWGLL2mw-270c-1539-GW was qualified, "B" as the detected concentration was <5x blank contamination	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓				QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Were the RPDs ≤ 40%?			✓	There were no detected concentrations above the RL.	LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR.	QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150582 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

HPLC

Lot-Sample #...: A0G150582-001 **Work Order #...:** L38WG1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 09:27 **Date Received..:** 07/15/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/31/10
Prep Batch #...: 0203097
Dilution Factor: 1.02 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.031
1,3-Dinitrobenzene	ND	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.051
2,4-Dinitrotoluene	ND	0.10	ug/L	0.051
2,6-Dinitrotoluene	ND	0.10	ug/L	0.051
2-Nitrotoluene	ND	0.51	ug/L	0.090
3-Nitrotoluene	ND	0.51	ug/L	0.058
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.051
4-Nitrotoluene	ND	0.51	ug/L	0.090
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.051
Nitroglycerin	ND	0.66	ug/L	0.34
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.66	ug/L	0.31
Tetryl	ND	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

HPLC

Lot-Sample #...: A0G150582-002 **Work Order #...:** L38WJ1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 10:41 **Date Received..:** 07/15/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/31/10
Prep Batch #...: 0203097
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

HPLC

Lot-Sample #...: A0G150582-003 **Work Order #...:** L38WM1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 12:47 **Date Received..:** 07/15/10
Prep Date.....: 07/22/10 **Analysis Date..:** 07/31/10
Prep Batch #...: 0203097
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

HPLC

Lot-Sample #...: A0G150582-004 **Work Order #...:** L38WN1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 09:18 **Date Received..:** 07/15/10
Prep Date.....: 07/22/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0203097
Dilution Factor: 1.05 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.032
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.052
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.092
3-Nitrotoluene	ND	0.52	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.052
4-Nitrotoluene	ND	0.52	ug/L	0.092
HMX	ND	0.10	ug/L	0.038
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.68	ug/L	0.35
RDX	ND	0.10	ug/L	0.038
PETN	ND	0.68	ug/L	0.32
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

HPLC

Lot-Sample #...: A0G150582-005 **Work Order #...:** L38WQ1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 10:58 **Date Received..:** 07/15/10
Prep Date.....: 07/22/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0203097
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

HPLC

Lot-Sample #...: A0G150582-006 **Work Order #...:** L38WT1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 12:08 **Date Received..:** 07/15/10
Prep Date.....: 07/22/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0203097
Dilution Factor: 1.07 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.032
1,3-Dinitrobenzene	ND	0.11	ug/L	0.054
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.054
2,4-Dinitrotoluene	ND	0.11	ug/L	0.054
2,6-Dinitrotoluene	ND	0.11	ug/L	0.054
2-Nitrotoluene	ND	0.54	ug/L	0.094
3-Nitrotoluene	ND	0.54	ug/L	0.061
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.054
4-Nitrotoluene	ND	0.54	ug/L	0.094
HMX	ND	0.11	ug/L	0.039
Nitrobenzene	ND	0.11	ug/L	0.054
Nitroglycerin	ND	0.70	ug/L	0.35
RDX	ND	0.11	ug/L	0.039
PETN	ND	0.70	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.054

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

HPLC

Lot-Sample #...: A0G150582-007 **Work Order #...:** L38WV1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10
Prep Date.....: 07/22/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0203097
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	**0.058 J**	**0.098**	**ug/L**	**0.049**
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

HPLC

Lot-Sample #...: A0G150582-008 **Work Order #...:** L38WW1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 11:50 **Date Received..:** 07/15/10
Prep Date.....: 07/22/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0203097
Dilution Factor: 1.03 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.031
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.052
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.091
3-Nitrotoluene	ND	0.52	ug/L	0.059
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.052
4-Nitrotoluene	ND	0.52	ug/L	0.091
HMX	ND	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.67	ug/L	0.34
RDX	ND	0.10	ug/L	0.037
PETN	ND	0.67	ug/L	0.31
Tetryl	**0.070 J**	**0.10**	**ug/L**	**0.052**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

HPLC

Lot-Sample #...: A0G150582-009 **Work Order #...:** L38WX1AA **Matrix.....:** WQ
Date Sampled...: 07/15/10 12:30 **Date Received..:** 07/15/10
Prep Date.....: 07/22/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0203097
Dilution Factor: 0.98 **Method.....:** SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	**0.060 J**	**0.098**	**ug/L**	**0.049**
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	ND	0.098	ug/L	0.049
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29
Tetryl	**0.091 J**	**0.098**	**ug/L**	**0.049**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G150582 **Work Order #...:** L4H381AA **Matrix.....:** WATER
MB Lot-Sample #: G0G220000-097

Prep Date.....: 07/22/10
Analysis Date..: 07/31/10 **Prep Batch #...:** 0203097
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	ND	0.10	ug/L	SW846 8330
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G150582 **Work Order #...:** L4H381AD **Matrix.....:** WATER
MB Lot-Sample #: G0G220000-097

Prep Date.....: 07/22/10
Analysis Date..: 07/31/10 **Prep Batch #...:** 0203097
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,3,5-Trinitrobenzene	ND	0.10	ug/L	SW846 8330
1,3-Dinitrobenzene	ND	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	ND	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	ND	0.10	ug/L	SW846 8330
2-Nitrotoluene	ND	0.50	ug/L	SW846 8330
3-Nitrotoluene	ND	0.50	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	SW846 8330
4-Nitrotoluene	ND	0.50	ug/L	SW846 8330
HMX	ND	0.10	ug/L	SW846 8330
Nitrobenzene	ND	0.10	ug/L	SW846 8330
Nitroglycerin	ND	0.65	ug/L	SW846 8330
RDX	ND	0.10	ug/L	SW846 8330
PETN	ND	0.65	ug/L	SW846 8330
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G150582 **Work Order #...:** L4H381AC **Matrix.....:** WATER
LCS Lot-Sample#: G0G220000-097
Prep Date.....: 07/22/10 **Analysis Date..:** 07/31/10
Prep Batch #...: 0203097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	101	(53 - 135)	**SW846 8330**
1,3-Dinitrobenzene	104	(54 - 120)	**SW846 8330**
2-Amino-4,6-dinitrotoluene	101	(53 - 120)	**SW846 8330**
2,4,6-Trinitrotoluene	98	(37 - 120)	**SW846 8330**
2,4-Dinitrotoluene	100	(58 - 136)	**SW846 8330**
2,6-Dinitrotoluene	100	(52 - 144)	**SW846 8330**
2-Nitrotoluene	95	(52 - 120)	**SW846 8330**
3-Nitrotoluene	96	(48 - 136)	**SW846 8330**
4-Amino-2,6-dinitrotoluene	97	(58 - 159)	**SW846 8330**
4-Nitrotoluene	97	(46 - 136)	**SW846 8330**
HMX	96	(45 - 140)	**SW846 8330**
Nitrobenzene	100	(49 - 120)	**SW846 8330**
Nitroglycerin	102	(60 - 120)	**SW846 8330**
RDX	100	(39 - 120)	**SW846 8330**
PETN	101	(60 - 120)	**SW846 8330**
Tetryl	98	(30 - 120)	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G150582 **Work Order #...:** L38WV1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150582-007 L38WV1AD-MSD
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10
Prep Date.....: 07/22/10 **Analysis Date..:** 08/01/10
Prep Batch #...: 0203097
Dilution Factor: 0.98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	103	(50 - 150)			SW846 8330
	105	(50 - 150)	2.0	(0-50)	SW846 8330
1,3-Dinitrobenzene	105	(50 - 150)			SW846 8330
	108	(50 - 150)	2.7	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	103	(50 - 150)			SW846 8330
	105	(50 - 150)	2.4	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	95	(50 - 150)			SW846 8330
	97	(50 - 150)	1.7	(0-50)	SW846 8330
2,4-Dinitrotoluene	100	(50 - 150)			SW846 8330
	102	(50 - 150)	2.0	(0-50)	SW846 8330
2,6-Dinitrotoluene	97	(50 - 150)			SW846 8330
	99	(50 - 150)	1.7	(0-50)	SW846 8330
2-Nitrotoluene	98	(50 - 150)			SW846 8330
	101	(50 - 150)	3.1	(0-50)	SW846 8330
3-Nitrotoluene	99	(50 - 150)			SW846 8330
	101	(50 - 150)	1.8	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	97	(50 - 150)			SW846 8330
	101	(50 - 150)	3.4	(0-50)	SW846 8330
4-Nitrotoluene	99	(50 - 150)			SW846 8330
	101	(50 - 150)	1.9	(0-50)	SW846 8330
HMX	98	(50 - 150)			SW846 8330
	100	(50 - 150)	1.8	(0-50)	SW846 8330
Nitrobenzene	101	(50 - 150)			SW846 8330
	104	(50 - 150)	2.2	(0-50)	SW846 8330
Nitroglycerin	101	(50 - 150)			SW846 8330
	106	(50 - 150)	4.3	(0-50)	SW846 8330
RDX	103	(50 - 150)			SW846 8330
	101	(50 - 150)	1.8	(0-50)	SW846 8330
PETN	103	(50 - 150)			SW846 8330
	106	(50 - 150)	2.8	(0-50)	SW846 8330
Tetryl	98	(50 - 150)			SW846 8330
	101	(50 - 150)	3.3	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G150582 **Work Order #...:** L38WV1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150582-007 L38WV1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)
	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica West Sacramento

A-000023.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 8/1/2010 3:16 Operator: RN

DataFile: LC10.I\07312010.B\A-000023.D Vial Num: 82

Instrument ID: LC10

Sample : **STD_MRL 10GCSV0213 8330 5ng/mL**

Method File: LC10.I\07312010.B\8330AB.M

Start Cal Date: 7/30/2010 18:51 End Cal Date: 7/31/2010 0:23

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE SubList: CAL.SUB SpikeList: 0

Samp. Info: STD_MRL 10GCSV0213 8330 5ng/mL;2;

Misc. Info: ;1;;;;3;CAL.SUB;0;1;

	Synergi Hydro-RP C18(250mm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.20	281	5.2600<	5	5%	Acceptable		16.22	543	5.5080	5	10%	Acceptable		(±15)	
HMX	5.31	679	5.4010<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
RDX	**7.46**	**575**	**6.1660<**	5	23%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	**8.56**	**905**	**10.0600**	5	101%	Fails		8.55	1330	9.6990<	5	94%	Fails		(±15)	
1,3,5-Trinitrobenzene	9.75	823	5.2450<	5	5%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.24	801	5.1580<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.33	506	5.1450<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
Nitrobenzene	13.72	407	5.4820<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.35	524	5.2840<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.72	415	5.1900<	5	4%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.69	444	5.2830<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.08	325	5.5030<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.81	511	5.3510<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.58	238	5.5710<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.31	290	5.6180<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.96	275	5.4430<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.39	378	5.7050<	5	14%	Acceptable		(±15)	45
PETN				5	-100%	Fails		27.47	257	7.0110<	5	40%	Fails	High	(±15)	45
3,5-Dinitroaniline	12.95	552	5.3280<	5	7%	Acceptable					5	-100%	Fails	?	(±15)	45
EGDN				5	-100%	Fails					5	-100%	Fails	ND	(±15)	

rsm 8/3/10

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

8330MOD NITROGUANIDINE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150582 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.4 and 4.4 °C.	QAPP Table 4-2
3. Were holding times met?		✓		Checked by ADR. The samples were prepped at 21 days, with a holding time of 14 days to prep. The nitroguanidine results were qualified as estimated, "UJ".	QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓			7/30/2010	LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?	✓				LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			Varian Star #1 ICAL: 4/20/10 primary column Stds: 20, 50, 100, 200, 500, 1000	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve)	✓			Linear fit used. No qualifications were made as r>0.995.	STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			4/21/10 @ 0143	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓				LCG Table 5 D>15% (neg) = J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150582 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
					D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓				LCG Attachment A Section 5.6
16. Were target analytes reported in the method blank <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was a field blank collected and analyzed?	✓				
18. Were target analytes reported in the field blank analyses < ½ the MRL?	✓				<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓				QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Was the RPD ≤ 40%?			✓		LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓				LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓				QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150582 R0
Analysis: SW846 8330M Nitroguanadine

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0010 "Determination of Nitroguanidine Based on Method 8330, SW-846" April 2007, revision 2.0

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

Dissolved HPLC

Lot-Sample #...:	A0G150582-001	**Work Order #...:**	L38WG1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/10 09:27	**Date Received..:**	07/15/10		
Prep Date.....:	08/05/10	**Analysis Date..:**	08/06/10		
Prep Batch #...:	0202240				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

Dissolved HPLC

Lot-Sample #...: A0G150582-002	**Work Order #...:** L38WJ1AD	**Matrix.....:** WG	
Date Sampled...: 07/15/10 10:41	**Date Received..:** 07/15/10		
Prep Date.....: 08/05/10	**Analysis Date..:** 08/06/10		
Prep Batch #...: 0202240			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

Dissolved HPLC

Lot-Sample #...:	A0G150582-003	**Work Order #...:**	L38WM1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/10 12:47	**Date Received..:**	07/15/10		
Prep Date.....:	08/05/10	**Analysis Date..:**	08/06/10		
Prep Batch #...:	0202240				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

Dissolved HPLC

Lot-Sample #...:	A0G150582-004	**Work Order #...:**	L38WN1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/10 09:18	**Date Received..:**	07/15/10		
Prep Date.....:	08/05/10	**Analysis Date..:**	08/06/10		
Prep Batch #...:	0202240				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

Dissolved HPLC

Lot-Sample #...:	A0G150582-005	**Work Order #...:**	L38WQ1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/10 10:58	**Date Received..:**	07/15/10		
Prep Date.....:	08/05/10	**Analysis Date..:**	08/06/10		
Prep Batch #...:	0202240				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

Dissolved HPLC

Lot-Sample #...:	A0G150582-006	**Work Order #...:**	L38WT1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/10 12:08	**Date Received..:**	07/15/10		
Prep Date.....:	08/05/10	**Analysis Date..:**	08/06/10		
Prep Batch #...:	0202240				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

Dissolved HPLC

Lot-Sample #...: A0G150582-007	**Work Order #...:** L38WV1AH	**Matrix.....:** WG	
Date Sampled...: 07/15/10 09:20	**Date Received..:** 07/15/10		
Prep Date.....: 08/05/10	**Analysis Date..:** 08/06/10		
Prep Batch #...: 0202240			
Dilution Factor: 1	**Method.....:** SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

Dissolved HPLC

Lot-Sample #...:	A0G150582-008	**Work Order #...:**	L38WW1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/10 11:50	**Date Received..:**	07/15/10		
Prep Date.....:	08/05/10	**Analysis Date..:**	08/06/10		
Prep Batch #...:	0202240				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

Dissolved HPLC

Lot-Sample #...:	A0G150582-009	**Work Order #...:**	L38WX1AD	**Matrix.....:**	WQ
Date Sampled...:	07/15/10 12:30	**Date Received..:**	07/15/10		
Prep Date.....:	08/05/10	**Analysis Date..:**	08/06/10		
Prep Batch #...:	0202240				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	9.7

METHOD BLANK REPORT

HPLC

Client Lot #...: A0G150582 **Work Order #...:** L4GGV1AA **Matrix.....:** WATER
MB Lot-Sample #: G0G210000-240

Prep Date.....: 08/05/10
Analysis Date..: 08/06/10 **Prep Batch #...:** 0202240
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitroguanidine	ND	20	ug/L	SW846 8330 (Modif

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G150582 **Work Order #...:** L4GGV1AC **Matrix.....:** WATER
LCS Lot-Sample#: G0G210000-240
Prep Date.....: 08/05/10 **Analysis Date..:** 08/06/10
Prep Batch #...: 0202240
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	114	(73 - 117)	**SW846 8330 (Modified**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A0G150582 **Work Order #...:** L38WV1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150582-007 L38WV1AK-MSD
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10
Prep Date.....: 08/05/10 **Analysis Date..:** 08/06/10
Prep Batch #...: 0202240
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	116	(73 - 117)			SW846 8330 (Modified
	119 a	(73 - 117)	2.4	(0-15)	SW846 8330 (Modified

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150582 Rev 0
Analysis: TAL-SOP WS-WC-005 Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.6 and 5.2 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3.7
7. Was Acetone used to extract the samples? Was the Acetone evaporated using Nitrogen?	✓				STL SOP Sections 11.4
8. Does the initial calibration curve consist of 5 concentration levels with the low standard near but > MDL?	✓			Instrument FS4; ICAL 7/28/10 Stds- 0, 0.05, 0.2, 0.4, 1, 2	STL SOP Section 10.2 R
9. Was the correlation coefficient >0.995?	✓				STL SOP Section 10.2
10. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D <30%?	✓				LCG Table 5 >30%=J
11. Was a second source verification (ICV) analyzed after the ICAL? Were all analytes 90-110%?	✓				STL SOP Section 9.8, 10.3, LCG >110%=J; 90-85%=J/UJ; <85%=J/R
12. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 9.8, LCG < 5x = U
13. Was a CCV run every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.4
14. Was the ICV and CCV a mid-level standard from the initial calibration curve?	✓				STL SOP Section 10.3.1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG:** A0G150582 Rev 0
Sample Event: July 2010 **Analysis:** TAL-SOP WS-WC-005 Nitrocellulose
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

Review Questions:	Yes	No	N/A	Comments	Qualifier
15. Were all CCV calibration analytes within 90-110%?	✓				STL SOP Section 10.4, LCG >110%=J; 85-90%=J/UJ; <85%=J/R
16. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				STL SOP Section 10.4, LCG < 5x = U
17. Was the Nitrocellulose assay available and/or analyzed to be within 10%?	✓				STL SOP Section 7.14.1 R
18. Was a method blank prepared and analyzed with each batch?	✓				
19. Were target analytes reported in the method blank <1/2 the MRL?	✓			ADR checked section.	STL SOP Section 9.4, LCG <5x=B
20. Was a field blank collected and analyzed?	✓				
21. Were target analytes reported in the field blank analyses <1/2 the MRL?	✓				<5x=B
22. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			ADR checked section.	QAPP Table 3-2 RPD > 30% = J
23. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within lab's in-house limits% (26-144%)?	✓				>UL%=J; 50-LL%=J/UJ; <50%=J/R
24. Was a MS/MSD pair prepared with each batch?	✓				
25. Was the MS/MSD parent a Ravenna sample?	✓				
26. Were MS/MSD recoveries 26-144% and RPD ≤20?	✓			ADR checked section.	Method EPA 353.2 Section 9.4.2 >UL%=J; <LL%=J/UJ; RPD>20%=J/UJ
27. Were sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ Sept.3, 2010

SDG: A0G150582 Rev 0
Analysis: TAL-SOP WS-WC-005 Nitrocellulose

Review Questions:	Yes	No	N/A	Comments	Qualifier
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.		✓			

References: *STL SOP SAC-WC-0050 "Preparation and Analysis of Nitrocellulose in Aqueous and Soil/Sediment Samples by Colorimetric Autoanalyzer", Jan 2007, rev. 2.0*

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:
The raw data incorrectly lists the true value of the LCS associated with this sample as 20.02mg/L with 8% recover. The reported result reflects the true value of 2.02mg/L.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

General Chemistry

Lot-Sample #...: A0G150582-001 **Work Order #...:** L38WG **Matrix.....:** WG
Date Sampled...: 07/15/10 09:27 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/27-07/28/10	0208193

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

General Chemistry

Lot-Sample #...: A0G150582-002 **Work Order #...:** L38WJ **Matrix.....:** WG
Date Sampled...: 07/15/10 10:41 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/27-07/28/10	0208193

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

General Chemistry

Lot-Sample #...: A0G150582-003 **Work Order #...:** L38WM **Matrix.....:** WG
Date Sampled...: 07/15/10 12:47 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/27-07/28/10	0208193

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

General Chemistry

Lot-Sample #...: A0G150582-004 **Work Order #...:** L38WN **Matrix.....:** WG
Date Sampled...: 07/15/10 09:18 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/27-07/28/10	0208193

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

General Chemistry

Lot-Sample #...: A0G150582-005 **Work Order #...:** L38WQ **Matrix.....:** WG
Date Sampled...: 07/15/10 10:58 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/27-07/28/10	0208193

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

General Chemistry

Lot-Sample #...: A0G150582-006 **Work Order #...:** L38WT **Matrix.....:** WG
Date Sampled...: 07/15/10 12:08 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/27-07/28/10	0208193

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

General Chemistry

Lot-Sample #...: A0G150582-007 **Work Order #...:** L38WV **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/27-07/28/10	0208193

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

General Chemistry

Lot-Sample #...: A0G150582-008 **Work Order #...:** L38WW **Matrix.....:** WG
Date Sampled...: 07/15/10 11:50 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/27-07/28/10	0208193

Dilution Factor: 1 MDL.....: 0.12

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

General Chemistry

Lot-Sample #...: A0G150582-009 Work Order #...: L38WX Matrix.....: WQ
Date Sampled...: 07/15/10 12:30 Date Received..: 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/27-07/28/10	0208193

Dilution Factor: 1 MDL.....: 0.12

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0G150582 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: L4P0G1AA		MB Lot-Sample #:	G0G270000-193	
	ND	0.50	mg/L	TAL-SOP WS-WC-005	07/27-07/28/10	0208193
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G150582 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: L4P0G1AC LCS Lot-Sample#: G0G270000-193			
	92	(26 - 144)	TAL-SOP WS-WC-005	07/27-07/28/10	0208193
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G150582 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: L38WV1AF-MS/L38WV1AG-MSD			MS Lot-Sample #: A0G150582-007		
	88	(26 - 144)			TAL-SOP WS-WC-005	07/27-07/28/10	0208193
	84	(26 - 144)	5.0	(0-45)	TAL-SOP WS-WC-005	07/27-07/28/10	0208193
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automatically adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150582										
8330	FWGEQUIPRINSE5-1582-GW	AQ	EB							
				1,3-Dinitrobenzene	0.098	0.060J		J	ug/L	L
				TETRYL	0.098	0.091J		J	ug/L	L
8330	FWGLL2mw-261C-1533-GW	AQ	N							
				2,4,6-TNT	0.098	0.058J		J	ug/L	L
8330	FWGLL2mw-270C-1539-GW	AQ	N							
				TETRYL	0.10	0.070J		JB	ug/L	L,N
SW8330 Modified	FWGEQUIPRINSE5-1582-GW	AQ	EB							
				Nitroguanidine	20	20U		UJ	ug/L	D
SW8330 Modified	FWGLL1mw-082C-1527-GW	AQ	N							
				Nitroguanidine	20	20U		UJ	ug/L	D
SW8330 Modified	FWGLL1mw-085C-1530-GW	AQ	N							
				Nitroguanidine	20	20U		UJ	ug/L	D
SW8330 Modified	FWGLL2mw-261C-1533-GW	AQ	N							
				Nitroguanidine	20	20U		UJ	ug/L	D
SW8330 Modified	FWGLL2mw-269C-1538-GW	AQ	N							
				Nitroguanidine	20	20U		UJ	ug/L	D
SW8330 Modified	FWGLL2mw-270C-1539-GW	AQ	N							
				Nitroguanidine	20	20U		UJ	ug/L	D
SW8330 Modified	FWGSCFmw-004-1518-GW	AQ	N							
				Nitroguanidine	20	20U		UJ	ug/L	D
SW8330 Modified	FWGSCFmw-005-1519-GW	AQ	N							
				Nitroguanidine	20	20U		UJ	ug/L	D

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150582										
SW8330 Modified	FWGSCFmw-DUP6-1571-GW	AQ	FD	Nitroguanidine	20	20U		UJ	ug/L	D

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE5-1582-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150582009

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.98**															
1,3-Dinitrobenzene	0.060		ug/L	J	YES	J								J							L
TETRYL	0.091		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE5-1582-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150582009

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : SW8330 Modified						**Dilution: 1**															
Nitroguanidine	20		ug/L	U	YES	**UJ**		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-082C-1527-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150582002

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : SW8330 Modified						**Dilution: 1**															
Nitroguanidine	20		ug/L	U	YES	**UJ**		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-085C-1530-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150582001

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : SW8330 Modified						**Dilution: 1**															
Nitroguanidine	20		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-261C-1533-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150582007

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330						**Dilution: 0.98**															
2,4,6-TNT	0.058		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-261C-1533-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150582007

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : SW8330 Modified						**Dilution: 1**															
Nitroguanidine	20		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-269C-1538-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150582003

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : SW8330 Modified						**Dilution: 1**															
Nitroguanidine	20		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-270C-1539-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150582008

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8330							**Dilution: 1.03**														
TETRYL	0.070		ug/L	J	YES	UJ JB								J		UB					L,N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-270C-1539-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150582008

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : SW8330 Modified						**Dilution: 1**															
Nitroguanidine	20		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-004-1518-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150582005

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : SW8330 Modified						**Dilution: 1**															
Nitroguanidine	20		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-005-1519-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150582004

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : SW8330 Modified						**Dilution: 1**															
Nitroguanidine	20		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-DUP6-1571-GW **Lab Report Batch :** A0G150582 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150582006

Reviewed By / Date : Angye Dragotta 9/3/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : SW8330 Modified						**Dilution: 1**															
Nitroguanidine	20		ug/L	U	YES	**UJ**		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G150582 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE5-1582	A0G150582009	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL1mw-082C-1527-G	A0G150582002	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL1mw-085C-1530-G	A0G150582001	8330	AQ	2-Nitrotoluene	U	0.51	0.20	ug/L
				3-Nitrotoluene	U	0.51	0.20	ug/L
				4-Nitrotoluene	U	0.51	0.20	ug/L
FWGLL2mw-261C-1533-G	A0G150582007	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL2mw-269C-1538-G	A0G150582003	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLL2mw-270C-1539-G	A0G150582008	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGSCFmw-004-1518-G	A0G150582005	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGSCFmw-005-1519-G	A0G150582004	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGSCFmw-DUP6-1571-	A0G150582006	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.54	0.21	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G150582 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGSCFmw-DUP6-1571-	A0G150582006	8330	AQ	3-Nitrotoluene	U	0.54	0.21	ug/L
				4-Nitrotoluene	U	0.54	0.21	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G150582 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE5-1582	A0G150582009	8330	AQ	1,3-Dinitrobenzene	J	0.060	0.098	ug/L
				TETRYL	J	0.091	0.098	ug/L
FWGLL2mw-261C-1533-G	A0G150582007			2,4,6-TNT	J	0.058	0.098	ug/L
FWGLL2mw-270C-1539-G	A0G150582008			TETRYL	J	0.070	0.10	ug/L

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0G150582
Lab ID: TALCAN
Method/Preparation Batch : 0203097 / 0203097
Analysis Date : 08/01/2010
Client Sample ID : FWGEQUIPRINSE5-1582-GW
Preparation Date : 07/22/2010
Lab Sample ID : A0G150582009
Preparation Type : 3535

Analysis Method : 8330

1,3-Dinitrobenzene	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.060	0.098	ug/L	J	

1,3-Dinitrobenzene contamination found in the equipment blank did not qualify any samples.

TETRYL	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.091	0.098	ug/L	J	

TETRYL was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL2mw-270C-1539-GW	A0G150582008	1.03	0.070	J	ug/L

QC Outlier Report: Holding Times

Lab Report Batch: A0G150582

Lab ID: TALCAN

					Actual Holding Time			Criteria				Reported Dates (and Times)		
Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Prep Method	Coll To Prep	Prep To Ana	Coll To Ana	Coll To Prep	Prep To Ana	Coll To Ana	Unit of Meas	Collection Date	Preparation Date	Analysis Date
FWGEQUIPRINSE5-	A0G150582009	W8330 Modifie	AQ	Gen Prep	21.0	1.0		14	40		Days	07/15/2010	08/05/2010	08/06/2010
FWGLL1mw-082C-15	A0G150582002	W8330 Modifie	AQ	Gen Prep	21.0	1.0		14	40		Days	07/15/2010	08/05/2010	08/06/2010
FWGLL1mw-085C-15	A0G150582001	W8330 Modifie	AQ	Gen Prep	21.0	1.0		14	40		Days	07/15/2010	08/05/2010	08/06/2010
FWGLL2mw-261C-15	A0G150582007	W8330 Modifie	AQ	Gen Prep	21.0	1.0		14	40		Days	07/15/2010	08/05/2010	08/06/2010
FWGLL2mw-261C-15	A0G150582007S	W8330 Modifie	AQ	Gen Prep	21.0	1.0		14	40		Days	07/15/2010	08/05/2010	08/06/2010
FWGLL2mw-261C-15	A0G150582007D	W8330 Modifie	AQ	Gen Prep	21.0	1.0		14	40		Days	07/15/2010	08/05/2010	08/06/2010
FWGLL2mw-269C-15	A0G150582003	W8330 Modifie	AQ	Gen Prep	21.0	1.0		14	40		Days	07/15/2010	08/05/2010	08/06/2010
FWGLL2mw-270C-15	A0G150582008	W8330 Modifie	AQ	Gen Prep	21.0	1.0		14	40		Days	07/15/2010	08/05/2010	08/06/2010
FWGSCFmw-004-15	A0G150582005	W8330 Modifie	AQ	Gen Prep	21.0	1.0		14	40		Days	07/15/2010	08/05/2010	08/06/2010
FWGSCFmw-005-15	A0G150582004	W8330 Modifie	AQ	Gen Prep	21.0	1.0		14	40		Days	07/15/2010	08/05/2010	08/06/2010
FWGSCFmw-DUP6-1	A0G150582006	W8330 Modifie	AQ	Gen Prep	21.0	1.0		14	40		Days	07/15/2010	08/05/2010	08/06/2010

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: July 2010
STL Sample Delivery Group: A0G150579

Date: September 10, 2010
Revision: 0

Data Validator: Erik Corbin, Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On July 15, 2010 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A0G150579.

Field Sample ID	Analytes	Method
FWGLL1mw-085c-1530-GW	VOCs SVOCs Pesticides PCBs Cyanide Nitrate/Nitrite	SW846 8260B SW846 8270C SW846 8081A SW846 8082 SW846 9012A 353.2
FWGLL1mw-082c-1527-GW		
FWGLL2mw-269c-1538-GW		
FWGSCFmw-DUP6-1571-GW		
FWGEQUIPRinse5-1582-GW		
FWGSCFmw-005-1519-GW		
FWGSCFmw-004-1518-GW		
FWGLL2mw-261c-1533-GW		
FWGLL2mw-270c-1539-GW		
FWGEQUIPRinse5-1582-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL1mw-085c-1530-GW	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGLL1mw-082c-1527-GW		
FWGLL2mw-269c-1538-GW		
FWGSCFmw-DUP6-1571-GW		
FWGEQUIPRinse5-1582-GW		
FWGSCFmw-005-1519-GW		
FWGSCFmw-004-1518-GW		
FWGLL2mw-261c-1533-GW		
FWGLL2mw-270c-1539-GW		
FWGTEAM1-Trip	VOCs	SW846 8260B
FWGTRIP-TEAM3		
FWGTEAM2-Trip		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004*, Analytical Methods, and Laboratory Standard Operating Procedures. These objectives represent accuracy and precision performance goals for each analytical method.

The cooler temperatures were documented as being received from 1.6°C – 5.2°C.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

Site: Ravenna Army Ammunition Plant
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STL Sample Delivery Group: A0G150579 **Revision:** 0

VOAs - 8260B
The following QC criteria were reviewed with acceptable results, except as noted below:

- Holding times, preservation, sample handling
- Tuning criteria
- Initial Calibration Criteria including SPCC and CCC compounds
- ICV/CCV criteria
- Internal standard area counts and retention times
- MDL verification criteria
- MRL verification criteria
- Method/Field/Trip blank Criteria
- Surrogate recoveries
- Field duplicate RPD criteria
- Laboratory Control Sample criteria
- Matrix Spike Recovery Criteria and RPD

QC/MRL

- The opening MRL check analyzed 7/26/10 at 1107 had methylene chloride recover above limits at 181%, bromomethane at 134%, and bromoform at 161%.
- The closing MRL check analyzed 7/26/10 at 2032 had methylene chloride recover above limits at 218%, chloroethane at 148%, and bromoform at 161%.

The methylene chloride result for FWGTEAM1-TRIP was qualified as estimated, "J".

The closing MRL check analyzed 7/29/10 was injected 11 minutes past the 12 hour window. No qualifications were made as the MRL recoveries for the target analytes were within acceptable limits.

Blanks

- Methylene chloride was detected in the method blank (prep batch 0207253) at 0.88ug/L. Sample FWGTEAM1-TRIP was qualified, "B". No additional qualifications were made as there were no other detected methylene chloride results associated with the blanks.
- FWGEQUIPRinse5-1582-GW had 2-butanone detected at 10ug/L, acetone at 6.3ug/L, and methylene chloride at 0.51ug/L.
- FWGTEAM2- and FWGTEAM3- trip blanks had acetone contamination detected at 1.6 and 1.4 ug/L respectively. FWGTEAM1-TRIP had methylene chloride and acetone contamination detected at 0.35 and 2.3 ug/L respectively.

The acetone result for sample FWGEQUIPRinse5-1582-GW was qualified "B" as the result was <10x trip blank contamination. As there were no detected concentrations of methylene chloride, acetone, or 2-butanone in the associated field samples no additional qualifications were made.

LCS Recovery
Carbon disulfide recovered above control limits in the LCS/LCD for batch 0207253 at 132% and 130%. Sample FWGSCF-005-1519-GW was the only affected sample with a detected concentration of carbon disulfide associated with batch 0207253, and was qualified as estimated,"J".

MS/MSD Recovery
Bromomethane recovered below limits in the MS for batch 0210187 at 69%. No qualifications were made to parent sample FWGLL2mw-261-1533-GW as the MSD, LCS, and LCD all recovered within criteria for this compound.

SVOCs- 8270C
The following QC criteria were reviewed with acceptable results, except as noted below:

- Holding times, preservation, sample handling
- Tuning criteria
- Initial Calibration Criteria including SPCC and CCC compounds
- ICV/CCV criteria
- Internal standard area counts and retention times
- MDL verification criteria
- MRL verification criteria
- Method/Field blank Criteria
- Surrogate recoveries

- Field duplicate RPD criteria
- Laboratory Control Sample criteria
- Matrix Spike Recovery Criteria and RPD

Holding Time
All samples were extracted as batch 0200033 within hold on 7/19. Sample FWGLL2mw-261C-1533-GW, including MS and MSD extracts, broke during concentration and were re-extracted as batch 0201101 within hold on 7/20. Due to QC failures for benzoic acid, all samples from SDG A0G150579 were re-extracted as batch 0207223 outside of hold on 7/26. The benzoic acid LCS recovery was acceptable in batch 0207223, and only the benzoic acid results will be reported from this run. As these results are being reported outside the required hold time, but within 2x hold time, all benzoic acid results from this batch were qualified "UJ".

Blanks
- bis(2-Ethylhexyl) phthalate was detected in the method blank at 0.91 ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate <10x contamination were qualified, "B".
- bis(2-Ethylhexyl) phthalate was detected in the FWGEQUIPRinse5-1582-GW at 0.91 ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate <10x contamination were qualified, "B".

See Appendix 1 for list of affected samples.

Laboratory Control Sample Recovery
- Batch 0200033-2,4-Dinitrophenol (16%) and Benzoic acid (0%) recovered below limits for batch 0200033. All 2,4-Dinitrophenol results were qualified "UJ".
- Batch 0207233-All samples were re-extracted for benzoic acid in batch 0207223 with acceptable LCS recoveries for benzoic z acid– see checklist item #4 for additional details.
- Batch 0201101-The LCS recoveries for 2,4-dinitrophenol (23%) and benzoic acid (8%) recovered below control limits for batch 0201101. The 2,4-dinitrophenol result for sample FWGLL2mw-261C-1533-GW was qualified as estimated, "UJ".

Matrix Spike Recovery
Sample FWGLL2mw-261C-1533-GW was the parent MS/MSD sample from this SDG. The MS had recoveries below control limits for all targets with the exception of 2,4-dinitrotoluene, n-nitrosodi-n-propylamine, benzo(k)fluoranthene, bis(2-chloroethoxy)methane, bis(2-chloroisopropyl)ether, bis(2-ethylhexyl)phthalate, 4-bromophenylphenyl ether, 4-chlorophenyl phenyl ether, diethyl phthalate, dimethyl phthalate, 2,6-dinitrotoluene, fluorene, 4-nitroaniline, nitrobenzene, and 2,4,5-trichlorophenol. All RPDs were above control limits with the exception of 3-nitroaniline. No qualifications were made for these outliers as the associated LCS and MSDs recovered within limits. No qualifications were made for these outliers as the associated LCS recovered within limits.

Surrogate Recovery
Samples FWGLL1mw-082C-1527-GW, FWGLL2mw-269C-1538-GW, FWGSCFmw-005-1519-GW, FWGSCFmw-004-1518-GW, and FWGEQUIPRINSE5-1582-GW and had one base/neutral surrogate recover below acceptance limits, but above 10%. No qualifications were made, as per the LCG one surrogate from each fraction is allowed below the LL without qualification.

Pesticides- 8081A
The following QC criteria were reviewed with acceptable results, except as noted below:
- Preservation, holding time and sample handling
- Initial Calibration criteria
- DDT and Endrin breakdown criteria
- Retention time criteria
- ICV criteria
- CCV Criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS Recoveries
- Field Duplicate Criteria
- MDL verification criteria
- MRL verification criteria
- Matrix Spike Recovery Criteria and RPD

- Surrogate Recoveries
- Second Column confirmation criteria

LCS Recovery
The recovery for Endosulfan I was reported from the confirmation column. No qualifications were made, as there were no detected concentrations for this compound in any of the samples.

Surrogate Recovery
The surrogate, DCB, recovered below control limits in sample FWGLL2mw-269c-1538-GW at 33%, FWGSCFmw-005c-1519-GW at 29% and FWGSCFmw-DUP6-1571-GW at 48%. The associated results were qualified as estimated, "J/UJ".

PCBs- 8082
The following QC criteria were reviewed with acceptable results, except as noted below:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- Retention time criteria
- MDL and MRL verification criteria
- ICV/ CCV criteria
- The method blank was free from contamination
- Equipment Rinse was free from contamination
- LCS/ LCSD percent recoveries and RPD value criteria
- Second Column confirmation criteria
- Field Duplicate RPD criteria
- Matrix Spike Recovery Criteria and RPD
- Surrogate Recoveries

Surrogate Recoveries
The surrogate, DCB, recovered below control limits in samples FWGLL2mw-269c-1538-GW at 34% and FWGSCFmw-005-1519-GW at 32%. The associated results were qualified as estimated, "J/UJ".

Metals - 6010B
The following QC criteria were reviewed with acceptable results, except as noted below:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- ICB /CCBs were free from contamination
- The method blank was free from contamination
- The equipment blank was free from contamination
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

Blanks

- The ICB analyzed 7/21/10 had detected potassium at 134ug/L. No qualifications were made as there were no detected potassium concentrations <5x contamination.
- The CCBs analyzed 7/21/10 had detected potassium from 134ug/L to 140ug/L. No qualifications were made as there were no detected potassium concentrations <5x contamination.

No qualifications were made for ICP results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

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Metals - 6020

The following QC criteria were reviewed with acceptable results, except as noted below:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- ICB /CCBs were free from contamination
- The method blank was free from contamination
- The equipment blank was free from contamination
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

Blanks

- The ICB analyzed 7/30/10 had thallium detected at 0.23ug/L. The thallium results for samples FWGLL1mw-085c-1530-GF and FWGLL1mw-082c-1527-GF were <5x the ICB contamination and were qualified, "U".
- The CCBs analyzed 7/30/2010 had beryllium detected from 0.017 to 0.027ug/L, antimony from 0.04ug/L to 0.053ug/L, cadmium at 0.012-0.034ug/L, iron from 9.3ug/L to 19ug/L and thallium from 0.25ug/L to 0.33ug/L. No additional thallium qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all bracketed detected contaminants were >5x the blank contamination.

No qualifications were made for ICPMS results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

LCS Recovery

The beryllium LCS recovered above control limits at 123%. No qualification was required as there were no detected beryllium concentrations.

Mercury - 7470A

The following QC criteria were reviewed with acceptable results, except as noted below:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- ICB /CCBs were free from contamination
- The method blank was free from contamination
- The equipment blank was free from contamination
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

No QC outliers were noted.

Cyanide- 9012

The following QC criteria were reviewed with acceptable results, except as noted below:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria and RPD

No QC outliers were noted.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
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STL Sample Delivery Group: A0G150579 **Revision:** 0

Nitrate/Nitrite- 353.2

The following QC criteria were reviewed with acceptable results, except as noted below:

- Holding times, preservation, sample handling
- Initial Calibration criteria
- ICV and CCV criteria
- MRL Verification Check criteria
- Method and Equipment Blank were free from contamination
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria and RPD

Blanks

The ICB had a detected nitrate concentration of 0.023mg/L and following CCB at 0.0718mg/L. No qualifications were made as there were no detected nitrate/nitrite concentrations.

Matrix Spike Recovery

The matrix spike recovered above control limits at 134%, however the parent sample was not from this SDG so no qualifications were made.

Data Reviewer: Erik Carbi
Date: 9/14/10

2nd Level Data Reviewer:
Date: Angie Dyer 9/15/10

CASE NARRATIVE

A0G150579

The following report contains the analytical results for seventeen water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 15, 2010, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on August 02, 2010. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 1.6 to 5.2°C.

GC/MS VOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL2mw-261C-1533-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GC/MS SEMIVOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL2mw-261C-1533-GW had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

CASE NARRATIVE (continued)

GC/MS SEMIVOLATILES (continued)

For batch(es) 0200033, the parent sample of the MS/MSD broke during concentration. The parent and MS/MSD were deleted from the batch and extracted again. The remainder of the batch was sent for analysis with Blank and LCS.

The LCS and/or LCSD associated with batch(es) 0200033 and 020161 had recoveries outside acceptance criteria. Due to length of time since sampling, repreparation and reanalysis could not occur.

Benzoic acid and 2,4-dinitrophenol were recovered below acceptance criteria in the LCS associated with batch(es) 0200033. Upon reextraction and reanalysis the associated LCS was again low for these analytes (QC batch 0207223). Because two weeks had elapsed since sampling no further corrective action was initiated. Due to client protocol only the initial results have been reported.

It should be noted, sample(s) FWGLL1mw-082C-1527-GW, FWGLL2mw-269C-1538-GW, FWGSCFmw-005-1519-GW, FWGSCFmw-004-1518-GW, and FWGEQUIPRINSE5-1582-GW had one (1) BN surrogate recovered outside control criteria, but above 10%.

PESTICIDES-8081

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

For sample(s) FWGLL2mw-269C-1538-GW, FWGSCFmw-005-1519-GW, and FWGSCFmw-DUP-1571-GW, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

The recovery of Endosulfan I has been reported from the confirmation column in the LCS.

CASE NARRATIVE (continued)

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGLL2mw-269C-1538-GW and FWGSCFmw-005-1519-GW, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The matrix spike/matrix spike duplicate(s) for FWGLL2mw-261C-1533-GF had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The LCS associated with batch(es) 0197015 was recovered high and outside of criteria for Beryllium. Since the analyte was not detected in any of the sample(s) FWGSCFmw-005-1519-GF, FWGSCFmw-004-1518-GF, FWGSCFmw-DUP6-1571-GF, FWGLL2mw-261C-1533-GF, FWGLL2mw-270C-1539-GF, FWGEQUIPRINSE5-1582-GW, FWGLL1mw-085C-1530-GF, FWGLL1mw-082C-1527-GF and FWGLL2mw-269C-1538-GF, the result(s) was/were accepted. Slight positive bias is not believed to have impacted data quality.

For batch(es) 0197015, the CCV exceeded method criteria on the high side Beryllium. Since the sample result(s) was/were below the requested reporting limit the result(s) was/were accepted.

The Mercury matrix spike associated with batch(es) 0197015 was outside of acceptance criteria. Due to analyst oversight, a post digestion spike was not performed.

GENERAL CHEMISTRY

The matrix spike/matrix spike duplicate(s) for batch(es) 0208347 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

CASE NARRATIVE (continued)

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

MANUAL INTEGRATION SUMMARY

Lot A0G150579

Client ID: FWGLL1mw-085C-1530-
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: L38T61AC.D
Inj. Date and Time: 23-JUL-2010 16:30
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL2mw-261C-1533-
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 040F4001.D
Inj. Date and Time: 27-JUL-2010 17:04
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGLL2mw-261C-1533-
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 041F4101.D
Inj. Date and Time: 27-JUL-2010 17:19
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 047F4701.D
Inj. Date and Time: 27-JUL-2010 18:49
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: INTRA-LAB CHECK
Compound Name: bis(2-Chloroethyl)ether
Instrument ID: a4hp9.i
File Name: L4D3V1AC.D
Inj. Date and Time: 23-JUL-2010 14:33
Manual Integration Reason: Poor Chromatography

Client ID: INTRA-LAB CHECK
Compound Name: 1,4-Dichlorobenzene-d4
Instrument ID: a4hp9.i
File Name: L4D3V1AC.D
Inj. Date and Time: 23-JUL-2010 14:33
Manual Integration Reason: Poor Chromatography

SAMPLE SUMMARY

A0G150579

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L38T5	001	FWGTEAM1-TRIP	07/15/10	08:00
L38T6	002	FWGLL1mw-085C-1530-GW	07/15/10	09:27
L38T9	003	FWGLL1mw-085C-1530-GF	07/15/10	09:27
L38VC	004	FWGLL1mw-082C-1527-GW	07/15/10	10:41
L38VF	005	FWGLL1mw-082C-1527-GF	07/15/10	10:41
L38VG	006	FWGLL2mw-269C-1538-GW	07/15/10	12:47
L38VL	007	FWGLL2mw-269C-1538-GF	07/15/10	12:47
L38VM	008	FWGTEAM2-TRIP	07/15/10	08:00
L38VN	009	FWGSCFmw-005-1519-GW	07/15/10	09:18
L38VR	010	FWGSCFmw-005-1519-GF	07/15/10	09:18
L38VT	011	FWGSCFmw-004-1518-GW	07/15/10	10:58
L38VW	012	FWGSCFmw-004-1518-GF	07/15/10	10:58
L38VX	013	FWGSCFmw-DUP6-1571-GW	07/15/10	12:08
L38V1	014	FWGSCFmw-DUP6-1571-GF	07/15/10	12:08
L38V2	015	FWGTRIP-TEAM3	07/15/10	08:00
L38V3	016	FWGLL2mw-261C-1533-GW	07/15/10	09:20
L38V4	017	FWGLL2mw-261C-1533-GF	07/15/10	09:20
L38V5	018	FWGLL2mw-270C-1539-GW	07/15/10	11:50
L38V6	019	FWGLL2mw-270C-1539-GF	07/15/10	11:50
L38V7	020	FWGEQUIPRINSE5-1582-GW	07/15/10	12:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica 21 — THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Erik Corbin	Mark Loeb	ML002
Address: 1800 Carillon Blvd.	Telephone: 513-825-7500	Telephone: 513-825-7500	Telephone: 3304979396	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email:	Analysis Turnaround Time:		
Phone: 513-825-7500		TAT if different from below 7 per SOW	Analyses	
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab pickup	☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 30240.00010	Shipping/Tracking No:			
PO# 167726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other			VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470			Sample Specific Notes / Special Instructions:
FWG Team 1 - Trip	7/15/10	08:00		X						2					N	G	X										ID27
FWGLL1mw-085C-1530-GW	7/15/10	09:27		X						3	1		9		N	G	X	X	X	X	X	X	X				#15
FWGLL1mw-085C-1530-GF	7/15/10	09:27		X					1						Y	G								X			#15
FWGLL1mw-082C-1527-GW	7/15/10	10:41		X						3	1		9		N	G	X	X	X	X	X	X	X				220
FWGLL1mw-082C-1527-GF	7/15/10	10:41		X					1						Y	G								X			220
FWGLL2mw-269C-1538-GW	7/15/10	12:47		X						3	1		9		N	G	X	X	X	X	X	X	X				ID27
FWGLL2mw-269C-1538-GF	7/15/10	12:47		X					1						Y	G								X			ID27

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Metals are field filtered

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EQM	7/15/10 1520		TestAmerica	7/15/10 1526
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	7/15/10 1615			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL NC	7/15/10 1615

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Temps may not meet requirements if sample collection is close to lab pick up time.

All VOAs in cooler ID27

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client: EQM	Project Manager: John Miller	Date: 7-15-10	Chain of Custody Number: 373465
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500	Lab Number: 330497939	Page 1 of 1
City: Cincinnati / State: OH / Zip Code: 45240	Site Contact: E CORBIN	Lab Contact: M LOEB	
Project Name and Location (State): RVAAP Ohio	Carrier/Waybill Number: LAB PICK UP		
Contract/Purchase Order/Quote No.: PW30240 0006 PO116726			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: VOC	SVOC	Pest	PCB	Radio	Propellant	Cyanide	NO3 NO2	Metals	Special Instructions/ Conditions of Receipt
FWG Team 2 - Trip	7-15-10	0800		X						2			X									~~GF~~ 176
FWG SCFMW-005-1519-GW	7-15-10	0918		X			9	1		3	1		X	X	X	X	X	X	X	X		TS17
FWG SCFMW-005-1519-GF	1	1		X					1												X	TS17
FWG SCFMW-004-1518-GW	1	1058		X			9	1		3	1		X	X	X	X	X	X	X	X		405
FWG SCFMW-004-1518-GF	1	1		X					1												X	405
FWG SCFMW DUP 6-1571-GW	1	1208		X			9	1		3	1		X	X	X	X	X	X	X	X		176
FWG SCFMW-DUP 6-1571 GF	1	1208		X					1												X	176

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): metals (GF) are field filtered

	Relinquished By	Date	Time	Received By	Date	Time
1.		7-15-10	1520		7/15/10	1520
2.		7/15/10	1615		7/15/10	1615
3.						

Comments: Temps may not meet requirements if sample collection time is close to lab pick up time. 1-7-10 All VOA in coolers ~~Shake~~

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica 23
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Erik Corbin	M. Loeb	15002
Address: 1800 Carillon Blvd	Telephone: 513 825 7500	Telephone: 513 825 7500	Telephone: 330 497 9396	of COCs
City/State/Zip: Cincinnati OH 45240	Email: JMiller@eqm.com			
Phone: 513 825 7500	Method of Shipment/Carrier: Lab Pick Up	TAT if different from below: ☑ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	Analyses	
Project Name: RVAAP (OH)	Shipping/Tracking No: N/A			
Project Number: 03024.0006				
PO# 167216				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Field Filtered	VOA 8260B	SVOC 8270C	Perchlorate 8321B	Explosives 8330	Propellants 8330	Nitrate 9012	Metals 6010/7470/7471	1,4-Dioxane 8270C SIM	Sample Specific Notes / Special Instructions
FWGTrip - Team3	7-15-10	0800		X						2						X								TS
FWGLL2MW261C-1533GW	7-15-10	0920		X						9	3		27			X	X	X	X	X	X	X		H112, TS, C222
FWGLL2MW261C-1533GF		0920		X					2						Y							X		H112, TS, C222
FWGLL2MW270C-1538GW		1150		X						3	1		9			X	X	X	X	X	X	X		TS2
FWGLL2MW270C-1538GF		1150		X					1						Y							X		TS2
FWGEQUIPRINSE.5-1582-GW		1230						1	1	8	21		9		N	X	X	X	X	X	X	X	X	173

MS/MSD

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
All metals are field filtered, Except Rinse 5 * ALL VOAS IN COOLER TS *
Temps may not meet requirements if sample collection is close to lab pick up

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EQM	7-15-10 1520		TestAmerica	7/15/10 1520
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	7/15/10 1615			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL NC	7/15/10 1615

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North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 240150579
North Canton Facility

Client EQM Project RVAAP By: Alaina
Cooler Received on 7/15/10 Opened on 7/15/10 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 11 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot#* 051010-HNO_3; *Sulfuric Acid Lot#* 121709-H_2SO_4; *Sodium Hydroxide Lot#* 100108 -*NaOH*; *Hydrochloric Acid Lot#* 092006-*HCl*; *Sodium Hydroxide and Zinc Acetate Lot#* 100108-$(CH_3COO)_2ZN/NaOH$. What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
1530 GW/GF	<2 >12	7/15/10	AM
1527 GW/GF	<2 >12		
1538 GW/GF	<2 >12		
1519 GW/GF	<2 <2 >12		
1518 GW/GF	<2 <2 >12		
1571 GW/GF	<2 <2 >12		
1533 GW/GF	<2 >12		
1539 GW/GF	<2 >12	↓	↓

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1582-GW	<2>12	7/15/10	am

Cooler #	Temp. °C	Method	Coolant
D27	1.6	IR	Wet ice
#15	3.8		
220	5.2		
T317	4.8		
405	5.1		
176	3.2		
H112	4.2		
TS	5.0		
C222	2.5		
TS2	4.0		
173	3.8		Wet ice

Discrepancies Cont'd:

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin/September 8, 2010

SDG: A0G150579 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.6 and 5.2 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3.3
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-3
7. Was the GC/MS system tuned with bromofluorobenzene (BFB)?	✓				LCG Table 1
8. Was the criteria met during each 12 hour shift (prior to ICAL and Cal Ver.)?	✓				SW846 8260B 7.3.1
9. Did the initial calibration curve consist of 5 concentration levels?	✓			Instrument A3UX11 – 6/17/10, 6/18/10, and 7/29/10 stds – 5, 10, 25, 50, 100, 200 ng on column	LCG Table 1 R
10. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviations (%RSD) ≤ 30%?	✓				LCG Table 1 R
11. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 1
12. Were all other target analytes ≤ 15% RSD? OR Was the average RSD ≤ 15%? Was a different calibration option used?	✓			6/17/10-Acetone, trans-1,3-dichloropropene, dibromochloromethane and bromoform used weighted linear curves. 7/29/10-Acetone, trichlorofluoromethane, bromomethane and bromoform used weighted linear curves.	LCG Table 1 15% <RSD< 20% = J/UJ
13. If a linear regression curve was used, was the correlation coefficient r≥0.99?	✓			All correlation coefficients were ≥0.99. No qualifications were made since the correlation coefficients were acceptable.	LCG Table 1 R<0.99=-J/R
14. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			7/21/10 @1907	LCG Table 1 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin/September 8, 2010

SDG: A0G150579 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓				LCG Table 1
16. Were the QC/MRL recoveries 70-130%?		✓		• The opening MRL check analyzed 7/26/10 at 1107 had methylene chloride recover above limits at 181%, bromomethane at 134%, and bromoform at 161%. • The closing MRL check analyzed 7/26/10 at 2032 had methylene chloride recover above limits at 218%, chloroethane at 148%, and bromoform at 161%. The methylene chloride result for FWGTEAM1-TRIP was qualified as estimated, "J". The closing MRL check analyzed 7/29/10 was injected 11 minutes past the 12 hour window. No qualifications were made as the MRL recoveries for the target analytes were within acceptable limits.	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed? Were results 80-120%?	✓			6/17/10 @ 1442, 7/29/10 @1251	LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
18. Was a CCV run every 12 hours?		✓		7/26/10 @ 0959,1021 and 7/29/10 @ 1337.	LCG Table 1
19. Did the CCCs have a %Difference < 20%?	✓				LCG Table 1
20. Were the minimum RFs for the SPCCs within limits?	✓				LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓				LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin/September 8, 2010

SDG: A0G150579 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1
26. Were target analytes detected in the method blank >1/2 the MRL?		✓		Checked by ADR. Methylene chloride was detected in the method blank (prep batch 0207253) at 0.88ug/L. Sample FWGTEAM1-TRIP was qualified, "B". No additional qualifications were made as there were no other detected methylene chloride results associated with the blanks.	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse5-1582-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?		✓		• FWGEQUIPRinse5-1582-GW had 2-butanone detected at 10ug/L, acetone at 6.3ug/L, and methylene chloride at 0.51ug/L. • FWGTEAM2- and FWGTEAM3- trip blanks had acetone contamination detected at 1.6 and 1.4 ug/L respectively. FWGTEAM1-TRIP had methylene chloride and acetone contamination detected at 0.35 and 2.3 ug/L respectively. The acetone result for sample FWGEQUIPRinse5-1582-GW was qualified "B" as the result was <10x trip blank contamination. As there were no detected concentrations of methylene chloride, acetone, or 2-butanone in the associated field samples no additional qualifications were made.	<5/10X =B
29. Was a field duplicate analyzed?	✓				
30. Were the Field duplicates RPDs within ±30%?	✓			ADR checked section;	QAPP Table 3-2 RPD >30=J
31. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 1
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?	✓			ADR checked section; Carbon disulfide recovered above control limits in the LCS/LCD for batch 0207253 at 132% and 130%. Sample FWGSCF-005-1519-GW was the only affected sample with a detected concentration of carbon disulfide associated with batch 0207253, and was qualified as estimated,"J".	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent sample a Ravenna sample?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin/September 8, 2010

SDG: A0G150579 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?		✓		Bromomethane recovered below limits in the MS for batch 0210187 at 69%. No qualifications were made to parent sample FWGLL2mw-261-1533-GW as the MSD, LCS, and LCD all recovered within criteria for this compound.	LCG Table 1 Pj
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% - 50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G150579-001 **Work Order #...:** L38T51AA **Matrix.....:** WQ
Date Sampled...: 07/15/10 08:00 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	**0.35 J,B**	**2.0**	**ug/L**	**0.33**
Acetone	**2.3 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G150579-001 **Work Order #...:** L38T51AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-002 **Work Order #...:** L38T61AA **Matrix.....:** WG
Date Sampled...: 07/15/10 09:27 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-002 **Work Order #...:** L38T61AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-004 **Work Order #...:** L38VC1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 10:41 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-004 **Work Order #...:** L38VC1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	103	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-006 **Work Order #...:** L38VG1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 12:47 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-006 **Work Order #...:** L38VG1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	102	(50 - 150)
Toluene-d8	91	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G150579-008 **Work Order #...:** L38VM1AA **Matrix.....:** WQ
Date Sampled...: 07/15/10 08:00 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.6 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A0G150579-008 **Work Order #...:** L38VM1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(50 - 150)
1,2-Dichloroethane-d4	104	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-009 **Work Order #...:** L38VN1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 09:18 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	**0.64 J**	**1.0**	**ug/L**	**0.13**
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-009 **Work Order #...:** L38VN1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(50 - 150)
1,2-Dichloroethane-d4	105	(50 - 150)
Toluene-d8	90	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-011 **Work Order #...:** L38VT1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 10:58 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-011 **Work Order #...:** L38VT1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(50 - 150)
1,2-Dichloroethane-d4	105	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-013 **Work Order #...:** L38VX1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 12:08 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-013 **Work Order #...:** L38VX1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(50 - 150)
1,2-Dichloroethane-d4	106	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTRIP-TEAM3

GC/MS Volatiles

Lot-Sample #...: A0G150579-015 **Work Order #...:** L38V21AA **Matrix.....:** WQ
Date Sampled...: 07/15/10 08:00 **Date Received..:** 07/15/10
Prep Date.....: 07/29/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0210187
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.4 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGTRIP-TEAM3

GC/MS Volatiles

Lot-Sample #...: A0G150579-015 **Work Order #...:** L38V21AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	87	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	89	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-016 **Work Order #...:** L38V31AA **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10
Prep Date.....: 07/29/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0210187
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-016 **Work Order #...:** L38V31AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	87	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
Toluene-d8	87	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-018 **Work Order #...:** L38V51AA **Matrix.....:** WG
Date Sampled...: 07/15/10 11:50 **Date Received..:** 07/15/10
Prep Date.....: 07/29/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0210187
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	ND	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-018 **Work Order #...:** L38V51AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	86	(50 - 150)
1,2-Dichloroethane-d4	81	(50 - 150)
Toluene-d8	87	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-020 **Work Order #...:** L38V71AA **Matrix.....:** WQ
Date Sampled...: 07/15/10 12:30 **Date Received..:** 07/15/10
Prep Date.....: 07/29/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0210187
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	**0.51 J**	**2.0**	**ug/L**	**0.33**
Acetone	**6.3 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**10**	**10**	**ug/L**	**0.57**
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

GC/MS Volatiles

Lot-Sample #...: A0G150579-020 Work Order #...: L38V71AA Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	87	(50 - 150)
1,2-Dichloroethane-d4	85	(50 - 150)
Toluene-d8	87	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 **Work Order #...:** L4NMQ1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G260000-253

Prep Date.....: 07/26/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/26/10 **Prep Batch #...:** 0207253
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	**0.88 J**	**2.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 **Work Order #...:** L4NMQ1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 **Work Order #...:** L4T131AA **Matrix.....:** WATER
MB Lot-Sample #: A0G290000-187

Prep Date.....: 07/29/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/29/10 **Prep Batch #...:** 0210187
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 **Work Order #...:** L4T131AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	86	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 Work Order #...: L4NMQ1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G260000-253 L4NMQ1AD-LCSD
Prep Date.....: 07/26/10 Analysis Date..: 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	104	(73 - 133)			SW846 8260B
	105	(73 - 133)	1.0	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	109	(75 - 134)			SW846 8260B
	109	(75 - 134)	0.15	(0-30)	SW846 8260B
1,2-Dibromoethane	101	(75 - 127)			SW846 8260B
	101	(75 - 127)	0.76	(0-30)	SW846 8260B
Bromochloromethane	104	(75 - 127)			SW846 8260B
	105	(75 - 127)	1.4	(0-30)	SW846 8260B
m-Xylene & p-Xylene	103	(75 - 122)			SW846 8260B
	104	(75 - 122)	0.60	(0-30)	SW846 8260B
o-Xylene	106	(75 - 118)			SW846 8260B
	108	(75 - 118)	1.9	(0-30)	SW846 8260B
Chloromethane	84	(58 - 135)			SW846 8260B
	83	(58 - 135)	0.63	(0-30)	SW846 8260B
Bromomethane	106	(35 - 153)			SW846 8260B
	107	(35 - 153)	0.84	(0-30)	SW846 8260B
Vinyl chloride	80	(73 - 134)			SW846 8260B
	79	(73 - 134)	1.4	(0-30)	SW846 8260B
Chloroethane	99	(72 - 129)			SW846 8260B
	98	(72 - 129)	1.4	(0-30)	SW846 8260B
Methylene chloride	105	(69 - 118)			SW846 8260B
	104	(69 - 118)	1.1	(0-30)	SW846 8260B
Acetone	102	(51 - 157)			SW846 8260B
	108	(51 - 157)	6.0	(0-30)	SW846 8260B
Carbon disulfide	132 a	(74 - 123)			SW846 8260B
	130 a	(74 - 123)	1.7	(0-30)	SW846 8260B
1,1-Dichloroethene	106	(75 - 125)			SW846 8260B
	106	(75 - 125)	0.10	(0-30)	SW846 8260B
1,1-Dichloroethane	111	(75 - 133)			SW846 8260B
	112	(75 - 133)	0.96	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	107	(85 - 111)			SW846 8260B
	107	(85 - 111)	0.58	(0-30)	SW846 8260B
Chloroform	107	(74 - 127)			SW846 8260B
	107	(74 - 127)	0.64	(0-30)	SW846 8260B
1,2-Dichloroethane	109	(67 - 132)			SW846 8260B
	112	(67 - 132)	2.3	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 **Work Order #...:** L4NMQ1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0G260000-253 L4NMQ1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	93	(45 - 150)			SW846 8260B
	93	(45 - 150)	0.65	(0-30)	SW846 8260B
1,1,1-Trichloroethane	102	(70 - 127)			SW846 8260B
	103	(70 - 127)	0.27	(0-30)	SW846 8260B
Carbon tetrachloride	104	(71 - 132)			SW846 8260B
	102	(71 - 132)	1.8	(0-30)	SW846 8260B
Bromodichloromethane	116	(70 - 130)			SW846 8260B
	116	(70 - 130)	0.20	(0-30)	SW846 8260B
1,2-Dichloropropane	108	(75 - 127)			SW846 8260B
	110	(75 - 127)	1.9	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	112	(73 - 132)			SW846 8260B
	111	(73 - 132)	0.42	(0-30)	SW846 8260B
Trichloroethene	99	(67 - 128)			SW846 8260B
	98	(67 - 128)	1.1	(0-30)	SW846 8260B
Dibromochloromethane	115	(74 - 145)			SW846 8260B
	112	(74 - 145)	3.2	(0-30)	SW846 8260B
1,1,2-Trichloroethane	101	(75 - 136)			SW846 8260B
	105	(75 - 136)	3.6	(0-30)	SW846 8260B
Benzene	105	(75 - 126)			SW846 8260B
	107	(75 - 126)	1.6	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	110	(74 - 131)			SW846 8260B
	108	(74 - 131)	2.0	(0-30)	SW846 8260B
Bromoform	122	(72 - 136)			SW846 8260B
	119	(72 - 136)	2.7	(0-30)	SW846 8260B
4-Methyl-2-pentanone	101	(59 - 150)			SW846 8260B
	101	(59 - 150)	0.040	(0-30)	SW846 8260B
2-Hexanone	100	(53 - 139)			SW846 8260B
	101	(53 - 139)	1.4	(0-30)	SW846 8260B
Tetrachloroethene	98	(75 - 129)			SW846 8260B
	96	(75 - 129)	1.8	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	98	(68 - 129)			SW846 8260B
	98	(68 - 129)	0.55	(0-30)	SW846 8260B
Toluene	103	(75 - 125)			SW846 8260B
	104	(75 - 125)	0.67	(0-30)	SW846 8260B
Chlorobenzene	101	(75 - 127)			SW846 8260B
	101	(75 - 127)	0.85	(0-30)	SW846 8260B
Ethylbenzene	103	(75 - 120)			SW846 8260B
	104	(75 - 120)	1.0	(0-30)	SW846 8260B
Styrene	107	(75 - 130)			SW846 8260B
	107	(75 - 130)	0.42	(0-30)	SW846 8260B
Xylenes (total)	104	(90 - 114)			SW846 8260B
	105	(90 - 114)	1.0	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 **Work Order #...:** L4NMQ1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0G260000-253 L4NMQ1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	90	(50 - 150)
	92	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
	95	(50 - 150)
Toluene-d8	93	(50 - 150)
	92	(50 - 150)
4-Bromofluorobenzene	98	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 Work Order #...: L4T131AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G290000-187 L4T131AD-LCSD
Prep Date.....: 07/29/10 Analysis Date..: 07/29/10
Prep Batch #...: 0210187
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	95	(73 - 133)			SW846 8260B
	99	(73 - 133)	4.1	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	94	(75 - 134)			SW846 8260B
	100	(75 - 134)	5.9	(0-30)	SW846 8260B
1,2-Dibromoethane	93	(75 - 127)			SW846 8260B
	98	(75 - 127)	5.4	(0-30)	SW846 8260B
Bromochloromethane	95	(75 - 127)			SW846 8260B
	98	(75 - 127)	3.0	(0-30)	SW846 8260B
m-Xylene & p-Xylene	95	(75 - 122)			SW846 8260B
	99	(75 - 122)	4.6	(0-30)	SW846 8260B
o-Xylene	96	(75 - 118)			SW846 8260B
	101	(75 - 118)	4.6	(0-30)	SW846 8260B
Chloromethane	92	(58 - 135)			SW846 8260B
	99	(58 - 135)	6.7	(0-30)	SW846 8260B
Bromomethane	79	(35 - 153)			SW846 8260B
	70	(35 - 153)	13	(0-30)	SW846 8260B
Vinyl chloride	87	(73 - 134)			SW846 8260B
	84	(73 - 134)	3.6	(0-30)	SW846 8260B
Chloroethane	91	(72 - 129)			SW846 8260B
	87	(72 - 129)	4.3	(0-30)	SW846 8260B
Methylene chloride	93	(69 - 118)			SW846 8260B
	97	(69 - 118)	4.7	(0-30)	SW846 8260B
Acetone	90	(51 - 157)			SW846 8260B
	89	(51 - 157)	1.5	(0-30)	SW846 8260B
Carbon disulfide	98	(74 - 123)			SW846 8260B
	96	(74 - 123)	2.4	(0-30)	SW846 8260B
1,1-Dichloroethene	96	(75 - 125)			SW846 8260B
	88	(75 - 125)	8.8	(0-30)	SW846 8260B
1,1-Dichloroethane	97	(75 - 133)			SW846 8260B
	100	(75 - 133)	3.0	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	95	(85 - 111)			SW846 8260B
	99	(85 - 111)	5.0	(0-30)	SW846 8260B
Chloroform	95	(74 - 127)			SW846 8260B
	102	(74 - 127)	6.5	(0-30)	SW846 8260B
1,2-Dichloroethane	96	(67 - 132)			SW846 8260B
	100	(67 - 132)	4.3	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 Work Order #...: L4T131AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A0G290000-187 L4T131AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Butanone	93	(45 - 150)			SW846 8260B
	92	(45 - 150)	1.1	(0-30)	SW846 8260B
1,1,1-Trichloroethane	97	(70 - 127)			SW846 8260B
	96	(70 - 127)	0.84	(0-30)	SW846 8260B
Carbon tetrachloride	97	(71 - 132)			SW846 8260B
	93	(71 - 132)	4.9	(0-30)	SW846 8260B
Bromodichloromethane	98	(70 - 130)			SW846 8260B
	104	(70 - 130)	5.8	(0-30)	SW846 8260B
1,2-Dichloropropane	95	(75 - 127)			SW846 8260B
	101	(75 - 127)	6.1	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	94	(73 - 132)			SW846 8260B
	100	(73 - 132)	6.0	(0-30)	SW846 8260B
Trichloroethene	95	(67 - 128)			SW846 8260B
	98	(67 - 128)	3.0	(0-30)	SW846 8260B
Dibromochloromethane	97	(74 - 145)			SW846 8260B
	103	(74 - 145)	6.7	(0-30)	SW846 8260B
1,1,2-Trichloroethane	96	(75 - 136)			SW846 8260B
	100	(75 - 136)	4.0	(0-30)	SW846 8260B
Benzene	93	(75 - 126)			SW846 8260B
	98	(75 - 126)	4.8	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	102	(74 - 131)			SW846 8260B
	105	(74 - 131)	3.0	(0-30)	SW846 8260B
Bromoform	95	(72 - 136)			SW846 8260B
	102	(72 - 136)	7.1	(0-30)	SW846 8260B
4-Methyl-2-pentanone	99	(59 - 150)			SW846 8260B
	102	(59 - 150)	2.3	(0-30)	SW846 8260B
2-Hexanone	104	(53 - 139)			SW846 8260B
	103	(53 - 139)	1.2	(0-30)	SW846 8260B
Tetrachloroethene	92	(75 - 129)			SW846 8260B
	95	(75 - 129)	3.1	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	92	(68 - 129)			SW846 8260B
	94	(68 - 129)	2.6	(0-30)	SW846 8260B
Toluene	95	(75 - 125)			SW846 8260B
	98	(75 - 125)	3.3	(0-30)	SW846 8260B
Chlorobenzene	94	(75 - 127)			SW846 8260B
	98	(75 - 127)	4.6	(0-30)	SW846 8260B
Ethylbenzene	97	(75 - 120)			SW846 8260B
	100	(75 - 120)	3.6	(0-30)	SW846 8260B
Styrene	98	(75 - 130)			SW846 8260B
	103	(75 - 130)	5.4	(0-30)	SW846 8260B
Xylenes (total)	95	(90 - 114)			SW846 8260B
	100	(90 - 114)	4.6	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 **Work Order #...:** L4T131AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0G290000-187 L4T131AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	84	(50 - 150)
	88	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
	85	(50 - 150)
Toluene-d8	88	(50 - 150)
	88	(50 - 150)
4-Bromofluorobenzene	92	(50 - 150)
	90	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 Work Order #...: L37G81AC-MS Matrix.....: WATER
MS Lot-Sample #: A0G150401-019 L37G81AD-MSD
Date Sampled...: 07/14/10 10:50 Date Received..: 07/15/10
Prep Date.....: 07/26/10 Analysis Date..: 07/26/10
Prep Batch #...: 0207253
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	100	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.2	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	105	(70 - 130)			SW846 8260B
	104	(70 - 130)	1.1	(0-30)	SW846 8260B
1,2-Dibromoethane	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.08	(0-30)	SW846 8260B
Bromochloromethane	98	(70 - 130)			SW846 8260B
	95	(70 - 130)	3.0	(0-30)	SW846 8260B
m-Xylene & p-Xylene	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.96	(0-30)	SW846 8260B
o-Xylene	97	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.72	(0-30)	SW846 8260B
Chloromethane	83	(70 - 130)			SW846 8260B
	81	(70 - 130)	2.5	(0-30)	SW846 8260B
Bromomethane	99	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.60	(0-30)	SW846 8260B
Vinyl chloride	80	(70 - 130)			SW846 8260B
	79	(70 - 130)	1.7	(0-30)	SW846 8260B
Chloroethane	100	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.0	(0-30)	SW846 8260B
Methylene chloride	92	(70 - 130)			SW846 8260B
	89	(70 - 130)	3.0	(0-30)	SW846 8260B
Acetone	110	(70 - 130)			SW846 8260B
	104	(70 - 130)	5.7	(0-30)	SW846 8260B
Carbon disulfide	130	(70 - 130)			SW846 8260B
	124	(70 - 130)	4.3	(0-30)	SW846 8260B
1,1-Dichloroethene	107	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.4	(0-30)	SW846 8260B
1,1-Dichloroethane	108	(70 - 130)			SW846 8260B
	107	(70 - 130)	1.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	103	(70 - 130)			SW846 8260B
	100	(70 - 130)	2.1	(0-30)	SW846 8260B
Chloroform	104	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.8	(0-30)	SW846 8260B
1,2-Dichloroethane	108	(70 - 130)			SW846 8260B
	105	(70 - 130)	3.2	(0-30)	SW846 8260B
2-Butanone	100	(70 - 130)			SW846 8260B
	96	(70 - 130)	3.9	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 **Work Order #...:** L37G81AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A0G150401-019 L37G81AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	102	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.6	(0-30)	SW846 8260B
Carbon tetrachloride	104	(70 - 130)			SW846 8260B
	104	(70 - 130)	0.59	(0-30)	SW846 8260B
Bromodichloromethane	112	(70 - 130)			SW846 8260B
	107	(70 - 130)	4.3	(0-30)	SW846 8260B
1,2-Dichloropropane	104	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.1	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	97	(70 - 130)			SW846 8260B
	94	(70 - 130)	3.1	(0-30)	SW846 8260B
Trichloroethene	93	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.6	(0-30)	SW846 8260B
Dibromochloromethane	105	(70 - 130)			SW846 8260B
	103	(70 - 130)	1.5	(0-30)	SW846 8260B
1,1,2-Trichloroethane	100	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.0	(0-30)	SW846 8260B
Benzene	103	(70 - 130)			SW846 8260B
	100	(70 - 130)	2.6	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	99	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.7	(0-30)	SW846 8260B
Bromoform	113	(70 - 130)			SW846 8260B
	114	(70 - 130)	0.75	(0-30)	SW846 8260B
4-Methyl-2-pentanone	103	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.7	(0-30)	SW846 8260B
2-Hexanone	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.2	(0-30)	SW846 8260B
Tetrachloroethene	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.54	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.9	(0-30)	SW846 8260B
Toluene	99	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.2	(0-30)	SW846 8260B
Chlorobenzene	96	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.2	(0-30)	SW846 8260B
Ethylbenzene	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.65	(0-30)	SW846 8260B
Styrene	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.39	(0-30)	SW846 8260B
Xylenes (total)	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.39	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 **Work Order #...:** L37G81AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A0G150401-019 L37G81AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
	93	(50 - 150)
1,2-Dichloroethane-d4	103	(50 - 150)
	97	(50 - 150)
Toluene-d8	95	(50 - 150)
	95	(50 - 150)
4-Bromofluorobenzene	102	(50 - 150)
	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 Work Order #...: L38V31AC-MS Matrix.....: WG
MS Lot-Sample #: A0G150579-016 L38V31AD-MSD
Date Sampled...: 07/15/10 09:20 Date Received..: 07/15/10
Prep Date.....: 07/29/10 Analysis Date..: 07/29/10
Prep Batch #...: 0210187
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
cis-1,2-Dichloroethene	95	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.5	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	95	(70 - 130)			SW846 8260B
	99	(70 - 130)	4.0	(0-30)	SW846 8260B
1,2-Dibromoethane	94	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.46	(0-30)	SW846 8260B
Bromochloromethane	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.0	(0-30)	SW846 8260B
m-Xylene & p-Xylene	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.1	(0-30)	SW846 8260B
o-Xylene	98	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.92	(0-30)	SW846 8260B
Chloromethane	97	(70 - 130)			SW846 8260B
	100	(70 - 130)	3.2	(0-30)	SW846 8260B
Bromomethane	69 a	(70 - 130)			SW846 8260B
	75	(70 - 130)	8.4	(0-30)	SW846 8260B
Vinyl chloride	87	(70 - 130)			SW846 8260B
	87	(70 - 130)	0.25	(0-30)	SW846 8260B
Chloroethane	88	(70 - 130)			SW846 8260B
	90	(70 - 130)	1.8	(0-30)	SW846 8260B
Methylene chloride	82	(70 - 130)			SW846 8260B
	83	(70 - 130)	1.8	(0-30)	SW846 8260B
Acetone	89	(70 - 130)			SW846 8260B
	98	(70 - 130)	9.6	(0-30)	SW846 8260B
Carbon disulfide	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.1	(0-30)	SW846 8260B
1,1-Dichloroethene	91	(70 - 130)			SW846 8260B
	87	(70 - 130)	5.2	(0-30)	SW846 8260B
1,1-Dichloroethane	96	(70 - 130)			SW846 8260B
	100	(70 - 130)	3.8	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	95	(70 - 130)			SW846 8260B
	98	(70 - 130)	2.7	(0-30)	SW846 8260B
Chloroform	95	(70 - 130)			SW846 8260B
	100	(70 - 130)	5.0	(0-30)	SW846 8260B
1,2-Dichloroethane	94	(70 - 130)			SW846 8260B
	98	(70 - 130)	4.9	(0-30)	SW846 8260B
2-Butanone	93	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.8	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 Work Order #...: L38V31AC-MS Matrix.....: WG
MS Lot-Sample #: A0G150579-016 L38V31AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.0	(0-30)	SW846 8260B
Carbon tetrachloride	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.3	(0-30)	SW846 8260B
Bromodichloromethane	97	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.5	(0-30)	SW846 8260B
1,2-Dichloropropane	96	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.3	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	89	(70 - 130)			SW846 8260B
	95	(70 - 130)	7.5	(0-30)	SW846 8260B
Trichloroethene	95	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.0	(0-30)	SW846 8260B
Dibromochloromethane	100	(70 - 130)			SW846 8260B
	98	(70 - 130)	2.0	(0-30)	SW846 8260B
1,1,2-Trichloroethane	94	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.10	(0-30)	SW846 8260B
Benzene	92	(70 - 130)			SW846 8260B
	96	(70 - 130)	3.7	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	103	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.5	(0-30)	SW846 8260B
Bromoform	100	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.3	(0-30)	SW846 8260B
4-Methyl-2-pentanone	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.7	(0-30)	SW846 8260B
2-Hexanone	106	(70 - 130)			SW846 8260B
	106	(70 - 130)	0.15	(0-30)	SW846 8260B
Tetrachloroethene	95	(70 - 130)			SW846 8260B
	93	(70 - 130)	2.6	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	93	(70 - 130)			SW846 8260B
	92	(70 - 130)	0.68	(0-30)	SW846 8260B
Toluene	97	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.59	(0-30)	SW846 8260B
Chlorobenzene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.8	(0-30)	SW846 8260B
Ethylbenzene	97	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.20	(0-30)	SW846 8260B
Styrene	98	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.58	(0-30)	SW846 8260B
Xylenes (total)	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.45	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G150579 **Work Order #...:** L38V31AC-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150579-016 L38V31AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	87	(50 - 150)
	88	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
	86	(50 - 150)
Toluene-d8	91	(50 - 150)
	87	(50 - 150)
4-Bromofluorobenzene	93	(50 - 150)
	89	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A0G150579

Lab File ID: BFB428 BFB Injection Date: 07/26/10

Instrument ID: A3UX11 BFB Injection Time: 0910

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.2
75	30.0 - 60.0% of mass 95	47.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	50.0 - 100.0% of mass 95	86.1
175	5.0 - 9.0% of mass 174	6.0 (7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	83.1 (96.5)1
177	5.0 - 9.0% of mass 176	5.5 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	50NG-A9CC	UXJ1012	07/26/10	0959
02	VSTD010	50NG-CC	UXJ1013	07/26/10	1021
03	L4NMQCHK	L4NMQ1AC	UXJ1014	07/26/10	1044
04	L4NMQBLK	L4NMQ1AA	UXJ1016	07/26/10	1129
05	L4NMQCKDUP	L4NMQ1AD	UXJ1017	07/26/10	1152
06	FWGTEAM1-TRI	L38T51AA	UXJ1032	07/26/10	1731
07	FWGLL1MW-085	L38T61AA	UXJ1033	07/26/10	1754
08	FWGLL1MW-082	L38VC1AA	UXJ1034	07/26/10	1816
09	FWGLL2MW-269	L38VG1AA	UXJ1035	07/26/10	1839
10	FWGTEAM2-TRI	L38VM1AA	UXJ1036	07/26/10	1901
11	FWGSCFMW-005	L38VN1AA	UXJ1037	07/26/10	1924
12	FWGSCFMW-004	L38VT1AA	UXJ1038	07/26/10	1947
13	FWGSCFMW-DUP	L38VX1AA	UXJ1039	07/26/10	2009
14					
15					
16					
17					
18					
19					
20					
21					
22					

Injected 7/26/10 11:07

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00726A.b\UXJ1015.D
Report Date: 26-Jul-2010 11:26

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 2-8260.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00726A.b\8260LLUX11.m
Misc Info: J00726A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.117	111.69	70-130
	42	Trichloroethene	1.000	0.9992	99.92	70-130
	59	Chlorobenzene	1.000	0.9801	98.01	70-130
	50	Toluene	1.000	1.016	101.64	70-130
	41	Benzene	1.000	1.009	100.87	70-130
	16	Acetone	2.000	2.347	117.37	70-130
	20	Carbon Disulfide	1.000	1.214	121.36	70-130
	9	Chloromethane	1.000	1.024	102.38	70-130
LCL-085	11	Bromomethane	1.000	1.336	133.62*	70-130
	10	Vinyl Chloride	1.000	1.037	103.75	70-130
LCL-082	12	Chloroethane	1.000	1.265	126.55	70-130
LCL2-269	21	Methylene Chloride	1.000	1.811	181.14*	70-130
	28	1,1-Dichloroethane	1.000	1.051	105.07	70-130
SCF-005	M 31	1,2-Dichloroethene	2.000	2.077	103.85	70-130
	35	Chloroform	1.000	1.026	102.61	70-130
SCF-004	40	1,2-Dichloroethane	1.000	1.049	104.88	70-130
DUP	30	2-Butanone	2.000	2.349	117.47	70-130
	37	1,1,1-Trichloroeth	1.000	1.042	104.15	70-130
	39	Carbon Tetrachlori	1.000	0.9905	99.05	70-130
Trips 1&2	46	Bromodichlorometha	1.000	1.033	103.31	70-130
	43	1,2-Dichloropropan	1.000	0.9638	96.38	70-130
	48	cis-1,3-Dichloropr	1.000	0.9191	91.91	70-130
	54	1,3-Dichloropropan	1.000	1.058	105.83	70-130
	57	Dibromochlorometha	1.000	1.241	124.13	70-130
	53	1,1,2-Trichloroeth	1.000	1.061	106.12	70-130
	51	trans-1,3-Dichloro	1.000	1.215	121.47	70-130
	49	4-Methyl-2-pentano	2.000	1.741	87.06	70-130
	56	2-Hexanone	2.000	1.631	81.53	70-130
	55	Tetrachloroethene	1.000	1.074	107.42	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.042	104.16	70-130
	66	Bromoform	1.000	1.611	161.15*	70-130
	61	Ethylbenzene	1.000	0.8663	86.63	70-130
	65	Styrene	1.000	0.7763	77.63	70-130
	M 63	Xylenes (total)	3.000	2.526	84.21	70-130
	32	cis-1,2-dichloroet	1.000	0.9675	96.75	70-130
	25	trans-1,2-Dichloro	1.000	1.109	110.94	70-130
	8	Dichlorodifluorome	1.000	1.061	106.10	70-130
	13	Trichlorofluoromet	1.000	1.136	113.60	70-130

Injected 7/26/10 @ 20:32

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00726A.b\UXJ1040.D
Report Date: 27-Jul-2010 08:04

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 2-8260.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J00726A.b\8260LLUX11.m
Misc Info: J00726A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.069	106.95	70-130
	42	Trichloroethene	1.000	0.9864	98.64	70-130
	59	Chlorobenzene	1.000	0.9934	99.34	70-130
	50	Toluene	1.000	1.028	102.80	70-130
	41	Benzene	1.000	1.068	106.78	70-130
	16	Acetone	2.000	2.318	115.93	70-130
	20	Carbon Disulfide	1.000	1.233	123.28	70-130
	9	Chloromethane	1.000	0.9613	96.13	70-130
	11	Bromomethane	1.000	1.056	105.58	70-130
	10	Vinyl Chloride	1.000	0.9105	91.05	70-130
	12	Chloroethane	1.000	1.478	147.83*	70-130
	21	Methylene Chloride	1.000	2.179	217.91*	70-130
	28	1,1-Dichloroethane	1.000	1.166	116.62	70-130
M	31	1,2-Dichloroethene	2.000	2.004	100.19	70-130
	35	Chloroform	1.000	1.123	112.26	70-130
	40	1,2-Dichloroethane	1.000	1.264	126.42	70-130
	30	2-Butanone	2.000	2.506	125.30	70-130
	37	1,1,1-Trichloroeth	1.000	1.040	103.99	70-130
	39	Carbon Tetrachlori	1.000	1.032	103.20	70-130
	46	Bromodichlorometha	1.000	1.176	117.60	70-130
	43	1,2-Dichloropropan	1.000	1.096	109.61	70-130
	48	cis-1,3-Dichloropr	1.000	0.8551	85.51	70-130
	54	1,3-Dichloropropan	1.000	1.100	110.01	70-130
	57	Dibromochlorometha	1.000	1.278	127.78	70-130
	53	1,1,2-Trichloroeth	1.000	1.136	113.56	70-130
	51	trans-1,3-Dichloro	1.000	1.170	117.02	70-130
	49	4-Methyl-2-pentano	2.000	1.788	89.42	70-130
	56	2-Hexanone	2.000	1.720	85.98	70-130
	55	Tetrachloroethene	1.000	0.9526	95.26	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.159	115.87	70-130
	66	Bromoform	1.000	1.615	161.49*	70-130
	61	Ethylbenzene	1.000	0.8549	85.49	70-130
	65	Styrene	1.000	0.7429	74.29	70-130
M	63	Xylenes (total)	3.000	2.354	78.46	70-130
	32	cis-1,2-dichloroet	1.000	0.9448	94.48	70-130
	25	trans-1,2-Dichloro	1.000	1.059	105.89	70-130
	8	Dichlorodifluorome	1.000	0.7969	79.69	70-130
	13	Trichlorofluoromet	1.000	0.9255	92.55	70-130

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.6 and 5.2 °C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓			All samples were extracted as batch 0200033 within hold on 7/19. Sample FWGLL2mw-261C-1533-GW, including MS and MSD extracts, broke during concentration and were re-extracted as batch 0201101 within hold on 7/20. Due to QC failures for benzoic acid, all samples from SDG A0G150579 were re-extracted as batch 0207223 outside of hold on 7/26. The benzoic acid LCS recovery was acceptable in batch 0207223, and only the benzoic acid results will be reported from this run. As these results are being reported outside the required hold time, but within 2x hold time, all benzoic acid results from this batch were qualified "UJ".	QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP9-7/23/2010 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 2 R
12. Did the Calibration Check Compounds (CCCs) (see Table 1 below) relative standard deviation (%RSD) ≤ 30%?	✓				LCG Table 2 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
13. Were the minimum response factors (RFs) for the System Performance Check Compounds (SPCCs) (see Table 2 below) met?	✓				LCG Table 2 R
14. Was each target analyte <15 % RSD, or was the average RSD <15%?	✓				LCG Table 2 15% <RSD< 30% = J/UJ
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			Benzoic acid and 2,4-dinitrophenol used a quadratic fit. No qualifications were made as coefficients of determination (COD)(r) were≥0.99.	LCG Table 2 r<0.99=-J/R
16. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			6/8/10	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓			7/23/2010 @ 1350 and 7/23/10 @ 1906	LCG Table 2
18. Were the QC/MRL recoveries 70-130%?	✓				LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			7/23/10 @ 1330	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?	✓				LCG Table 2
21. Was the percent difference (% D) for the CCCs ≤ 20%? (see Table 1) (% drift if regression fit model used)	✓				LCG Table 2
22. Were the minimum RFs for the SPCCs met? (see Table 2)	✓				LCG Table 2

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
23. Was the %Difference or %Drift ≤20% for all target analytes? OR was the average %D ≤20% with no individual analyte ≥30%D?	✓				LCG Table 2 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>30% (neg) = J/R D>30% (pos) = J
24. Were the internal standards added to every sample?	✓				LCG Table 2
25. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point ICAL std?	✓				LCG Table 2 R
26. Did the areas of all IS compounds vary by no more than -50% to +100% from the ICAL EICP area?	✓				LCG Table 2 R
27. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 2
28. Were all target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. bis(2-Ethylhexyl) phthalate was detected in the method blank at 0.91 ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate <10x contamination were qualified, "B". See Appendix 1 for list of affected samples.	LCG Table 2 <5/10x blank = B
29. Was a field blank collected and analyzed?	✓				
30. Were all target analytes in the field blank analysis <1/2 the MRL?	✓			Checked by ADR. bis(2-Ethylhexyl) phthalate was detected in the FWGEQUIPRinse5-1582-GW at 0.91 ug/L. Samples with detected concentrations of bis(2-ethylhexyl) phthalate <10x contamination were qualified, "B". See Appendix 1 for list of affected samples.	<5/10x blank = B
31. Was a field duplicate analyzed?	✓				
32. Were the field duplicate RPDs ≤30%?	✓			Checked by ADR. Only detected sample results above the RL were evaluated.	QAPP Table 3-2 RPD >30=J
33. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 2
34. Were the LCS recoveries within limits specified in LCG Appendix C?		✓		Checked by ADR. 2,4-Dinitrophenol (16%) and Benzoic acid (0%) recovered below limits for batch 0200033. All 2,4-Dinitrophenol results were qualified	LCG Appendix C >UL=J; 30%-LL=J/UJ;

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
				"UJ". Batch 0200033 was re-extracted with acceptable LCS recoveries for Benzoic acid (batch 0207223) – see checklist item #4 for additional details. 2,4-Dinitrophenol (23%) and Benzoic acid (8%) recovered below limits of 10% for batch 0201101. The benzoic acid results were qualified as estimated, "UJ".	<30%=J/R
35. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 2
36. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL2mw-261C-1533-GW was the parent MS/MSD sample from this SDG.	
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		The MS had recoveries below control limits for all targets with the exception of 2,4-dinitrotoluene, n-nitrosodi-n-propylamine, benzo(k)fluoranthene, bis(2-chloroethoxy)methane, bis(2-chloroisopropyl)ether, bis(2-ethylhexyl)phthalate, 4-bromophenylphenyl ether, 4-chlorophenyl phenyl ether, diethyl phthalate, dimethyl phthalate, 2,6-dinitrotoluene, fluorene, 4-nitroaniline, nitrobenzene, and 2,4,5-trichlorophenol. All RPDs were above control limits with the exception of 3-nitroaniline. No qualifications were made for these outliers as the associated LCS and MSDs recovered within limits.	LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?		✓		Samples FWGLL1mw-082C-1527-GW, FWGLL2mw-269C-1538-GW, FWGSCFmw-005-1519-GW, FWGSCFmw-004-1518-GW, and FWGEQUIPRINSE5-1582-GW and had one base/neutral surrogate recover below acceptance limits, but above 10%. No qualifications were made, as per the LCG one surrogate from each fraction is allowed below the LL without qualification.	LCG Table 2 >150%=J; 10% -50%=J/UJ; <10%=J/R
39. Were reported sample concentrations within calibration range?	✓				
40. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
41. Were lab comments included in report? If yes, summarize contents.	✓			See narrative regarding MS, LCS, and surrogate outliers.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 2 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 8270C (including PAHs)

Table 1: CCCs *(All analytes if CCCs not included in standard)*

Base / Neutral Compunds	Acid Compounds
Acenaphthalene	4-Chloro-3-methylphenol
1,4-Dichlorobenzene	2,4-Dichlorophenol
Hexachlorobutadiene	2-Nitrophenol
N-Nitrosodiphehylamine	Phenol
Di-n-octylphthalate	Pentachlorophenol
Fluoroanthene	2,4,6-Trichlorophenol
Benzo(a)pyrene	

Table 2: SPCCs

N-Nitroso-di-n-propylamine	0.050
Hexachlorocyclopentadiene	0.050
2,4-Dinitrophenol	0.050
4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-002 **Work Order #...:** L38T61AC **Matrix.....:** WG
Date Sampled...: 07/15/10 09:27 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0200033
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-002 **Work Order #...:** L38T61AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-002 **Work Order #...:** L38T61AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	79	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	90	(50 - 150)
Phenol-d5	79	(50 - 150)
2-Fluorophenol	80	(50 - 150)
2,4,6-Tribromophenol	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0G150579-002	**Work Order #...:**	L38T62AC	**Matrix.....:**	WG
Date Sampled...:	07/15/10 09:27	**Date Received..:**	07/15/10		
Prep Date.....:	07/26/10	**Analysis Date..:**	07/28/10		
Prep Batch #...:	0207223				
Dilution Factor:	1	**Initial Wgt/Vol:**	1030 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(50 - 150)
2-Fluorobiphenyl	74	(50 - 150)
Terphenyl-d14	88	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-004 **Work Order #...:** L38VC1AC **Matrix.....:** WG
Date Sampled...: 07/15/10 10:41 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0200033
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.0 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-004 Work Order #...: L38VC1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-004 **Work Order #...:** L38VC1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	60	(50 - 150)
2-Fluorobiphenyl	38 *	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-004 **Work Order #...:** L38VC2AC **Matrix.....:** WG
Date Sampled...: 07/15/10 10:41 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0207223
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	85	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	67	(50 - 150)
2,4,6-Tribromophenol	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-006 **Work Order #...:** L38VG1AC **Matrix.....:** WG
Date Sampled...: 07/15/10 12:47 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0200033
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.4 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-006 **Work Order #...:** L38VG1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-006 **Work Order #...:** L38VG1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(50 - 150)
2-Fluorobiphenyl	42 *	(50 - 150)
Terphenyl-d14	69	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-006 **Work Order #...:** L38VG2AC **Matrix.....:** WG
Date Sampled...: 07/15/10 12:47 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0207223
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-009 **Work Order #...:** L38VN1AC **Matrix.....:** WG
Date Sampled...: 07/15/10 09:18 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0200033
Dilution Factor: 1.32 **Initial Wgt/Vol:** 760 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.26	ug/L	0.13
Acenaphthylene	ND	0.26	ug/L	0.13
Anthracene	ND	0.26	ug/L	0.13
Benzo(a)anthracene	ND	0.26	ug/L	0.13
Benzo(b)fluoranthene	ND	0.26	ug/L	0.13
Benzo(k)fluoranthene	ND	0.26	ug/L	0.13
Benzo(ghi)perylene	ND	0.26	ug/L	0.13
Benzo(a)pyrene	ND	0.26	ug/L	0.13
Benzyl alcohol	ND	6.6	ug/L	0.50
bis(2-Chloroethoxy) methane	ND	1.3	ug/L	0.42
bis(2-Chloroethyl)- ether	ND	1.3	ug/L	0.13
bis(2-Ethylhexyl) phthalate	ND	13	ug/L	1.1
Butyl benzyl phthalate	ND	1.3	ug/L	1.1
Carbazole	ND	1.3	ug/L	0.37
4-Chloroaniline	ND	2.6	ug/L	1.1
4-Chloro-3-methylphenol	ND	2.6	ug/L	1.1
2-Chloronaphthalene	ND	1.3	ug/L	0.13
2-Chlorophenol	ND	1.3	ug/L	0.38
4-Chlorophenyl phenyl ether	ND	2.6	ug/L	0.40
Chrysene	ND	0.26	ug/L	0.13
Dibenz(a,h)anthracene	ND	0.26	ug/L	0.13
Dibenzofuran	ND	1.3	ug/L	0.13
Di-n-butyl phthalate	ND	1.3	ug/L	0.88
1,2-Dichlorobenzene	ND	1.3	ug/L	0.38
1,3-Dichlorobenzene	ND	1.3	ug/L	1.1
1,4-Dichlorobenzene	ND	1.3	ug/L	0.45
3,3'-Dichlorobenzidine	ND	6.6	ug/L	0.49
2,4-Dichlorophenol	ND	2.6	ug/L	1.1
Diethyl phthalate	ND	1.3	ug/L	0.79
2,4-Dimethylphenol	ND	2.6	ug/L	1.1
Dimethyl phthalate	ND	1.3	ug/L	0.38
4,6-Dinitro- 2-methylphenol	ND	6.6	ug/L	3.2
2,4-Dinitrophenol	ND	6.6	ug/L	3.2

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-009 **Work Order #...:** L38VN1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrotoluene	ND	6.6	ug/L	0.36
2,6-Dinitrotoluene	ND	6.6	ug/L	1.1
Di-n-octyl phthalate	ND	1.3	ug/L	1.1
Fluoranthene	ND	0.26	ug/L	0.13
Fluorene	ND	0.26	ug/L	0.13
Hexachlorobenzene	ND	0.26	ug/L	0.13
Hexachlorobutadiene	ND	1.3	ug/L	0.36
Hexachloroethane	ND	1.3	ug/L	1.1
Indeno(1,2,3-cd)pyrene	ND	0.26	ug/L	0.13
Isophorone	ND	1.3	ug/L	0.36
2-Methylnaphthalene	ND	0.26	ug/L	0.13
2-Methylphenol	ND	1.3	ug/L	1.1
4-Methylphenol	ND	1.3	ug/L	1.1
Naphthalene	ND	0.26	ug/L	0.13
2-Nitroaniline	ND	2.6	ug/L	1.1
3-Nitroaniline	ND	2.6	ug/L	0.37
4-Nitroaniline	ND	2.6	ug/L	1.1
Nitrobenzene	ND	1.3	ug/L	0.053
2-Nitrophenol	ND	2.6	ug/L	0.37
4-Nitrophenol	ND	6.6	ug/L	3.2
N-Nitrosodiphenylamine	ND	1.3	ug/L	0.41
N-Nitrosodi-n-propyl-amine	ND	1.3	ug/L	1.1
2,2'-oxybis (1-Chloropropane)	ND	1.3	ug/L	0.53
Pentachlorophenol	ND	6.6	ug/L	3.2
Phenanthrene	ND	0.26	ug/L	0.13
Phenol	ND	1.3	ug/L	0.79
Pyrene	ND	0.26	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.3	ug/L	0.37
2,4,5-Trichloro-phenol	ND	6.6	ug/L	0.40
2,4,6-Trichloro-phenol	ND	6.6	ug/L	1.1
Hexachlorocyclopenta-diene	ND	13	ug/L	1.1
4-Bromophenyl phenyl ether	ND	2.6	ug/L	1.1

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-009 **Work Order #...:** L38VN1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	62	(50 - 150)
2-Fluorobiphenyl	42 *	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	60	(50 - 150)
2,4,6-Tribromophenol	66	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0G150579-009	**Work Order #...:**	L38VN2AC	**Matrix.....:**	WG
Date Sampled...:	07/15/10 09:18	**Date Received..:**	07/15/10		
Prep Date.....:	07/26/10	**Analysis Date..:**	07/28/10		
Prep Batch #...:	0207223				
Dilution Factor:	1	**Initial Wgt/Vol:**	910 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	86	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-011 **Work Order #...:** L38VT1AC **Matrix.....:** WG
Date Sampled...: 07/15/10 10:58 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0200033
Dilution Factor: 1 **Initial Wgt/Vol:** 900 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**0.92 J,B**	**10**	**ug/L**	**0.80**
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-011 Work Order #...: L38VT1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	**0.81 J**	**1.0**	**ug/L**	**0.60**
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-011 **Work Order #...:** L38VT1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	61	(50 - 150)
2-Fluorobiphenyl	42 *	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	62	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0G150579-011	**Work Order #...:**	L38VT2AC	**Matrix.....:**	WG
Date Sampled...:	07/15/10 10:58	**Date Received..:**	07/15/10		
Prep Date.....:	07/26/10	**Analysis Date..:**	07/28/10		
Prep Batch #...:	0207223				
Dilution Factor:	1	**Initial Wgt/Vol:**	920 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	82	(50 - 150)
Phenol-d5	70	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-013 **Work Order #...:** L38VX1AC **Matrix.....:** WG
Date Sampled...: 07/15/10 12:08 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0200033
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.9 J,B**	**10**	**ug/L**	**0.80**
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-013 **Work Order #...:** L38VX1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-013 **Work Order #...:** L38VX1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	56	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	59	(50 - 150)
2,4,6-Tribromophenol	61	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-013 **Work Order #...:** L38VX2AC **Matrix.....:** WG
Date Sampled...: 07/15/10 12:08 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0207223
Dilution Factor: 1 **Initial Wgt/Vol:** 910 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	75	(50 - 150)
Terphenyl-d14	88	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	77	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-016 **Work Order #...:** L38V31AE **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10
Prep Date.....: 07/20/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0201101
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**0.87 J**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-016 **Work Order #...:** L38V31AE **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-016 **Work Order #...:** L38V31AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	57	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
Terphenyl-d14	65	(50 - 150)
Phenol-d5	55	(50 - 150)
2-Fluorophenol	55	(50 - 150)
2,4,6-Tribromophenol	55	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-016 **Work Order #...:** L38V32AE **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0207223
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	79	(50 - 150)
2-Fluorobiphenyl	75	(50 - 150)
Terphenyl-d14	90	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-018 **Work Order #...:** L38V51AC **Matrix.....:** WG
Date Sampled...: 07/15/10 11:50 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0200033
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	**13**	**1.0**	**ug/L**	**0.80**
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-018 **Work Order #...:** L38V51AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	**1.4**	**1.0**	**ug/L**	**0.60**
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-018 **Work Order #...:** L38V51AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	59	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

GC/MS Semivolatiles

Lot-Sample #...:	A0G150579-018	**Work Order #...:**	L38V52AC	**Matrix.....:**	WG
Date Sampled...:	07/15/10 11:50	**Date Received..:**	07/15/10		
Prep Date.....:	07/26/10	**Analysis Date..:**	07/28/10		
Prep Batch #...:	0207223				
Dilution Factor:	1	**Initial Wgt/Vol:**	960 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	84	(50 - 150)
2-Fluorobiphenyl	79	(50 - 150)
Terphenyl-d14	92	(50 - 150)
Phenol-d5	77	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-020 **Work Order #...:** L38V71AC **Matrix.....:** WQ
Date Sampled...: 07/15/10 12:30 **Date Received..:** 07/15/10
Prep Date.....: 07/19/10 **Analysis Date..:** 07/23/10
Prep Batch #...: 0200033
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**0.91 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-020 **Work Order #...:** L38V71AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-020 **Work Order #...:** L38V71AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	45 *	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	64	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

GC/MS Semivolatiles

Lot-Sample #...: A0G150579-020 **Work Order #...:** L38V72AC **Matrix.....:** WQ
Date Sampled...: 07/15/10 12:30 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0207223
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzoic acid	ND	10	ug/L	10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	53	(50 - 150)
2-Fluorophenol	59	(50 - 150)
2,4,6-Tribromophenol	56	(50 - 150)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4CX31AA **Matrix.....:** WATER
MB Lot-Sample #: A0G190000-033

Prep Date.....: 07/19/10 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/23/10 **Prep Batch #...:** 0200033
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**0.91 J**	**10**	**ug/L**	**SW846 8270C**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4CX31AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	70	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	64	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 Work Order #...: L4CX31AA Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4D3V1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G200000-101

Prep Date.....: 07/20/10 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/23/10 **Prep Batch #...:** 0201101
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8270C
Benzo(a)pyrene	ND	0.20	ug/L	SW846 8270C
Benzyl alcohol	ND	5.0	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	SW846 8270C
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	SW846 8270C
4-Bromophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	1.0	ug/L	SW846 8270C
4-Chloroaniline	ND	2.0	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	2.0	ug/L	SW846 8270C
2-Chloronaphthalene	ND	1.0	ug/L	SW846 8270C
2-Chlorophenol	ND	1.0	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	0.20	ug/L	SW846 8270C
Dibenzofuran	ND	1.0	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	1.0	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	5.0	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	2.0	ug/L	SW846 8270C
Diethyl phthalate	ND	1.0	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	2.0	ug/L	SW846 8270C
Dimethyl phthalate	ND	1.0	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	1.0	ug/L	SW846 8270C
4,6-Dinitro- 2-methylphenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4D3V1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,6-Dinitrotoluene	ND	5.0	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
Hexachlorobenzene	ND	0.20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	1.0	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8270C
Isophorone	ND	1.0	ug/L	SW846 8270C
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
2-Methylphenol	ND	1.0	ug/L	SW846 8270C
4-Methylphenol	ND	1.0	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
2-Nitroaniline	ND	2.0	ug/L	SW846 8270C
3-Nitroaniline	ND	2.0	ug/L	SW846 8270C
4-Nitroaniline	ND	2.0	ug/L	SW846 8270C
Nitrobenzene	ND	1.0	ug/L	SW846 8270C
2-Nitrophenol	ND	2.0	ug/L	SW846 8270C
4-Nitrophenol	ND	5.0	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	1.0	ug/L	SW846 8270C
Pentachlorophenol	ND	5.0	ug/L	SW846 8270C
Phenanthrene	ND	0.20	ug/L	SW846 8270C
Phenol	ND	1.0	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	5.0	ug/L	SW846 8270C
Carbazole	ND	1.0	ug/L	SW846 8270C
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	78	(50 - 150)
Terphenyl-d14	92	(50 - 150)
Phenol-d5	79	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	78	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4D3V1AA **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4NLC1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G260000-223

Prep Date.....: 07/26/10 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 07/28/10 **Prep Batch #...:** 0207223
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzoic acid	ND	10	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	82	(50 - 150)
2-Fluorobiphenyl	77	(50 - 150)
Terphenyl-d14	95	(50 - 150)
Phenol-d5	78	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 Work Order #...: L4CX31AC Matrix.....: WATER
LCS Lot-Sample#: A0G190000-033
Prep Date.....: 07/19/10 Analysis Date..: 07/23/10
Prep Batch #...: 0200033
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	43	(30 - 120)	SW846 8270C
Acenaphthene	59	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	66	(34 - 151)	SW846 8270C
Pyrene	56	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	63	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	45	(30 - 115)	SW846 8270C
Pentachlorophenol	47	(30 - 150)	SW846 8270C
Phenol	62	(30 - 115)	SW846 8270C
2-Chlorophenol	62	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	60	(31 - 121)	SW846 8270C
4-Nitrophenol	56	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	43	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	39	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	59	(36 - 135)	SW846 8270C
4-Methylphenol	59	(31 - 115)	SW846 8270C
4-Nitroaniline	64	(30 - 140)	SW846 8270C
Acenaphthylene	60	(37 - 115)	SW846 8270C
Anthracene	60	(45 - 118)	SW846 8270C
Benzo(a)anthracene	55	(43 - 138)	SW846 8270C
Benzo(a)pyrene	50	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	55	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	59	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	70	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	65	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	63	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	63	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	62	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 Work Order #...: L4CX31AC Matrix.....: WATER
LCS Lot-Sample#: A0G190000-033

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	57	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	61	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	56	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	16 a	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	69	(43 - 122)	SW846 8270C
2-Chloronaphthalene	57	(35 - 115)	SW846 8270C
2-Methylnaphthalene	57	(32 - 115)	SW846 8270C
2-Methylphenol	61	(30 - 116)	SW846 8270C
2-Nitroaniline	59	(36 - 140)	SW846 8270C
2-Nitrophenol	62	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	39	(30 - 160)	SW846 8270C
3-Nitroaniline	63	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	47	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	64	(43 - 118)	SW846 8270C
4-Chloroaniline	62	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	63	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	61	(37 - 136)	SW846 8270C
Carbazole	61	(49 - 126)	SW846 8270C
Chrysene	60	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	60	(38 - 130)	SW846 8270C
Dibenzofuran	60	(40 - 115)	SW846 8270C
Diethyl phthalate	64	(43 - 132)	SW846 8270C
Dimethyl phthalate	64	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	58	(36 - 151)	SW846 8270C
Fluoranthene	60	(47 - 132)	SW846 8270C
Fluorene	63	(41 - 115)	SW846 8270C
Hexachlorobenzene	61	(42 - 123)	SW846 8270C
Hexachlorobutadiene	35	(30 - 120)	SW846 8270C
Hexachloroethane	33	(30 - 120)	SW846 8270C
Isophorone	63	(33 - 115)	SW846 8270C
Naphthalene	54	(30 - 119)	SW846 8270C
Nitrobenzene	65	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	59	(35 - 124)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4CX31AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G190000-033

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	**60**	**(45 - 117)**	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	**59**	**(37 - 130)**	**SW846 8270C**
Di-n-butyl phthalate	**63**	**(46 - 123)**	**SW846 8270C**
Hexachlorocyclopenta-diene	**38**	**(30 - 115)**	**SW846 8270C**
Benzyl alcohol	**62**	**(29 - 115)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	70	(50 - 150)
Phenol-d5	61	(50 - 150)
2-Fluorophenol	60	(50 - 150)
2,4,6-Tribromophenol	63	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 Work Order #...: L4D3V1AC Matrix.....: WATER
LCS Lot-Sample#: A0G200000-101
Prep Date.....: 07/20/10 Analysis Date..: 07/23/10
Prep Batch #...: 0201101
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	58	(30 - 120)	SW846 8270C
Acenaphthene	76	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	83	(34 - 151)	SW846 8270C
Pyrene	71	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	82	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	54	(30 - 115)	SW846 8270C
Pentachlorophenol	56	(30 - 150)	SW846 8270C
Phenol	77	(30 - 115)	SW846 8270C
2-Chlorophenol	75	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	74	(31 - 121)	SW846 8270C
4-Nitrophenol	70	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	55	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	50	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	75	(36 - 135)	SW846 8270C
4-Methylphenol	74	(31 - 115)	SW846 8270C
4-Nitroaniline	80	(30 - 140)	SW846 8270C
Acenaphthylene	77	(37 - 115)	SW846 8270C
Anthracene	75	(45 - 118)	SW846 8270C
Benzo(a)anthracene	69	(43 - 138)	SW846 8270C
Benzo(a)pyrene	64	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	67	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	74	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	91	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	81	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	88	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	81	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	88	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 Work Order #...: L4D3V1AC Matrix.....: WATER
LCS Lot-Sample#: A0G200000-101

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	70	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	76	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	61	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	23 a	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	87	(43 - 122)	SW846 8270C
2-Chloronaphthalene	76	(35 - 115)	SW846 8270C
2-Methylnaphthalene	75	(32 - 115)	SW846 8270C
2-Methylphenol	77	(30 - 116)	SW846 8270C
2-Nitroaniline	74	(36 - 140)	SW846 8270C
2-Nitrophenol	76	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	56	(30 - 160)	SW846 8270C
3-Nitroaniline	76	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	57	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	82	(43 - 118)	SW846 8270C
4-Chloroaniline	68	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	82	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	77	(37 - 136)	SW846 8270C
Carbazole	76	(49 - 126)	SW846 8270C
Chrysene	72	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	77	(38 - 130)	SW846 8270C
Dibenzofuran	77	(40 - 115)	SW846 8270C
Diethyl phthalate	83	(43 - 132)	SW846 8270C
Dimethyl phthalate	81	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	75	(36 - 151)	SW846 8270C
Fluoranthene	76	(47 - 132)	SW846 8270C
Fluorene	81	(41 - 115)	SW846 8270C
Hexachlorobenzene	79	(42 - 123)	SW846 8270C
Hexachlorobutadiene	53	(30 - 120)	SW846 8270C
Hexachloroethane	47	(30 - 120)	SW846 8270C
Isophorone	78	(33 - 115)	SW846 8270C
Naphthalene	68	(30 - 119)	SW846 8270C
Nitrobenzene	80	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	76	(35 - 124)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4D3V1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G200000-101

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	**76**	**(45 - 117)**	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	**75**	**(37 - 130)**	**SW846 8270C**
Di-n-butyl phthalate	**78**	**(46 - 123)**	**SW846 8270C**
Hexachlorocyclopenta-diene	**56**	**(30 - 115)**	**SW846 8270C**
Benzyl alcohol	**78**	**(29 - 115)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	73	(50 - 150)
Terphenyl-d14	84	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	75	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4NLC1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G260000-223
Prep Date.....: 07/26/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0207223
Dilution Factor: 1 **Final Wgt/Vol..:** 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzoic acid	**10 a**	**(30 - 136)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(50 - 150)
2-Fluorobiphenyl	75	(50 - 150)
Terphenyl-d14	85	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 Work Order #...: L38V31AF-MS Matrix.....: WG
MS Lot-Sample #: A0G150579-016 L38V31AG-MSD
Date Sampled...: 07/15/10 09:20 Date Received..: 07/15/10
Prep Date.....: 07/20/10 Analysis Date..: 07/23/10
Prep Batch #...: 0201101
Dilution Factor: 1 Initial Wgt/Vol: 515 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	34 a	(45 - 135)			SW846 8270C
	61 p	(45 - 135)	56	(0-40)	SW846 8270C
Acenaphthene	43 a	(45 - 135)			SW846 8270C
	73 p	(45 - 135)	51	(0-40)	SW846 8270C
2,4-Dinitrotoluene	46	(45 - 135)			SW846 8270C
	80 p	(45 - 135)	54	(0-40)	SW846 8270C
Pyrene	40 a	(45 - 135)			SW846 8270C
	70 p	(45 - 135)	53	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	46	(45 - 135)			SW846 8270C
	77 p	(45 - 135)	50	(0-40)	SW846 8270C
1,4-Dichlorobenzene	35 a	(45 - 135)			SW846 8270C
	63 p	(45 - 135)	58	(0-40)	SW846 8270C
Pentachlorophenol	34 a	(45 - 135)			SW846 8270C
	60 p	(45 - 135)	54	(0-40)	SW846 8270C
Phenol	43 a	(45 - 135)			SW846 8270C
	75 p	(45 - 135)	53	(0-40)	SW846 8270C
2-Chlorophenol	42 a	(45 - 135)			SW846 8270C
	73 p	(45 - 135)	53	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	43 a	(45 - 135)			SW846 8270C
	74 p	(45 - 135)	54	(0-40)	SW846 8270C
4-Nitrophenol	39 a	(45 - 135)			SW846 8270C
	69 p	(45 - 135)	55	(0-40)	SW846 8270C
Acenaphthylene	44 a	(45 - 135)			SW846 8270C
	73 p	(45 - 135)	51	(0-40)	SW846 8270C
Anthracene	41 a	(45 - 135)			SW846 8270C
	71 p	(45 - 135)	53	(0-40)	SW846 8270C
Benzo(a)anthracene	40 a	(45 - 135)			SW846 8270C
	72 p	(45 - 135)	58	(0-40)	SW846 8270C
Benzo(b)fluoranthene	41 a	(45 - 135)			SW846 8270C
	71 p	(45 - 135)	55	(0-40)	SW846 8270C
Benzo(k)fluoranthene	48	(45 - 135)			SW846 8270C
	83 p	(45 - 135)	54	(0-40)	SW846 8270C
Benzo(ghi)perylene	43 a	(45 - 135)			SW846 8270C
	74 p	(45 - 135)	54	(0-40)	SW846 8270C
Benzo(a)pyrene	36 a	(45 - 135)			SW846 8270C
	63 p	(45 - 135)	55	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 Work Order #...: L38V31AF-MS Matrix.....: WG
MS Lot-Sample #: A0G150579-016 L38V31AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	46	(45 - 135)			SW846 8270C
	79 p	(45 - 135)	53	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	43 a	(45 - 135)			SW846 8270C
	78 p	(45 - 135)	58	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	45	(45 - 135)			SW846 8270C
	77 p	(45 - 135)	53	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	41 a	(45 - 135)			SW846 8270C
	81 p	(45 - 135)	62	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	47	(45 - 135)			SW846 8270C
	78 p	(45 - 135)	50	(0-40)	SW846 8270C
Butyl benzyl phthalate	42 a	(45 - 135)			SW846 8270C
	78 p	(45 - 135)	58	(0-40)	SW846 8270C
Carbazole	44 a	(45 - 135)			SW846 8270C
	73 p	(45 - 135)	50	(0-40)	SW846 8270C
4-Chloroaniline	38 a	(45 - 135)			SW846 8270C
	70 p	(45 - 135)	58	(0-40)	SW846 8270C
2-Chloronaphthalene	43 a	(45 - 135)			SW846 8270C
	72 p	(45 - 135)	51	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	46	(45 - 135)			SW846 8270C
	77 p	(45 - 135)	50	(0-40)	SW846 8270C
Chrysene	42 a	(45 - 135)			SW846 8270C
	70 p	(45 - 135)	49	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	43 a	(45 - 135)			SW846 8270C
	74 p	(45 - 135)	53	(0-40)	SW846 8270C
Dibenzofuran	44 a	(45 - 135)			SW846 8270C
	73 p	(45 - 135)	50	(0-40)	SW846 8270C
Di-n-butyl phthalate	44 a	(45 - 135)			SW846 8270C
	75 p	(45 - 135)	52	(0-40)	SW846 8270C
1,2-Dichlorobenzene	34 a	(45 - 135)			SW846 8270C
	60 p	(45 - 135)	55	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 Work Order #...: L38V31AF-MS Matrix.....: WG
MS Lot-Sample #: A0G150579-016 L38V31AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	31 a	(45 - 135)			SW846 8270C
	55 p	(45 - 135)	57	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	20 a	(45 - 135)			SW846 8270C
	40 a,p	(45 - 135)	67	(0-40)	SW846 8270C
2,4-Dichlorophenol	43 a	(45 - 135)			SW846 8270C
	73 p	(45 - 135)	52	(0-40)	SW846 8270C
Diethyl phthalate	47	(45 - 135)			SW846 8270C
	79 p	(45 - 135)	52	(0-40)	SW846 8270C
2,4-Dimethylphenol	37 a	(45 - 135)			SW846 8270C
	62 p	(45 - 135)	50	(0-40)	SW846 8270C
Dimethyl phthalate	46	(45 - 135)			SW846 8270C
	78 p	(45 - 135)	52	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	35 a	(45 - 135)			SW846 8270C
	63 p	(45 - 135)	57	(0-40)	SW846 8270C
2,4-Dinitrophenol	20 a	(45 - 135)			SW846 8270C
	34 a,p	(45 - 135)	51	(0-40)	SW846 8270C
2,6-Dinitrotoluene	48	(45 - 135)			SW846 8270C
	84 p	(45 - 135)	54	(0-40)	SW846 8270C
Di-n-octyl phthalate	41 a	(45 - 135)			SW846 8270C
	72 p	(45 - 135)	55	(0-40)	SW846 8270C
Fluoranthene	43 a	(45 - 135)			SW846 8270C
	73 p	(45 - 135)	53	(0-40)	SW846 8270C
Fluorene	46	(45 - 135)			SW846 8270C
	76 p	(45 - 135)	50	(0-40)	SW846 8270C
Hexachlorobenzene	44 a	(45 - 135)			SW846 8270C
	75 p	(45 - 135)	52	(0-40)	SW846 8270C
Hexachlorobutadiene	27 a	(45 - 135)			SW846 8270C
	51 p	(45 - 135)	61	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	28 a	(45 - 135)			SW846 8270C
	52 p	(45 - 135)	59	(0-40)	SW846 8270C
Hexachloroethane	26 a	(45 - 135)			SW846 8270C
	48 p	(45 - 135)	58	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	42 a	(45 - 135)			SW846 8270C
	72 p	(45 - 135)	54	(0-40)	SW846 8270C
Isophorone	44 a	(45 - 135)			SW846 8270C
	76 p	(45 - 135)	52	(0-40)	SW846 8270C
2-Methylnaphthalene	43 a	(45 - 135)			SW846 8270C
	74 p	(45 - 135)	54	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L38V31AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150579-016 L38V31AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	42 a	(45 - 135)			SW846 8270C
	71 p	(45 - 135)	52	(0-40)	SW846 8270C
4-Methylphenol	42 a	(45 - 135)			SW846 8270C
	69 p	(45 - 135)	49	(0-40)	SW846 8270C
Naphthalene	41 a	(45 - 135)			SW846 8270C
	71 p	(45 - 135)	54	(0-40)	SW846 8270C
2-Nitroaniline	41 a	(45 - 135)			SW846 8270C
	73 p	(45 - 135)	55	(0-40)	SW846 8270C
3-Nitroaniline	44 a	(45 - 135)			SW846 8270C
	73	(45 - 135)	49	(0-50)	SW846 8270C
4-Nitroaniline	46	(45 - 135)			SW846 8270C
	77 p	(45 - 135)	50	(0-40)	SW846 8270C
Nitrobenzene	46	(45 - 135)			SW846 8270C
	78 p	(45 - 135)	53	(0-40)	SW846 8270C
2-Nitrophenol	43 a	(45 - 135)			SW846 8270C
	75 p	(45 - 135)	53	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	38 a	(45 - 135)			SW846 8270C
	67 p	(45 - 135)	54	(0-40)	SW846 8270C
Phenanthrene	43 a	(45 - 135)			SW846 8270C
	72 p	(45 - 135)	49	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	45	(45 - 135)			SW846 8270C
	72 p	(45 - 135)	47	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	40 a	(45 - 135)			SW846 8270C
	71 p	(45 - 135)	55	(0-40)	SW846 8270C
Benzyl alcohol	44 a	(45 - 135)			SW846 8270C
	74 p	(45 - 135)	51	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	45 *	(50 - 150)
	78	(50 - 150)
2-Fluorobiphenyl	43 *	(50 - 150)
	74	(50 - 150)
Terphenyl-d14	48 *	(50 - 150)
	86	(50 - 150)
Phenol-d5	41 *	(50 - 150)
	72	(50 - 150)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L38V31AF-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150579-016 L38V31AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	42 *	(50 - 150)
	68	(50 - 150)
2,4,6-Tribromophenol	46 *	(50 - 150)
	77	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L38V31AT-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150579-016 L38V31AU-MSD
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10
Prep Date.....: 07/26/10 **Analysis Date..:** 07/28/10
Prep Batch #...: 0207223
Dilution Factor: 1 **Initial Wgt/Vol:** 510 mL **Final Wgt/Vol..:** 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzoic acid	**9.8 a**	**(45 - 135)**			**SW846 8270C**
	14 a	**(45 - 135)**	**38**	**(0-40)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(50 - 150)
	81	(50 - 150)
2-Fluorobiphenyl	78	(50 - 150)
	79	(50 - 150)
Terphenyl-d14	90	(50 - 150)
	89	(50 - 150)
Phenol-d5	78	(50 - 150)
	78	(50 - 150)
2-Fluorophenol	72	(50 - 150)
	72	(50 - 150)
2,4,6-Tribromophenol	78	(50 - 150)
	77	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.6 and 5.2 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Was a DDT standard analyzed every 12 hours? Was the DDT %breakdown < 15%?	✓				LCG Table 4 >15%=J/R
8. Was an endrin standard analyzed every 12 hours? Was endrin %breakdown <15%?	✓				LCG Table 4 >15%=J/R
9. Does the initial calibration curve consist of 5 concentration levels?	✓			Instrument A2HP3 7/26/10 stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column	LCG Table 4 R
10. Were the %RSDs for each analyte ≤ 20%? OR was the average %RSD ≤ 20% with the r^2 >0.990?	✓				LCG Table 4 RSD>20% or r<0.99=J/R
11. Was a blank run prior to the initial calibration?			✓	No data provided to evaluate.	
12. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			4/14/10 @ 0240	LCG Table 4 R
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?	✓			7/29/10 @ 2100 and 7/30/10 @ 0400	LCG Table 4 >130%=J; 65-70%%=J/UJ; <65%=J/R
14. Was a second source (ICV) verification analyzed after the ICAL? Were results 85-115%?	✓			7/26/10 @ 2007	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a CCV run every 12 hours?	✓			7/29/10 @ 2010, 2035 and 7/30/10 @ 0311, 03:36	LCG Table 4
16. Was the %D for all target analytes ≤15%? OR was the average %D ≤ 15% with no individual analyte >30%?	✓				LCG Table 4 D>30% (neg) =J/R D>30% (pos) = J
17. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 4
18. Were target analytes < ½ the MRL?	✓				LCG Table 4 <5x=B
19. Was a field blank collected and analyzed?	✓				
20. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓				<5x =B
21. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 4
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR. The recovery for Endosulfan I was reported from the confirmation column. No qualifications were made, as there were no detected concentrations for this compound in any of the samples.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 50-150% and RPD ≤20%?		✓		Checked by ADR.	*Was QAPP Table 3-2*, Pj
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in sample FWGLL2mw-269c-1538-GW at 33%, FWGSCFmw-005c-1519-GW at 29% and FWGSCFmw-DUP6-1571-GW at 48%. The associated results were qualified as estimated, "J/UJ".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Only sample results above the RL were evaluated.	QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPD's ≤ 40?			✓		LCG Table 4 >40 RPD=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Were reported sample concentrations within calibration range?	✓				
30. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
31. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 4 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-002 **Work Order #...:** L38T61AD **Matrix.....:** WG
Date Sampled...: 07/15/10 09:27 **Date Received..:** 07/15/10
Prep Date.....: 07/20/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0201034
Dilution Factor: 1 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	75	(50 - 150)
Decachlorobiphenyl	68	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-004 **Work Order #...:** L38VC1AD **Matrix.....:** WG
Date Sampled...: 07/15/10 10:41 **Date Received..:** 07/15/10
Prep Date.....: 07/20/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0201034
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	57	(50 - 150)
Decachlorobiphenyl	55	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-006 **Work Order #...:** L38VG1AD **Matrix.....:** WG
Date Sampled...: 07/15/10 12:47 **Date Received..:** 07/15/10
Prep Date.....: 07/20/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0201034
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	33 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-009 **Work Order #...:** L38VN1AD **Matrix.....:** WG
Date Sampled...: 07/15/10 09:18 **Date Received..:** 07/15/10
Prep Date.....: 07/20/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0201034
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	29 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

GC Semivolatiles

Lot-Sample #...:	A0G150579-011	**Work Order #...:**	L38VT1AD	**Matrix.....:**	WG
Date Sampled...:	07/15/10 10:58	**Date Received..:**	07/15/10		
Prep Date.....:	07/20/10	**Analysis Date..:**	07/29/10		
Prep Batch #...:	0201034				
Dilution Factor:	1	**Initial Wgt/Vol:**	930 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	76	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-013 **Work Order #...:** L38VX1AD **Matrix.....:** WG
Date Sampled...: 07/15/10 12:08 **Date Received..:** 07/15/10
Prep Date.....: 07/20/10 **Analysis Date..:** 07/29/10
Prep Batch #...: 0201034
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
Decachlorobiphenyl	48 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-016 **Work Order #...:** L38V31AH **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10
Prep Date.....: 07/20/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0201034
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	51	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-018 **Work Order #...:** L38V51AD **Matrix.....:** WG
Date Sampled...: 07/15/10 11:50 **Date Received..:** 07/15/10
Prep Date.....: 07/20/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0201034
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	**0.0090 J**	**0.030**	**ug/L**	**0.0078**
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	57	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-020 **Work Order #...:** L38V71AD **Matrix.....:** WQ
Date Sampled...: 07/15/10 12:30 **Date Received..:** 07/15/10
Prep Date.....: 07/20/10 **Analysis Date..:** 07/30/10
Prep Batch #...: 0201034
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	74	(50 - 150)
Decachlorobiphenyl	82	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4D0J1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G200000-034

Prep Date.....: 07/20/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/30/10 **Prep Batch #...:** 0201034
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
alpha-BHC	ND	0.030	ug/L	SW846 8081A
beta-BHC	ND	0.030	ug/L	SW846 8081A
delta-BHC	ND	0.030	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.030	ug/L	SW846 8081A
Heptachlor	ND	0.030	ug/L	SW846 8081A
Aldrin	ND	0.030	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.030	ug/L	SW846 8081A
Endosulfan I	ND	0.025	ug/L	SW846 8081A
Dieldrin	ND	0.030	ug/L	SW846 8081A
4,4'-DDE	ND	0.030	ug/L	SW846 8081A
Endrin	ND	0.030	ug/L	SW846 8081A
Endosulfan II	ND	0.025	ug/L	SW846 8081A
4,4'-DDD	ND	0.030	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.030	ug/L	SW846 8081A
4,4'-DDT	ND	0.030	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Endrin ketone	ND	0.030	ug/L	SW846 8081A
Endrin aldehyde	ND	0.030	ug/L	SW846 8081A
alpha-Chlordane	ND	0.030	ug/L	SW846 8081A
gamma-Chlordane	ND	0.030	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	66	(50 - 150)
Decachlorobiphenyl	65	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G150579 Work Order #...: L4D0J1AC Matrix.....: WATER
LCS Lot-Sample#: A0G200000-034
Prep Date.....: 07/20/10 Analysis Date..: 07/29/10
Prep Batch #...: 0201034
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	74	(44 - 137)	**SW846 8081A**
beta-BHC	71	(50 - 135)	**SW846 8081A**
delta-BHC	76	(58 - 160)	**SW846 8081A**
gamma-BHC (Lindane)	74	(58 - 127)	**SW846 8081A**
Heptachlor	76	(48 - 150)	**SW846 8081A**
Aldrin	70	(53 - 128)	**SW846 8081A**
Heptachlor epoxide	72	(50 - 127)	**SW846 8081A**
Endosulfan I	50	(50 - 160)	**SW846 8081A**
Dieldrin	74	(50 - 124)	**SW846 8081A**
4,4'-DDE	70	(50 - 130)	**SW846 8081A**
Endrin	68	(50 - 137)	**SW846 8081A**
Endosulfan II	52	(50 - 144)	**SW846 8081A**
4,4'-DDD	73	(50 - 137)	**SW846 8081A**
Endosulfan sulfate	71	(50 - 160)	**SW846 8081A**
4,4'-DDT	62	(50 - 145)	**SW846 8081A**
Methoxychlor	63	(50 - 160)	**SW846 8081A**
Endrin ketone	64	(50 - 150)	**SW846 8081A**
Endrin aldehyde	59	(30 - 160)	**SW846 8081A**
alpha-Chlordane	73	(50 - 122)	**SW846 8081A**
gamma-Chlordane	73	(50 - 130)	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	67	(50 - 150)
Decachlorobiphenyl	59	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G150579 Work Order #...: L38V31AJ-MS Matrix.....: WG
MS Lot-Sample #: A0G150579-016 L38V31AK-MSD
Date Sampled...: 07/15/10 09:20 Date Received..: 07/15/10
Prep Date.....: 07/20/10 Analysis Date..: 07/30/10
Prep Batch #...: 0201034
Dilution Factor: 2 Initial Wgt/Vol: 510 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	95	(50 - 150)			SW846 8081A
	94	(50 - 150)	1.6	(0-50)	SW846 8081A
beta-BHC	93	(50 - 150)			SW846 8081A
	94	(50 - 150)	1.3	(0-50)	SW846 8081A
delta-BHC	102	(50 - 150)			SW846 8081A
	97	(50 - 150)	5.5	(0-50)	SW846 8081A
gamma-BHC (Lindane)	92	(50 - 150)			SW846 8081A
	89	(50 - 150)	3.1	(0-50)	SW846 8081A
Heptachlor	105	(50 - 150)			SW846 8081A
	128	(50 - 150)	20	(0-50)	SW846 8081A
Aldrin	91	(50 - 150)			SW846 8081A
	91	(50 - 150)	0.05	(0-50)	SW846 8081A
Heptachlor epoxide	93	(50 - 150)			SW846 8081A
	92	(50 - 150)	0.49	(0-50)	SW846 8081A
Endosulfan I	66	(50 - 150)			SW846 8081A
	64	(50 - 150)	3.4	(0-50)	SW846 8081A
Dieldrin	95	(50 - 150)			SW846 8081A
	94	(50 - 150)	0.64	(0-50)	SW846 8081A
4,4'-DDE	91	(50 - 150)			SW846 8081A
	95	(50 - 150)	4.3	(0-50)	SW846 8081A
Endrin	95	(50 - 150)			SW846 8081A
	81	(50 - 150)	15	(0-50)	SW846 8081A
Endosulfan II	69	(50 - 150)			SW846 8081A
	65	(50 - 150)	5.8	(0-50)	SW846 8081A
4,4'-DDD	95	(50 - 150)			SW846 8081A
	91	(50 - 150)	4.1	(0-50)	SW846 8081A
Endosulfan sulfate	93	(50 - 150)			SW846 8081A
	88	(50 - 150)	5.2	(0-50)	SW846 8081A
4,4'-DDT	78	(50 - 150)			SW846 8081A
	77	(50 - 150)	1.4	(0-50)	SW846 8081A
Methoxychlor	75	(50 - 150)			SW846 8081A
	74	(50 - 150)	2.3	(0-50)	SW846 8081A
Endrin ketone	80	(50 - 150)			SW846 8081A
	76	(50 - 150)	5.4	(0-50)	SW846 8081A
Endrin aldehyde	72	(50 - 150)			SW846 8081A
	67	(50 - 150)	6.6	(0-50)	SW846 8081A
alpha-Chlordane	95	(50 - 150)			SW846 8081A
	95	(50 - 150)	0.16	(0-50)	SW846 8081A
gamma-Chlordane	96	(50 - 150)			SW846 8081A
	96	(50 - 150)	0.0	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L38V31AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A0G150579-016 L38V31AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
	85	(50 - 150)
Decachlorobiphenyl	86	(50 - 150)
	74	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

SW846 8081A SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc. Client: Environmental Quality Mgt., Inc.

Lab Code: TALCAN SDG No:

Lot #: A0G150579

Extraction: XXI10QJ36

	CLIENT ID.	SRG01	SRG02	TOT OUT
01	FWGLL1mw-085C-1530-GW	75	68	00
02	FWGLL1mw-082C-1527-GW	57	55	00
03	FWGLL2mw-269C-1538-GW	81	33 *	01
04	FWGSCFmw-005-1519-GW	73	29 *	01
05	FWGSCFmw-004-1518-GW	80	76	00
06	FWGSCFmw-DUP6-1571-GW	87	48 *	01
07	FWGLL2mw-261C-1533-GW	76	51	00
08	FWGLL2mw-270C-1539-GW	79	57	00
09	FWGEQUIPRINSE5-1582-GW	74	82	00
10	METHOD BLK. L4D0J1AA	66	65	00
11	LCS L4D0J1AC	67	59	00
12	FWGLL2mw-261C-1533-GW D	85	74	00
13	FWGLL2mw-261C-1533-GW S	84	86	00

SURROGATES		QC LIMITS
SRG01	= Tetrachloro-m-xylene	(50-150)
SRG02	= Decachlorobiphenyl	(50-150)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.6 and 5.2 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Does the initial calibration curve consist of 5 concentration levels of Aroclors 1016 and 1260?	✓			Instrument A2HP13; ICAL on 7/20/10 Stds = 0.05, 0.1, 0.2, 0.5, 1.0, 2.0	LCG Table 3 R
8. Was the % RSD ≤ 20%? Were the r^2s >0.990?	✓				LCG Table 3 RSD>20% or r<0.99= J/R
9. Was a MDL Level Verification performed once per quarter? Were all target analytes detected?	✓			No data provided for evaluation.	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			7/21/10@ 0320	LCG Table 3 >115%=J; 80-85%=J/UJ; <80%=J/R
12. Were single standards of the other five Aroclors run to aid in pattern recognition and to determine a single point calibration factor?	✓				Method 8082 Section 5.6.2
13. Was a CCV run every 12 hours?	✓			7/27/10 @ 1503, 1749, and 1903	LCG Table 3

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the % D ≤ 15 % for each analyte or the average %D across all analytes ≤ 15% with a maximum %D for each target analyte ≤30%?	✓				LCG Table 3 D>30% (neg) =J/R D>30% (pos) =J
15. Was a method blank prepared and analyzed with each batch?	✓			Section checked by ADR	LCG Table 5
16. Were target analytes <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was an equipment blank collected and analyzed?	✓				
18. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓			Section checked by ADR	<5x = B
19. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 3
20. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Section checked by ADR	LCG Appendix C >UL=J; LL-30%=J/UJ; <30%=J/R
21. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?	✓			Sample FWGLL2mw-261C-1533-GW was the parent MS/MSD sample from this SDG.	
23. Were MS/MSD recoveries 50-150% and RPD ≤20%?	✓			Checked by ADR.	QAPP Table 3-2 Pj
24. Was the surrogate spiked into all samples?	✓				
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits in samples FWGLL2mw-269c-1538-GW at 34% and FWGSCFmw-005-1519-GW at 32%. The associated results were qualified as estimated, "J/UJ".	LCG Table 3 >150%=J; 10-50%=J/UJ; <10%=R
26. Was a field duplicate analyzed? Were the RPDs <30%?	✓				QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Erik Corbin / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
27. Were all positive results verified by a second dissimilar column confirmation? Was the RPD ≤ 40?			✓	No detected concentrations were reported.	LCG Table 3 RPD>40=J
28. Were reported sample concentrations within calibration range?			✓	No detected concentrations were reported.	
29. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
30. Were lab comments included in report? If yes, summarize contents.	✓			See narrative for surrogate outliers.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 3 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-002	**Work Order #...:** L38T61AF	**Matrix.....:** WG	
Date Sampled...: 07/15/10 09:27	**Date Received..:** 07/15/10		
Prep Date.....: 07/20/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0201035			
Dilution Factor: 1	**Initial Wgt/Vol:** 1000 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	74	(50 - 150)
Decachlorobiphenyl	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-004	**Work Order #...:** L38VC1AF	**Matrix.....:** WG	
Date Sampled...: 07/15/10 10:41	**Date Received..:** 07/15/10		
Prep Date.....: 07/20/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0201035			
Dilution Factor: 1	**Initial Wgt/Vol:** 1000 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	62	(50 - 150)
Decachlorobiphenyl	56	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

GC Semivolatiles

Lot-Sample #...:	A0G150579-006	**Work Order #...:**	L38VG1AF	**Matrix.....:**	WG
Date Sampled...:	07/15/10 12:47	**Date Received..:**	07/15/10		
Prep Date.....:	07/20/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0201035				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(50 - 150)
Decachlorobiphenyl	34 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-009	**Work Order #...:** L38VN1AF		**Matrix.....:** WG
Date Sampled...: 07/15/10 09:18	**Date Received..:** 07/15/10		
Prep Date.....: 07/20/10	**Analysis Date..:** 07/27/10		
Prep Batch #...: 0201035			
Dilution Factor: 1	**Initial Wgt/Vol:** 1000 mL		**Final Wgt/Vol..:** 5 mL
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	32 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

GC Semivolatiles

Lot-Sample #...:	A0G150579-011	**Work Order #...:**	L38VT1AF	**Matrix.....:**	WG
Date Sampled...:	07/15/10 10:58	**Date Received..:**	07/15/10		
Prep Date.....:	07/20/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0201035				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

GC Semivolatiles

Lot-Sample #...:	A0G150579-013	**Work Order #...:**	L38VX1AF	**Matrix.....:**	WG
Date Sampled...:	07/15/10 12:08	**Date Received..:**	07/15/10		
Prep Date.....:	07/20/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0201035				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	53	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

GC Semivolatiles

Lot-Sample #...:	A0G150579-016	**Work Order #...:**	L38V31AP	**Matrix.....:**	WG
Date Sampled...:	07/15/10 09:20	**Date Received..:**	07/15/10		
Prep Date.....:	07/20/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0201035				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	55	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

GC Semivolatiles

Lot-Sample #...:	A0G150579-018	**Work Order #...:**	L38V51AF	**Matrix.....:**	WG
Date Sampled...:	07/15/10 11:50	**Date Received..:**	07/15/10		
Prep Date.....:	07/20/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0201035				
Dilution Factor:	1	**Initial Wgt/Vol:**	1000 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	64	(50 - 150)
Decachlorobiphenyl	59	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

GC Semivolatiles

Lot-Sample #...: A0G150579-020 Work Order #...: L38V71AG Matrix.....: WQ
Date Sampled...: 07/15/10 12:30 Date Received..: 07/15/10
Prep Date.....: 07/20/10 Analysis Date..: 07/27/10
Prep Batch #...: 0201035
Dilution Factor: 1 Initial Wgt/Vol: 1000 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	64	(50 - 150)
Decachlorobiphenyl	92	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4D0M1AA **Matrix.....:** WATER
MB Lot-Sample #: A0G200000-035

Prep Date.....: 07/20/10 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 07/27/10 **Prep Batch #...:** 0201035
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/L	SW846 8082
Aroclor 1221	ND	0.50	ug/L	SW846 8082
Aroclor 1232	ND	0.50	ug/L	SW846 8082
Aroclor 1242	ND	0.50	ug/L	SW846 8082
Aroclor 1248	ND	0.50	ug/L	SW846 8082
Aroclor 1254	ND	0.50	ug/L	SW846 8082
Aroclor 1260	ND	0.50	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	63	(50 - 150)
Decachlorobiphenyl	84	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A0G150579 **Work Order #...:** L4D0M1AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G200000-035
Prep Date.....: 07/20/10 **Analysis Date..:** 07/27/10
Prep Batch #...: 0201035
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**81**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**83**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...:	A0G150579	**Work Order #...:**	L38V31AQ-MS	**Matrix.....:**	WG
MS Lot-Sample #:	A0G150579-016		L38V31AR-MSD		
Date Sampled...:	07/15/10 09:20	**Date Received..:**	07/15/10		
Prep Date.....:	07/20/10	**Analysis Date..:**	07/27/10		
Prep Batch #...:	0201035				
Dilution Factor:	2	**Initial Wgt/Vol:**	500 mL	**Final Wgt/Vol..:**	5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**78**	**(50 - 150)**			**SW846 8082**
	82	**(50 - 150)**	**5.4**	**(0-50)**	**SW846 8082**
Aroclor 1260	**87**	**(50 - 150)**			**SW846 8082**
	85	**(50 - 150)**	**1.4**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	67	(50 - 150)
	81	(50 - 150)
Decachlorobiphenyl	89	(50 - 150)
	81	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

SW846 8082 SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc. Client: Environmental Quality Mgt., Inc.

Lab Code: TALCAN SDG No:

Lot #: A0G150579

Extraction: XXI61QH36

	CLIENT ID.	SRG01	SRG02	TOT OUT
01	FWGLL1mw-085C-1530-GW	74	69	00
02	FWGLL1mw-082C-1527-GW	62	56	00
03	FWGLL2mw-269C-1538-GW	73	34 *	01
04	FWGSCFmw-005-1519-GW	76	32 *	01
05	FWGSCFmw-004-1518-GW	79	83	00
06	FWGSCFmw-DUP6-1571-GW	83	53	00
07	FWGLL2mw-261C-1533-GW	79	55	00
08	FWGLL2mw-270C-1539-GW	64	59	00
09	FWGEQUIPRINSE5-1582-GW	64	92	00
10	METHOD BLK. L4D0M1AA	63	84	00
11	LCS L4D0M1AC	76	52	00
12	FWGLL2mw-261C-1533-GW D	81	81	00
13	FWGLL2mw-261C-1533-GW S	67	89	00

SURROGATES		QC LIMITS
SRG01	= Tetrachloro-m-xylene	(50-150)
SRG02	= Decachlorobiphenyl	(50-150)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.6 and 5.2 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			ICP- 5/17/10 ICPMS-7/16/2010	LCG Table 7 R
11. Was a MRL Level Verification performed at the beginning of the daily sequence? Were results 70-130%?	✓				LCG Table 7 >130%=J; 65-70%=J/UJ; <65%=J/R
12. Was the ICV (second source verification) analyzed after the ICAL?	✓				LCG Table 7
13. Were all analytes within 90-110% in the ICV?	✓				LCG Table 7 J>110%=J; 90-85%=J/UJ; <85%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		ICP The ICB analyzed 7/21/10 had detected potassium at 134ug/L. No qualifications were made as there were no detected potassium concentrations <5x contamination. ICPMS The ICB analyzed 7/30/10 had thallium detected at 0.23ug/L. The thallium results for samples FWGLL1mw-085c-1530-GF and FWGLL1mw-082c-1527-GF were <5x the ICB contamination and were qualified, "U". No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U
15. Were CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 7
16. Were CCV results within 90 to 110%?	✓				LCG Table 7 >110%=J 90-85%=J/UJ; <85%=J/R
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICP The CCBs analyzed 7/21/10 had detected potassium from 134ug/L to 140ug/L. No qualifications were made as there were no detected potassium concentrations <5x contamination. ICPMS The CCBs analyzed 7/30/2010 had beryllium detected from 0.017 to 0.027ug/L, antimony from 0.04ug/L to 0.053ug/L, cadmium at 0.012-0.034ug/L, iron from 9.3ug/L to 19ug/L and thallium from 0.25ug/L to 0.33ug/L. No additional thallium qualifications other than those made for the ICB contamination were made. All other contaminants in the calibration blanks did not require qualification of the data as all bracketed detected contaminants were >5x the blank contamination.	LCG Table 7 <5x = U
18. Was an Interelement Check Standard run at the beginning of the analytical sequence?	✓				LCG Table 7
19. Was the ICS recovery within 80 to 120% of true value for each element of interest?	✓				LCG Table 7 >120%=J; 50-79%=J/UJ; <50%=Pj/R
21. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 7
22. Were target analytes <1/2 the MRL in the method blank?	✓			ADR checked section;	LCG Table 7 <5x = B

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
23. Was a field blank collected and analyzed?	✓				
24. Were target analytes reported in the field blank analyses >1/2 the MRL?		✓		ADR checked section;	<5x=B
25. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 7
26. Were the LCS recoveries within limits specified in LCG Appendix C?		✓		Checked by ADR. The beryllium LCS recovered above control limits at 123%. No qualification was required as there were no detected beryllium concentrations.	LCG Appendix C >UL=J; 60%-LL= J/UJ; <60%=J/R
27. Was a MS prepared with each batch?	✓				LCG Table 7
28. Was the MS and Lab Duplicate parent a Ravenna sample?	✓				
29. Were the MS recoveries within 75-125%?	✓			Checked by ADR.	LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤20%?	✓				LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	Not evaluated as the MS/MSD results were acceptable.	LCG Table 7 >125%=J; 30-75%=J/UJ; <30%=R
32. Was a serial dilution performed as needed?	✓				
33. Was the 4 fold dilution within ± 10% of the original result?	✓				LCG Table 7 >10%=J
34. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR. Only results where both sample results were detected above the RL were evaluated.	QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				
36. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta / September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
37. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 7 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.6 and 5.2 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Were the CCBs analyzed every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?	✓			No qualifications were made for due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
16. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 9
17. Were target analytes detected in the method blank <1/2 the MRL?	✓				LCG Table 9 <5x = B
18. Was a field blank collected and analyzed?	✓				
19. Were target analytes reported in the field blank analyses at <1/2 the MRL?	✓				<5x=B
20. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 9
21. Were the LCS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 J>120%=J; 50-79%=J/UJ; <50%=R
22. Was a MS prepared with each batch?	✓				LCG Table 9
23. Was the MS and Lab Duplicate parent sample a Ravenna sample?	✓				
24. Were the MS recoveries within 80-120%?	✓			Checked by ADR.	LCG Table 9 >125% = J 30% - 75% = J/UJ <30% = J/R
25. Was the Matrix Duplicate RPD ± 20%?	✓				LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Checked by ADR.	QAPP Table 3-2
27. Were sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ September 9, 2010

SDG: A0G150579 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
29. Were lab comments included in report? If yes, summarize contents.		✓			

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 9 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GF

TOTAL Metals

Lot-Sample #...: A0G150579-003 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:27 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197015						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38T91AM
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38T91AA
		Dilution Factor: 1		Analysis Time..: 21:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38T91AJ
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**13.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38T91AN**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38T91AC
		Dilution Factor: 1		Analysis Time..: 21:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**64600**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38T91AP**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L38T91AD
		Dilution Factor: 1		Analysis Time..: 21:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**2.8 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38T91AQ**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38T91AR
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38T91AT
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GF

TOTAL Metals

Lot-Sample #...: A0G150579-003 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**435**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38T91AE**
		Dilution Factor: 1		Analysis Time..: 21:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L38T91A2
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**1690**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38T91AU**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**18300**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38T91AV**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**564**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38T91AW**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1380**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38T91AX**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**11.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38T91A0**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L38T91AK
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L38T91AF
		Dilution Factor: 1		Analysis Time..: 21:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38T91AL
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GF

TOTAL Metals

Lot-Sample #...: A0G150579-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.14 B**	**1.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38T91AH**
		Dilution Factor: 1		Analysis Time..: 21:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38T91A1
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**4.1 B**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38T91AG**
		Dilution Factor: 1		Analysis Time..: 21:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GF

TOTAL Metals

Lot-Sample #...: A0G150579-005 **Matrix.....:** WG
Date Sampled...: 07/15/10 10:41 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197015						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VF1AQ
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38VF1AE
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VF1AM
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**9.9 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VF1AR**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38VF1AF
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**29800**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VF1AT**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	**0.18 B**	**0.50**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38VF1AG**
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**8.2**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VF1AU**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VF1AV
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VF1AW
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-082C-1527-GF

TOTAL Metals

Lot-Sample #...: A0G150579-005 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**5150**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38VF1AH**
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L38VF1AD
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**1460**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VF1AX**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**12300**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VF1A0**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1080**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VF1A1**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1190**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VF1A2**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**17.9**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VF1AA**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L38VF1AN
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L38VF1AJ
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VF1AP
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GF

TOTAL Metals

Lot-Sample #...: A0G150579-005 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.16 B**	**1.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38VF1AL**
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38VF1AC
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**49.1**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38VF1AK**
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GF

TOTAL Metals

Lot-Sample #...: A0G150579-007 **Matrix.....:** WG
Date Sampled...: 07/15/10 12:47 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197015						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VL1AQ
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38VL1AE
		Dilution Factor: 1		Analysis Time..: 22:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VL1AM
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**215**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VL1AR**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38VL1AF
		Dilution Factor: 1		Analysis Time..: 22:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**30300**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VL1AT**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L38VL1AG
		Dilution Factor: 1		Analysis Time..: 22:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VL1AU
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VL1AV
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VL1AW
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GF

TOTAL Metals

Lot-Sample #...: A0G150579-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**5990**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38VL1AH**
		Dilution Factor: 1		Analysis Time..: 22:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L38VL1AD
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**2970**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VL1AX**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**15200**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VL1A0**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1540**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VL1A1**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**5930**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VL1A2**
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38VL1AA
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L38VL1AN
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L38VL1AJ
		Dilution Factor: 1		Analysis Time..: 22:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VL1AP
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GF

TOTAL Metals

Lot-Sample #...: A0G150579-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38VL1AL
		Dilution Factor: 1		Analysis Time..: 22:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38VL1AC
		Dilution Factor: 1		Analysis Time..: 14:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L38VL1AK
		Dilution Factor: 1		Analysis Time..: 22:03	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GF

TOTAL Metals

Lot-Sample #...: A0G150579-010 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:18 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197015						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VR1AQ
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38VR1AE
		Dilution Factor: 1		Analysis Time..: 22:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VR1AM
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**22.4**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VR1AR**
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38VR1AF
		Dilution Factor: 1		Analysis Time..: 22:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**89400**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VR1AT**
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L38VR1AG
		Dilution Factor: 1		Analysis Time..: 22:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VR1AU
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	**3.0 B**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VR1AV**
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VR1AW
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GF

TOTAL Metals

Lot-Sample #...: A0G150579-010 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**4440**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38VR1AH**
		Dilution Factor: 1		Analysis Time..: 22:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L38VR1AD
		Dilution Factor: 1		Analysis Time..: 15:30	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**2180**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VR1AX**
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**43100**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VR1A0**
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1750**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VR1A1**
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**8400**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38VR1A2**
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38VR1AA
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L38VR1AN
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L38VR1AJ
		Dilution Factor: 1		Analysis Time..: 22:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VR1AP
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GF

TOTAL Metals

Lot-Sample #...: A0G150579-010 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38VR1AL
		Dilution Factor: 1		Analysis Time..: 22:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38VR1AC
		Dilution Factor: 1		Analysis Time..: 14:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L38VR1AK
		Dilution Factor: 1		Analysis Time..: 22:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GF

TOTAL Metals

Lot-Sample #...: A0G150579-012 **Matrix.....:** WG
Date Sampled...: 07/15/10 10:58 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197015						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AQ
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38VW1AE
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AM
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**97.9**	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AR
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38VW1AF
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**135000**	1000	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AT
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L38VW1AG
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AU
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AV
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AW
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GF

TOTAL Metals

Lot-Sample #...: A0G150579-012 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38VW1AH
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L38VW1AD
		Dilution Factor: 1		Analysis Time..: 15:20	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**2440**	1000	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AX
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**54200**	1000	ug/L	SW846 6010B	07/16-07/21/10	L38VW1A0
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**624**	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38VW1A1
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**12700**	1000	ug/L	SW846 6010B	07/16-07/21/10	L38VW1A2
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AA
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AN
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L38VW1AJ
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AP
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GF

TOTAL Metals

Lot-Sample #...: A0G150579-012 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38VW1AL
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38VW1AC
		Dilution Factor: 1		Analysis Time..: 14:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L38VW1AK
		Dilution Factor: 1		Analysis Time..: 22:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GF

TOTAL Metals

Lot-Sample #...: A0G150579-014 **Matrix.....:** WG
Date Sampled...: 07/15/10 12:08 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197015						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V11AQ
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38V11AE
		Dilution Factor: 1		Analysis Time..: 22:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V11AM
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**96.3**	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38V11AR
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38V11AF
		Dilution Factor: 1		Analysis Time..: 22:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**133000**	1000	ug/L	SW846 6010B	07/16-07/21/10	L38V11AT
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L38V11AG
		Dilution Factor: 1		Analysis Time..: 22:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V11AU
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V11AV
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V11AW
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GF

TOTAL Metals

Lot-Sample #...: A0G150579-014 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38V11AH
		Dilution Factor: 1		Analysis Time..: 22:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L38V11AD
		Dilution Factor: 1		Analysis Time..: 15:26	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**2390**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V11AX**
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**53300**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V11A0**
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**613**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V11A1**
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**12600**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V11A2**
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38V11AA
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L38V11AN
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L38V11AJ
		Dilution Factor: 1		Analysis Time..: 22:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V11AP
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GF

TOTAL Metals

Lot-Sample #...: A0G150579-014 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38V11AL
		Dilution Factor: 1		Analysis Time..: 22:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38V11AC
		Dilution Factor: 1		Analysis Time..: 14:50	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L38V11AK
		Dilution Factor: 1		Analysis Time..: 22:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GF

TOTAL Metals

Lot-Sample #...: A0G150579-017 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197015						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V41CL
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38V41AL
		Dilution Factor: 1		Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**11.2**	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V41CA
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**19.1**	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38V41CP
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38V41AP
		Dilution Factor: 1		Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**59200**	1000	ug/L	SW846 6010B	07/16-07/21/10	L38V41CT
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L38V41AT
		Dilution Factor: 1		Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**2.2 B**	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V41CW
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V41C1
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V41C4
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GF

TOTAL Metals

Lot-Sample #...: A0G150579-017 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**2290**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38V41AW**
		Dilution Factor: 1		Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L38V41AH
		Dilution Factor: 1		Analysis Time..: 15:12	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**1070**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V41C7**
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**21700**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V41DA**
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**375**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V41DE**
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**10800**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V41DH**
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**3.9 B**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V41AA**
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L38V41CE
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L38V41A1
		Dilution Factor: 1		Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V41CH
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GF

TOTAL Metals

Lot-Sample #...: A0G150579-017 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38V41A7
		Dilution Factor: 1		Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38V41AE
		Dilution Factor: 1		Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L38V41A4
		Dilution Factor: 1		Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GF

TOTAL Metals

Lot-Sample #...: A0G150579-019 **Matrix.....:** WG
Date Sampled...: 07/15/10 11:50 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197015						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V61AQ
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38V61AE
		Dilution Factor: 1		Analysis Time..: 22:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V61AM
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**13.1**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V61AR**
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38V61AF
		Dilution Factor: 1		Analysis Time..: 22:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**44400**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V61AT**
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L38V61AG
		Dilution Factor: 1		Analysis Time..: 22:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**7.2**	**5.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V61AU**
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V61AV
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V61AW
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GF

TOTAL Metals

Lot-Sample #...: A0G150579-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1420**	**50.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38V61AH**
		Dilution Factor: 1		Analysis Time..: 22:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L38V61AD
		Dilution Factor: 1		Analysis Time..: 15:25	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**1070**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V61AX**
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**16800**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V61A0**
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**384**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V61A1**
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2190**	**1000**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V61A2**
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	**12.7**	**10.0**	**ug/L**	**SW846 6010B**	**07/16-07/21/10**	**L38V61AA**
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L38V61AN
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L38V61AJ
		Dilution Factor: 1		Analysis Time..: 22:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V61AP
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GF

TOTAL Metals

Lot-Sample #...: A0G150579-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38V61AL
		Dilution Factor: 1		Analysis Time..: 22:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38V61AC
		Dilution Factor: 1		Analysis Time..: 15:31	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**3.5 B**	**10.0**	**ug/L**	**SW846 6020**	**07/16-07/30/10**	**L38V61AK**
		Dilution Factor: 1		Analysis Time..: 22:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

TOTAL Metals

Lot-Sample #...: A0G150579-020 **Matrix.....:** WQ
Date Sampled...: 07/15/10 12:30 **Date Received..:** 07/15/10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0197015						
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V71AU
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38V71AH
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V71AQ
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38V71AV
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38V71AJ
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L38V71AW
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L38V71AK
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V71AX
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V71A0
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V71A1
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

TOTAL Metals

Lot-Sample #...: A0G150579-020 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L38V71AL
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L38V71A8
		Dilution Factor: 1		Analysis Time..: 15:19	Analyst ID.....: 001576	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L38V71A2
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L38V71A3
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38V71A4
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L38V71A5
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 972		
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38V71A6
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L38V71AR
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L38V71AM
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L38V71AT
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

TOTAL Metals

Lot-Sample #...: A0G150579-020 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L38V71AP
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L38V71A7
		Dilution Factor: 1		Analysis Time..: 15:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L38V71AN
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A0G160000-015 **Prep Batch #...:** 0197015						
Aluminum	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L39CW1AA
		Dilution Factor: 1				
		Analysis Time..: 21:29		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	07/16-07/30/10	L39CW1AF
		Dilution Factor: 1				
		Analysis Time..: 21:29		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AJ
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AN
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L39CW1AC
		Dilution Factor: 1				
		Analysis Time..: 21:29		Analyst ID.....: 000079	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	07/16-07/30/10	L39CW1AD
		Dilution Factor: 1				
		Analysis Time..: 21:29		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AP
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AR
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AQ
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AT
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	07/16-07/30/10	L39CW1AE
		Dilution Factor: 1				
		Analysis Time..: 21:29		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AK
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AV
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AW
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	07/16-07/19/10	L39CW1A2
		Dilution Factor: 1				
		Analysis Time..: 15:08		Analyst ID.....: 001576	Instrument ID..: H4	
Nickel	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L39CW1A0
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AU
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AL
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AM
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6010B	07/16-07/21/10	L39CW1AX
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Thallium	ND	1.0	ug/L	SW846 6020	07/16-07/30/10	L39CW1AH
		Dilution Factor: 1				
		Analysis Time..: 21:29		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	07/16-07/21/10	L39CW1A1
		Dilution Factor: 1				
		Analysis Time..: 13:57		Analyst ID.....: 001637	Instrument ID..: I5	
Zinc	ND	10.0	ug/L	SW846 6020	07/16-07/30/10	L39CW1AG
		Dilution Factor: 1				
		Analysis Time..: 21:29		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A0G150579 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A0G160000-015 **Prep Batch #...:** 0197015					
Aluminum	104	(80 - 120)	SW846 6020	07/16-07/30/10	L39CW1A3
		Dilution Factor: 1	Analysis Time..: 21:34	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	123 N	(80 - 120)	SW846 6020	07/16-07/30/10	L39CW1A4
		Dilution Factor: 1	Analysis Time..: 21:34	Analyst ID.....: 000079	
		Instrument ID..: I8			
Cadmium	109	(80 - 120)	SW846 6020	07/16-07/30/10	L39CW1A5
		Dilution Factor: 1	Analysis Time..: 21:34	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	84	(80 - 120)	SW846 6020	07/16-07/30/10	L39CW1A6
		Dilution Factor: 1	Analysis Time..: 21:34	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	104	(80 - 120)	SW846 6020	07/16-07/30/10	L39CW1A7
		Dilution Factor: 1	Analysis Time..: 21:34	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	109	(80 - 120)	SW846 6020	07/16-07/30/10	L39CW1A8
		Dilution Factor: 1	Analysis Time..: 21:34	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	102	(80 - 120)	SW846 6020	07/16-07/30/10	L39CW1A9
		Dilution Factor: 1	Analysis Time..: 21:34	Analyst ID.....: 000079	
		Instrument ID..: I8			
Arsenic	101	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CA
		Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5			
Lead	102	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CC
		Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5			
Selenium	105	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CD
		Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	102	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CE
	Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637		
	Instrument ID..: I5				
Barium	100	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CF
	Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637		
	Instrument ID..: I5				
Calcium	99	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CG
	Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637		
	Instrument ID..: I5				
Cobalt	102	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CH
	Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637		
	Instrument ID..: I5				
Chromium	98	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CJ
	Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637		
	Instrument ID..: I5				
Copper	101	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CK
	Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637		
	Instrument ID..: I5				
Potassium	94	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CL
	Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637		
	Instrument ID..: I5				
Magnesium	102	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CM
	Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637		
	Instrument ID..: I5				
Manganese	102	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CN
	Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637		
	Instrument ID..: I5				
Sodium	99	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CP
	Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637		
	Instrument ID..: I5				
Nickel	104	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CQ
	Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637		
	Instrument ID..: I5				

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	98	(80 - 120)	SW846 6010B	07/16-07/21/10	L39CW1CR
		Dilution Factor: 1	Analysis Time..: 14:14	Analyst ID.....: 001637	
		Instrument ID..: I5			
Mercury	84	(80 - 120)	SW846 7470A	07/16-07/19/10	L39CW1CT
		Dilution Factor: 1	Analysis Time..: 15:10	Analyst ID.....: 001576	
		Instrument ID..: H4			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A0G160000-015 **Prep Batch #...:** 0197015							
Aluminum	10000	10400	ug/L	104	SW846 6020	07/16-07/30/10	L39CW1A3
			Dilution Factor: 1		Analysis Time..: 21:34	Analyst ID.....: 000079	
			Instrument ID..: I8				
Beryllium	100	123 N	ug/L	123	SW846 6020	07/16-07/30/10	L39CW1A4
			Dilution Factor: 1		Analysis Time..: 21:34	Analyst ID.....: 000079	
			Instrument ID..: I8				
Cadmium	100	109	ug/L	109	SW846 6020	07/16-07/30/10	L39CW1A5
			Dilution Factor: 1		Analysis Time..: 21:34	Analyst ID.....: 000079	
			Instrument ID..: I8				
Iron	10000	8430	ug/L	84	SW846 6020	07/16-07/30/10	L39CW1A6
			Dilution Factor: 1		Analysis Time..: 21:34	Analyst ID.....: 000079	
			Instrument ID..: I8				
Antimony	100	104	ug/L	104	SW846 6020	07/16-07/30/10	L39CW1A7
			Dilution Factor: 1		Analysis Time..: 21:34	Analyst ID.....: 000079	
			Instrument ID..: I8				
Zinc	100	109	ug/L	109	SW846 6020	07/16-07/30/10	L39CW1A8
			Dilution Factor: 1		Analysis Time..: 21:34	Analyst ID.....: 000079	
			Instrument ID..: I8				
Thallium	100	102	ug/L	102	SW846 6020	07/16-07/30/10	L39CW1A9
			Dilution Factor: 1		Analysis Time..: 21:34	Analyst ID.....: 000079	
			Instrument ID..: I8				
Arsenic	2000	2030	ug/L	101	SW846 6010B	07/16-07/21/10	L39CW1CA
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Lead	500	512	ug/L	102	SW846 6010B	07/16-07/21/10	L39CW1CC
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Selenium	2000	2100	ug/L	105	SW846 6010B	07/16-07/21/10	L39CW1CD
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	50.0	50.9	ug/L	102	SW846 6010B	07/16-07/21/10	L39CW1CE
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Barium	2000	2010	ug/L	100	SW846 6010B	07/16-07/21/10	L39CW1CF
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Calcium	50000	49600	ug/L	99	SW846 6010B	07/16-07/21/10	L39CW1CG
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Cobalt	500	511	ug/L	102	SW846 6010B	07/16-07/21/10	L39CW1CH
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Chromium	200	196	ug/L	98	SW846 6010B	07/16-07/21/10	L39CW1CJ
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Copper	250	252	ug/L	101	SW846 6010B	07/16-07/21/10	L39CW1CK
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Potassium	50000	47200	ug/L	94	SW846 6010B	07/16-07/21/10	L39CW1CL
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Magnesium	50000	51000	ug/L	102	SW846 6010B	07/16-07/21/10	L39CW1CM
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Manganese	500	508	ug/L	102	SW846 6010B	07/16-07/21/10	L39CW1CN
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Sodium	50000	49500	ug/L	99	SW846 6010B	07/16-07/21/10	L39CW1CP
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Nickel	500	518	ug/L	104	SW846 6010B	07/16-07/21/10	L39CW1CQ
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	500	490	ug/L	98	SW846 6010B	07/16-07/21/10	L39CW1CR
			Dilution Factor: 1		Analysis Time..: 14:14	Analyst ID.....: 001637	
			Instrument ID..: I5				
Mercury	5.0	4.2	ug/L	84	SW846 7470A	07/16-07/19/10	L39CW1CT
			Dilution Factor: 1		Analysis Time..: 15:10	Analyst ID.....: 001576	
			Instrument ID..: H4				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A0G150579-017 **Prep Batch #...:** 0197015					
Aluminum	101	(75 - 125)	SW846 6020	07/16-07/30/10	L38V41AM
		Dilution Factor: 1	Analysis Time..: 22:22	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	101	(75 - 125)	SW846 6020	07/16-07/30/10	L38V41A2
		Dilution Factor: 1	Analysis Time..: 22:22	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	105	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41CC
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Barium	103	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41CQ
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Beryllium	114	(75 - 125)	SW846 6020	07/16-07/30/10	L38V41AQ
		Dilution Factor: 1	Analysis Time..: 22:22	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	104	(75 - 125)	SW846 6020	07/16-07/30/10	L38V41AU
		Dilution Factor: 1	Analysis Time..: 22:22	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	106	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41CU
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Chromium	100	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41C2
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Cobalt	104	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41CX
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Copper	103	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41C5
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	101	(75 - 125)	SW846 6020	07/16-07/30/10	L38V41AX
		Dilution Factor: 1	Analysis Time..: 22:22	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	103	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41CF
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Magnesium	108	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41DC
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Manganese	108	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41DF
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Mercury	76 N	(80 - 120)	SW846 7470A	07/16-07/19/10	L38V41AJ
		Dilution Factor: 1	Analysis Time..: 15:12	Instrument ID..: H4	
		Analyst ID.....: 001576			
Nickel	107	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41AC
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Potassium	98	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41C8
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Selenium	107	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41CJ
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Silver	104	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41CM
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Sodium	101	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41DJ
		Dilution Factor: 1	Analysis Time..: 14:56	Instrument ID..: I5	
		Analyst ID.....: 001637			
Thallium	98	(75 - 125)	SW846 6020	07/16-07/30/10	L38V41A8
		Dilution Factor: 1	Analysis Time..: 22:22	Instrument ID..: I8	
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	100	(75 - 125)	SW846 6010B	07/16-07/21/10	L38V41AF
		Dilution Factor: 1	Analysis Time..: 14:56		Instrument ID..: I5
		Analyst ID.....: 001637			
Zinc	103	(75 - 125)	SW846 6020	07/16-07/30/10	L38V41A5
		Dilution Factor: 1	Analysis Time..: 22:22		Instrument ID..: I8
		Analyst ID.....: 000079			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A0G150579-017 **Prep Batch #...:** 0197015								
Aluminum	ND	10000	10100	ug/L	101	SW846 6020	07/16-07/30/10	L38V41AM
			Dilution Factor: 1		Analysis Time..: 22:22		Instrument ID..: I8	
			Analyst ID.....: 000079					
Antimony	ND	100	101	ug/L	101	SW846 6020	07/16-07/30/10	L38V41A2
			Dilution Factor: 1		Analysis Time..: 22:22		Instrument ID..: I8	
			Analyst ID.....: 000079					
Arsenic	11.2	2000	2110	ug/L	105	SW846 6010B	07/16-07/21/10	L38V41CC
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Barium	19.1	2000	2090	ug/L	103	SW846 6010B	07/16-07/21/10	L38V41CQ
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Beryllium	ND	100	114	ug/L	114	SW846 6020	07/16-07/30/10	L38V41AQ
			Dilution Factor: 1		Analysis Time..: 22:22		Instrument ID..: I8	
			Analyst ID.....: 000079					
Cadmium	ND	100	104	ug/L	104	SW846 6020	07/16-07/30/10	L38V41AU
			Dilution Factor: 1		Analysis Time..: 22:22		Instrument ID..: I8	
			Analyst ID.....: 000079					
Calcium	59200	50000	112000	ug/L	106	SW846 6010B	07/16-07/21/10	L38V41CU
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Chromium	ND	200	201	ug/L	100	SW846 6010B	07/16-07/21/10	L38V41C2
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Cobalt	2.2	500	524	ug/L	104	SW846 6010B	07/16-07/21/10	L38V41CX
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Copper	ND	250	259	ug/L	103	SW846 6010B	07/16-07/21/10	L38V41C5
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	2290	10000	12400	ug/L	101	SW846 6020	07/16-07/30/10	L38V41AX
			Dilution Factor: 1		Analysis Time..: 22:22		Instrument ID..: I8	
			Analyst ID.....: 000079					
Lead	ND	500	516	ug/L	103	SW846 6010B	07/16-07/21/10	L38V41CF
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Magnesium	21700	50000	75800	ug/L	108	SW846 6010B	07/16-07/21/10	L38V41DC
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Manganese	375	500	916	ug/L	108	SW846 6010B	07/16-07/21/10	L38V41DF
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Mercury	ND	1.0	0.76 N	ug/L	76	SW846 7470A	07/16-07/19/10	L38V41AJ
			Dilution Factor: 1		Analysis Time..: 15:12		Instrument ID..: H4	
			Analyst ID.....: 001576					
Nickel	3.9	500	540	ug/L	107	SW846 6010B	07/16-07/21/10	L38V41AC
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Potassium	1070	50000	50200	ug/L	98	SW846 6010B	07/16-07/21/10	L38V41C8
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Selenium	ND	2000	2140	ug/L	107	SW846 6010B	07/16-07/21/10	L38V41CJ
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Silver	ND	50.0	51.9	ug/L	104	SW846 6010B	07/16-07/21/10	L38V41CM
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Sodium	10800	50000	61500	ug/L	101	SW846 6010B	07/16-07/21/10	L38V41DJ
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Thallium	ND	100	97.6	ug/L	98	SW846 6020	07/16-07/30/10	L38V41A8
			Dilution Factor: 1		Analysis Time..: 22:22		Instrument ID..: I8	
			Analyst ID.....: 000079					

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: A0G150579 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	ND	500	500	ug/L	100	SW846 6010B	07/16-07/21/10	L38V41AF
			Dilution Factor: 1		Analysis Time..: 14:56		Instrument ID..: I5	
			Analyst ID.....: 001637					
Zinc	ND	100	103	ug/L	103	SW846 6020	07/16-07/30/10	L38V41A5
			Dilution Factor: 1		Analysis Time..: 22:22		Instrument ID..: I8	
			Analyst ID.....: 000079					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A0G150579 **Work Order #...:** L38V4-SMP L38V4-DUP **Matrix.....:** WG

Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/30/10	0197015
		Dilution Factor: 1				Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #: A0G150579-017		
	11.2	10.5	ug/L	6.6	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Barium						SD Lot-Sample #: A0G150579-017		
	19.1	19.6	ug/L	2.1	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/30/10	0197015
		Dilution Factor: 1				Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #: A0G150579-017		
	59200	56800	ug/L	4.1	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/30/10	0197015
		Dilution Factor: 1				Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #: A0G150579-017		
	2.2 B	1.8 B	ug/L	17	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G150579-000 **Work Order #...:** L38V4-SMP L38V4-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A0G150579-017		
	2290	2300	ug/L	0.39	(0-20)	SW846 6020	07/16-07/30/10	0197015
		Dilution Factor: 1				Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	07/16-07/19/10	0197015
		Dilution Factor: 1				Analysis Time..: 15:12	Analyst ID.....: 001576	
		Instrument ID..: H4						
Potassium						SD Lot-Sample #: A0G150579-017		
	1070	1120	ug/L	4.8	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A0G150579-017		
	21700	20500	ug/L	5.8	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A0G150579-017		
	375	365	ug/L	2.5	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A0G150579-017		
	10800	11100	ug/L	2.9	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Nickel						SD Lot-Sample #: A0G150579-017		
	3.9 B	3.6 B	ug/L	6.4	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A0G150579-000 **Work Order #...:** L38V4-SMP L38V4-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/30/10	0197015
		Dilution Factor: 1				Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8						
Selenium						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Thallium						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/30/10	0197015
		Dilution Factor: 1				Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8						
Vanadium						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	07/16-07/21/10	0197015
		Dilution Factor: 1				Analysis Time..: 14:56	Analyst ID.....: 001637	
		Instrument ID..: I5						
Zinc						SD Lot-Sample #: A0G150579-017		
	ND	ND	ug/L	0	(0-20)	SW846 6020	07/16-07/30/10	0197015
		Dilution Factor: 1				Analysis Time..: 22:22	Analyst ID.....: 000079	
		Instrument ID..: I8						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

EXECUTIVE SUMMARY - Detection Highlights

A0G150579

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGTEAM1-TRIP 07/15/10 08:00 001				
Methylene chloride	0.35 J,B	2.0	ug/L	SW846 8260B
Acetone	2.3 J	10	ug/L	SW846 8260B
FWGLL1mw-085C-1530-GW 07/15/10 09:27 002				
bis(2-Ethylhexyl) phthalate	2.5 J,B	10	ug/L	SW846 8270C
FWGLL1mw-085C-1530-GF 07/15/10 09:27 003				
Iron	435	50.0	ug/L	SW846 6020
Thallium	0.14 B	1.0	ug/L	SW846 6020
Zinc	4.1 B	10.0	ug/L	SW846 6020
Barium	13.4	10.0	ug/L	SW846 6010B
Calcium	64600	1000	ug/L	SW846 6010B
Cobalt	2.8 B	5.0	ug/L	SW846 6010B
Potassium	1690	1000	ug/L	SW846 6010B
Magnesium	18300	1000	ug/L	SW846 6010B
Manganese	564	10.0	ug/L	SW846 6010B
Sodium	1380	1000	ug/L	SW846 6010B
Nickel	11.4	10.0	ug/L	SW846 6010B
FWGLL1mw-082C-1527-GW 07/15/10 10:41 004				
bis(2-Ethylhexyl) phthalate	2.0 J,B	10	ug/L	SW846 8270C
FWGLL1mw-082C-1527-GF 07/15/10 10:41 005				
Cadmium	0.18 B	0.50	ug/L	SW846 6020
Iron	5150	50.0	ug/L	SW846 6020
Thallium	0.16 B	1.0	ug/L	SW846 6020
Zinc	49.1	10.0	ug/L	SW846 6020
Barium	9.9 B	10.0	ug/L	SW846 6010B
Calcium	29800	1000	ug/L	SW846 6010B
Cobalt	8.2	5.0	ug/L	SW846 6010B
Potassium	1460	1000	ug/L	SW846 6010B
Magnesium	12300	1000	ug/L	SW846 6010B
Manganese	1080	10.0	ug/L	SW846 6010B
Sodium	1190	1000	ug/L	SW846 6010B
Nickel	17.9	10.0	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G150579

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL2mw-269C-1538-GW 07/15/10 12:47 006				
bis(2-Ethylhexyl) phthalate	1.4 J,B	10	ug/L	SW846 8270C
FWGLL2mw-269C-1538-GF 07/15/10 12:47 007				
Iron	5990	50.0	ug/L	SW846 6020
Barium	215	10.0	ug/L	SW846 6010B
Calcium	30300	1000	ug/L	SW846 6010B
Potassium	2970	1000	ug/L	SW846 6010B
Magnesium	15200	1000	ug/L	SW846 6010B
Manganese	1540	10.0	ug/L	SW846 6010B
Sodium	5930	1000	ug/L	SW846 6010B
FWGTEAM2-TRIP 07/15/10 08:00 008				
Acetone	1.6 J	10	ug/L	SW846 8260B
FWGSCFmw-005-1519-GW 07/15/10 09:18 009				
Carbon disulfide	0.64 J	1.0	ug/L	SW846 8260B
FWGSCFmw-005-1519-GF 07/15/10 09:18 010				
Iron	4440	50.0	ug/L	SW846 6020
Barium	22.4	10.0	ug/L	SW846 6010B
Calcium	89400	1000	ug/L	SW846 6010B
Chromium	3.0 B	5.0	ug/L	SW846 6010B
Potassium	2180	1000	ug/L	SW846 6010B
Magnesium	43100	1000	ug/L	SW846 6010B
Manganese	1750	10.0	ug/L	SW846 6010B
Sodium	8400	1000	ug/L	SW846 6010B
FWGSCFmw-004-1518-GW 07/15/10 10:58 011				
bis(2-Ethylhexyl) phthalate	0.92 J,B	10	ug/L	SW846 8270C
Phenol	0.81 J	1.0	ug/L	SW846 8270C
FWGSCFmw-004-1518-GF 07/15/10 10:58 012				
Barium	97.9	10.0	ug/L	SW846 6010B
Calcium	135000	1000	ug/L	SW846 6010B
Potassium	2440	1000	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A0G150579

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGSCFmw-004-1518-GF 07/15/10 10:58 012				
Magnesium	54200	1000	ug/L	SW846 6010B
Manganese	624	10.0	ug/L	SW846 6010B
Sodium	12700	1000	ug/L	SW846 6010B
FWGSCFmw-DUP6-1571-GW 07/15/10 12:08 013				
bis(2-Ethylhexyl) phthalate	2.9 J,B	10	ug/L	SW846 8270C
FWGSCFmw-DUP6-1571-GF 07/15/10 12:08 014				
Barium	96.3	10.0	ug/L	SW846 6010B
Calcium	133000	1000	ug/L	SW846 6010B
Potassium	2390	1000	ug/L	SW846 6010B
Magnesium	53300	1000	ug/L	SW846 6010B
Manganese	613	10.0	ug/L	SW846 6010B
Sodium	12600	1000	ug/L	SW846 6010B
FWGTRIP-TEAM3 07/15/10 08:00 015				
Acetone	1.4 J	10	ug/L	SW846 8260B
FWGLL2mw-261C-1533-GW 07/15/10 09:20 016				
bis(2-Ethylhexyl) phthalate	0.87 J	10	ug/L	SW846 8270C
FWGLL2mw-261C-1533-GF 07/15/10 09:20 017				
Iron	2290	50.0	ug/L	SW846 6020
Arsenic	11.2	5.0	ug/L	SW846 6010B
Barium	19.1	10.0	ug/L	SW846 6010B
Calcium	59200	1000	ug/L	SW846 6010B
Cobalt	2.2 B	5.0	ug/L	SW846 6010B
Potassium	1070	1000	ug/L	SW846 6010B
Magnesium	21700	1000	ug/L	SW846 6010B
Manganese	375	10.0	ug/L	SW846 6010B
Sodium	10800	1000	ug/L	SW846 6010B
Nickel	3.9 B	10.0	ug/L	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A0G150579

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL2mw-270C-1539-GW 07/15/10 11:50	**018**			
Endrin ketone	0.0090 J	0.030	ug/L	SW846 8081A
Butyl benzyl phthalate	13	1.0	ug/L	SW846 8270C
Phenol	1.4	1.0	ug/L	SW846 8270C
FWGLL2mw-270C-1539-GF 07/15/10 11:50	**019**			
Iron	1420	50.0	ug/L	SW846 6020
Zinc	3.5 B	10.0	ug/L	SW846 6020
Barium	13.1	10.0	ug/L	SW846 6010B
Calcium	44400	1000	ug/L	SW846 6010B
Cobalt	7.2	5.0	ug/L	SW846 6010B
Potassium	1070	1000	ug/L	SW846 6010B
Magnesium	16800	1000	ug/L	SW846 6010B
Manganese	384	10.0	ug/L	SW846 6010B
Sodium	2190	1000	ug/L	SW846 6010B
Nickel	12.7	10.0	ug/L	SW846 6010B
FWGEQUIPRINSE5-1582-GW 07/15/10 12:30	**020**			
bis(2-Ethylhexyl) phthalate	0.91 J,B	10	ug/L	SW846 8270C
Methylene chloride	0.51 J	2.0	ug/L	SW846 8260B
Acetone	6.3 J	10	ug/L	SW846 8260B
2-Butanone	10	10	ug/L	SW846 8260B

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50721A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 7/21/2010 10:42 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	5	4.4	U								
Barium	493.409	10	0.3	U								
Calcium	317.933	1000	**-30.0**	**B**								
Chromium	267.716	5	1.4	U								
Cobalt	228.616	5	1.3	U								
Copper	324.753	5	2.1	U								
Lead	220.353	3	1.5	U								
Magnesium	279.078	1000	14.8	U								
Manganese	257.61	10	0.3	U								
Nickel	231.604	10	2.3	U								
Potassium	766.491	1000	**134.0**	**B**								
Selenium	196.026	5	3.4	U								
Silver	328.068	5	1.3	U								
Sodium	330.232	1000	750.0	U								
Vanadium	292.402	10	2.0	U								

IL K70

No Qual - all samples > 5x blank

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50721A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 7/21/2010 11:47 AM Found	Q	CCB 7/21/2010 12:58 PM Found	Q	CCB 7/21/2010 2:08 PM Found	Q	CCB 7/21/2010 3:19 PM Found	Q	CCB 7/21/2010 4:30 PM Found	Q
Arsenic	189.042	5	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
Barium	493.409	10	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Calcium	317.933	1000	**-26.0**	**B**	**-23.0**	**B**	**-29.0**	**B**	**-38.0**	**B**	**-37.0**	**B**
Chromium	267.716	5	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Cobalt	228.616	5	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
Copper	324.753	5	2.1	U	2.1	U	2.1	U	**-2.2**	**B**	2.1	U
Lead	220.353	3	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Magnesium	279.078	1000	14.8	U	14.8	U	14.8	U	14.8	U	14.8	U
Manganese	257.61	10	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Nickel	231.604	10	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U
Potassium	766.491	1000	**138.0**	**B**	**140.0**	**B**	**135.0**	**B**	**136.0**	**B**	**134.0**	**B**
Selenium	196.026	5	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U
Silver	328.068	5	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
Sodium	330.232	1000	750.0	U	750.0	U	750.0	U	750.0	U	750.0	U
Vanadium	292.402	10	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U

UL 700

NR.

5.21.0

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 7/30/2010 11:16 AM Found	Q	CCB 7/30/2010 9:06 PM Found	Q	CCB 10 7/30/2010 9:48 PM Found	Q	CCB 11 7/30/2010 10:50 PM Found	Q	CCB 12 7/30/2010 11:52 PM Found	Q
Aluminum	27	50	4.2	U	**8**	**B**	4.2	U	4.2	U	4.2	U
Antimony	121	2	0.038	U	**0.053**	**B**	**0.04**	**B**	0.038	U	0.038	U
Beryllium	9	1	0.0076	U	**0.024**	**B**	**0.017**	**B**	**0.021**	**B**	**0.027**	**B**
Cadmium	111	0.5	**0.012**	**B**	**0.034**	**B**	**0.031**	**B**	**0.016**	**B**	**0.023**	**B**
Iron	56	50	3.2	U	**19**	**B**	**11.1**	**B**	**9.3**	**B**	**9.6**	**B**
Thallium	205	1	**0.27**	**B**	**0.33**	**B**	**0.32**	**B**	**0.29**	**B**	**0.25**	**B**
Zinc	66	10	10.1	U	10.1	U	10.1	U	10.1	U	10.1	U

Sb < 0.265 NQ

Be < 0.135 NQ

Cd < 0.17 NQ

Fe < 95 NQ

Tl < 1.65 No additional qual.

5.04.5

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80730A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 7/30/2010 10:47 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	4.2	U								
Antimony	121	2	0.038	U								
Beryllium	9	1	0.0076	U								
Cadmium	111	0.5	0.0074	U								
Iron	56	50	3.2	U								
Thallium	205	1	**0.23**	**B**								
Zinc	66	10	10.1	U								

Tl c 1.15 ug/L.
- 1530
- 1527

5.04.5

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

A0G160000 MB	015	L39CW	TOTAL	H4	07/19/10	15:08
	HG					
A0G160000 LCS	015	L39CW	TOTAL	H4	07/19/10	15:10
	HG					
A0G150579	017	L38V4	TOTAL	H4	07/19/10	15:12
	HG					
A0G150579 DUP	017	L38V4	TOTAL	H4	07/19/10	15:13
	HG					
A0G150579 MS	017	L38V4	TOTAL	H4	07/19/10	15:18
	HG					
A0G150579	020	L38V7	TOTAL	H4	07/19/10	15:19
	HG					
A0G150579	012	L38VW	TOTAL	H4	07/19/10	15:20
	HG					
A0G150579	003	L38T9	TOTAL	H4	07/19/10	15:23
	HG					
A0G150579	019	L38V6	TOTAL	H4	07/19/10	15:25
	HG					
A0G150579	014	L38V1	TOTAL	H4	07/19/10	15:26
	HG					
A0G150579	007	L38VL	TOTAL	H4	07/19/10	15:28
	HG					
A0G150579	010	L38VR	TOTAL	H4	07/19/10	15:30
	HG					
A0G150579	005	L38VF	TOTAL	H4	07/19/10	15:31
	HG					
A0G160000 MB	015	L39CW	TOTAL	I5	07/21/10	13:57
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G160000 LCS	015	L39CW	TOTAL	I5	07/21/10	14:14
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G150579	003	L38T9	TOTAL	I5	07/21/10	14:20
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					

Metals Run Log
Additional Information

A0G150579	005	L38VF	TOTAL	I5	07/21/10	14:26
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G150579	007	L38VL	TOTAL	I5	07/21/10	14:32
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G150579	010	L38VR	TOTAL	I5	07/21/10	14:38
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G150579	012	L38VW	TOTAL	I5	07/21/10	14:44
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G150579	014	L38V1	TOTAL	I5	07/21/10	14:50
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G150579	017	L38V4	TOTAL	I5	07/21/10	14:56
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G150579 DUP	017	L38V4	TOTAL	I5	07/21/10	15:08
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G150579 MS	017	L38V4	TOTAL	I5	07/21/10	15:25
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G150579	019	L38V6	TOTAL	I5	07/21/10	15:31
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G150579	020	L38V7	TOTAL	I5	07/21/10	15:37
	AG AS BA CA CO CR CU KX MG MN NA NI PB SE VX					
A0G160000 MB	015	L39CW	TOTAL	I8	07/30/10	21:29
	AL BE CD FE SB TL ZN					
A0G160000 LCS	015	L39CW	TOTAL	I8	07/30/10	21:34
	AL BE CD FE SB TL ZN					
A0G150579	003	L38T9	TOTAL	I8	07/30/10	21:53
	AL BE CD FE SB TL ZN					
A0G150579	005	L38VF	TOTAL	I8	07/30/10	21:58
	AL BE CD FE SB TL ZN					
A0G150579	007	L38VL	TOTAL	I8	07/30/10	22:03
	AL BE CD FE SB TL ZN					
A0G150579	010	L38VR	TOTAL	I8	07/30/10	22:07
	AL BE CD FE SB TL ZN					

Metals Run Log
Additional Information

A0G150579	012	L38VW	TOTAL	I8	07/30/10	22:12
		AL BE CD FE SB TL ZN				
A0G150579	014	L38V1	TOTAL	I8	07/30/10	22:17
		AL BE CD FE SB TL ZN				
A0G150579	017	L38V4	TOTAL	I8	07/30/10	22:22
		AL BE CD FE SB TL ZN				
A0G150579 DUP	017	L38V4	TOTAL	I8	07/30/10	22:31
		AL BE CD FE SB TL ZN				
A0G150579 MS	017	L38V4	TOTAL	I8	07/30/10	22:36
		AL BE CD FE SB TL ZN				
A0G150579	019	L38V6	TOTAL	I8	07/30/10	22:55
		AL BE CD FE SB TL ZN				
A0G150579	020	L38V7	TOTAL	I8	07/30/10	23:00
		AL BE CD FE SB TL ZN				

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0197015 **Analysis Method :** 6020 **Analysis Date :** 07/30/2010

Preparation Batch : 0197015 **Preparation Type :** 3005A **Preparation Date :** 07/16/2010

Lab Reporting Batch : A0G150579 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	Matrix	Analyte Name	Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0G160000015C	AQ	Beryllium	123		60.00	80.00	120.00	20.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE5-1582-GW	A0G150579020
FWGLL1mw-082C-1527-GF	A0G150579005
FWGLL1mw-085C-1530-GF	A0G150579003
FWGLL2mw-261C-1533-GF	A0G150579017
FWGLL2mw-269C-1538-GF	A0G150579007
FWGLL2mw-270C-1539-GF	A0G150579019
FWGSCFmw-004-1518-GF	A0G150579012
FWGSCFmw-005-1519-GF	A0G150579010
FWGSCFmw-DUP6-1571-GF	A0G150579014

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/ September 10, 2010

SDG: A0G150579 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
1. Did Chain-of-Custody information agree with laboratory report?	X				
2. Were samples preserved properly and received in good condition?	X			The coolers were received between 1.6 and 5.2°C.	QAPP Table 4-2
3. Were holding times met?	X				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	X				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	X				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	X				QAPP Table 3-9
7. Was the Linear Calibration Range verified using 3 standards and 1 blank? Was the ICV within 10% of the initial values?	X				Method EPA 353.2 Section 9.2.2 J
8. Were the calibration standards verified by preparation and analysis of a Quality Control Sample? Were results within 10% of the stated values?	X				Method EPA 353.2 Section 9.2.3 Pj
9. Was an Instrument Performance Check Solution (CCV) analyzed immediately following daily calibration, after every 10th sample, and at the end of the analytical sequence?	X				Method EPA 353.2 Section 9.3.4
10. Was the CCV a mid-level standard from the initial calibration curve?	X				Method EPA 353.2 Section 9.3.4
11. Were the CCVs 90-110%?	X				Method EPA 353.2 Section 9.3.4 >110%=J; 85-90%=J/UJ; <85%=J/R
12. Was a method blank and a calibration blank prepared and analyzed with each batch?	X				Method EPA 353.2 Section 9.3.1, 9.3.4

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG:** A0G150579 Rev 0
Sample Event: July 2010 **Analysis:** EPA 353.2
Data Reviewer/Date: Angye Dragotta/ September 10, 2010

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
13. Were target analytes detected in the method blank or calibration blank >1/2 the MRL?		X		ADR checked section. The ICB had a detected nitrate concentration of 0.023mg/L and following CCB at 0.0718mg/L. No qualifications were made as there were no detected nitrate/nitrite concentrations.	LCG Attachment A Section 11 <5x = U
14. Was a field blank (trip or equipment) collected and analyzed?	X				
15. Were target analytes reported in the field blank analyses (trip or equipment) >1/2 the MRL?		X			*<5x=B*
16. Was a field duplicate analyzed? Were the RPDs acceptable?	X				
17. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within 90-110%?	X				Method EPA 353.2 Section 9.3.3 J/UJ; <50%= R
18. Was a MS/MSD pair prepared with each batch?	X				*Method EPA 353.2 Section 9.4.1*
19. Was the MS/MSD parent sample a Ravenna sample?	X				
20. Were MS/MSD recoveries and RPD within acceptance criteria?	X			The matrix spike recovered above control limits at 134%, however the parent sample was not from this SDG so no qualifications were made.	*Method EPA 353.2 Section 9.4.2 Pj*
21. Were sample concentrations within calibration range?	X				
22. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		X			
23. Were lab comments included in report? If yes, summarize contents.	X			See narrative.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004
Additional Comments:

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/September 10, 2010

SDG: A0G150579 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.6 and 5.2 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-9
7. Does the initial calibration curve consist of at least 6 standards and one blank?	✓				LCG Table 10 R
8. Was the correlation coefficient R ≥ 0.995?	✓				LCG Table 10 R<0.995=-J/R
9. Were % RSDs ≤ 10% in all standards and ICV/CCVs?	✓				LCG Table 10 RSD%>10=J
10. Were a high and low standard distilled and compared to the undistilled standard? Were the results within ± 10%?			✓	No data provided to evaluate.	LCG Table 10 R
11. Was an MDL Level Verification performed at least once per quarter with all target analytes detected?	✓			7/22/10	LCG Table 10 R
12. Was a MRL Level Verification performed at the beginning of every daily sequence? Were results within 70-130%?	✓				LCG Table 10 >130%=J; 65-70%=J/UJ; <65%=J/R
13. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓				LCG Table 10 >115%=J; 80-85%=J/UJ; <80%=J/R
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				LCG Table 7 < 5x = U
15. Was a CCV run at the beginning and end of the analytical sequence?	✓				LCG Table 10

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/September 10, 2010

SDG: A0G150579 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
16. Were the CCV results 80-120%?	✓				LCG Table 10 >120%=J; 75-80%=J/UJ; <75%=J/R
17. Was a method blank prepared and analyzed with each batch?	✓				
18. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR.	LCG Table 10 <5x=B
19. Was a field blank collected and analyzed?	✓				
20. Were target analytes in the field blank analyses <1/2 the MRL?	✓				<5x=B
21. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Checked by ADR.	QAPP Table 3-2 >30% = J
22. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 10
23. Were the LCS recoveries 80-120%?	✓			Checked by ADR.	LCG Table 10 >120%=J; 50-79%=J/UJ; <50%=R
24. Was a MS prepared once per every 10 samples?	✓				LCG Table 10
25. Was the MS parent a Ravenna sample?	✓				
26. Were MS recoveries 75-125%?	✓				QAPP Table 3-2 >125%=J; 30-75%=J/UJ; <30%=J/R
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: July 2010
Data Reviewer/Date: Angye Dragotta/September 10, 2010

SDG: A0G150579 R0
Analysis: SW846 9012

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 10 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1530-GW

General Chemistry

Lot-Sample #...: A0G150579-002 **Work Order #...:** L38T6 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:27 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1527-GW

General Chemistry

Lot-Sample #...: A0G150579-004 **Work Order #...:** L38VC **Matrix.....:** WG
Date Sampled...: 07/15/10 10:41 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1538-GW

General Chemistry

Lot-Sample #...: A0G150579-006 **Work Order #...:** L38VG **Matrix.....:** WG
Date Sampled...: 07/15/10 12:47 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1519-GW

General Chemistry

Lot-Sample #...: A0G150579-009 **Work Order #...:** L38VN **Matrix.....:** WG
Date Sampled...: 07/15/10 09:18 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259
	Dilution Factor: 1			MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/27/10	0208347
	Dilution Factor: 1			MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1518-GW

General Chemistry

Lot-Sample #...: A0G150579-011 **Work Order #...:** L38VT **Matrix.....:** WG
Date Sampled...: 07/15/10 10:58 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1		MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP6-1571-GW

General Chemistry

Lot-Sample #...: A0G150579-013 **Work Order #...:** L38VX **Matrix.....:** WG
Date Sampled...: 07/15/10 12:08 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1		MDL.....: 0.02		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-261C-1533-GW

General Chemistry

Lot-Sample #...: A0G150579-016 **Work Order #...:** L38V3 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/29/10	0210280
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-270C-1539-GW

General Chemistry

Lot-Sample #...: A0G150579-018 **Work Order #...:** L38V5 **Matrix.....:** WG
Date Sampled...: 07/15/10 11:50 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1582-GW

General Chemistry

Lot-Sample #...: A0G150579-020 **Work Order #...:** L38V7 **Matrix.....:** WQ
Date Sampled...: 07/15/10 12:30 **Date Received..:** 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259
	Dilution Factor: 1			MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	07/27/10	0208347
	Dilution Factor: 1			MDL.....: 0.02		

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A0G150579 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: L4R0D1AA		MB Lot-Sample #:	A0G280000-259	
	ND	0.010	mg/L	SW846 9012A	07/28/10	0209259
		Dilution Factor: 1				
Cyanide, Total		Work Order #: L4VLF1AA		MB Lot-Sample #:	A0G290000-280	
	ND	0.010	mg/L	SW846 9012A	07/29/10	0210280
		Dilution Factor: 1				
Nitrate-Nitrite		Work Order #: L4QMK1AA		MB Lot-Sample #:	A0G270000-347	
	ND	0.1	mg/L	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G150579 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: L4R0D1AC	LCS Lot-Sample#: A0G280000-259		
	85	(80 - 120)	SW846 9012A	07/28/10	0209259
		Dilution Factor: 1			
Cyanide, Total		Work Order #: L4VLF1AC	LCS Lot-Sample#: A0G290000-280		
	109	(80 - 120)	SW846 9012A	07/29/10	0210280
		Dilution Factor: 1			
Nitrate-Nitrite		Work Order #: L4QMK1AC	LCS Lot-Sample#: A0G270000-347		
	99	(79 - 117)	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G150579 **Matrix.....:** WATER
Date Sampled...: 07/14/10 10:50 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: L37G81AM-MS/L37G81AN-MSD				MS Lot-Sample #: A0G150401-019	
	85	(80 - 120)			SW846 9012A	07/28/10	0209259
	88	(80 - 120)	3.1	(0-20)	SW846 9012A	07/28/10	0209259
		Dilution Factor: 1					
Nitrate-Nitrite		WO#: L35NG1AH-MS/L35NG1AJ-MSD				MS Lot-Sample #: A0G140402-013	
	134 N	(34 - 125)			MCAWW 353.2	07/27/10	0208347
	124	(34 - 125)	6.9	(0-20)	MCAWW 353.2	07/27/10	0208347
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G150579 **Matrix.....:** WG
Date Sampled...: 07/15/10 09:20 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: L38V31AM-MS/L38V31AN-MSD				MS Lot-Sample #: A0G150579-016	
	94	(80 - 120)			SW846 9012A	07/29/10	0210280
	93	(80 - 120)	1.0	(0-20)	SW846 9012A	07/29/10	0210280
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix I

Reason Code Library: Example 1

Category	Code
Low Bias Indicator	-
High Bias Indicator	+
Temperature	A
Holding Times	
Sampling to Analysis	C
Sampling to Extraction	D
Extaction to Analysis	E
Method Blanks	F
Surrogate Recovery	G
MS/MSD	
MS/MSD Recovery	H
MS/MSD RPD	I
LCS	
LCS Recovery	J
LCS RPD	K
Reporting Limits	L
Field QC	
Field Blank	M
Equipment Blank	N
Trip Blank	O
Field Duplicate	P
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibraton Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automatically adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150579										
6010B	FWGLL1mw-082C-1527-GF	AQ	N							
				Barium	10.0	9.9B		J	ug/L	L
6010B	FWGLL1mw-085C-1530-GF	AQ	N							
				Cobalt	5.0	2.8B		J	ug/L	L
6010B	FWGLL2mw-261C-1533-GF	AQ	N							
				Cobalt	5.0	2.2B		J	ug/L	L
				Nickel	10.0	3.9B		J	ug/L	L
6010B	FWGSCFmw-005-1519-GF	AQ	N							
				Chromium	5.0	3.0B		J	ug/L	L
6020	FWGLL1mw-082C-1527-GF	AQ	N							
				Cadmium	0.50	0.18B		J	ug/L	L
				Thallium	1.0	0.16B		UJ	ug/L	Cb,L
6020	FWGLL1mw-085C-1530-GF	AQ	N							
				Thallium	1.0	0.14B		UJ	ug/L	Cb,L
				Zinc	10.0	4.1B		J	ug/L	L
6020	FWGLL2mw-270C-1539-GF	AQ	N							
				Zinc	10.0	3.5B		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150579										
8081A	FWGLL2mw-269C-1538-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8081A	FWGLL2mw-270C-1539-GW	AQ	N							
				Endrin ketone	0.030	0.0090J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150579										
8081A	FWGSCFmw-005-1519-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150579										
8081A	FWGSCFmw-DUP6-1571-GW	AQ	FD							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	G
				4,4'-DDE	0.030	0.030U		UJ	ug/L	G
				4,4'-DDT	0.030	0.030U		UJ	ug/L	G
				Aldrin	0.030	0.030U		UJ	ug/L	G
				alpha-BHC	0.030	0.030U		UJ	ug/L	G
				alpha-Chordane	0.030	0.030U		UJ	ug/L	G
				beta-BHC	0.030	0.030U		UJ	ug/L	G
				delta-BHC	0.030	0.030U		UJ	ug/L	G
				Dieldrin	0.030	0.030U		UJ	ug/L	G
				Endosulfan I	0.025	0.025U		UJ	ug/L	G
				Endosulfan II	0.025	0.025U		UJ	ug/L	G
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	G
				Endrin	0.030	0.030U		UJ	ug/L	G
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	G
				Endrin ketone	0.030	0.030U		UJ	ug/L	G
				gamma-BHC	0.030	0.030U		UJ	ug/L	G
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	G
				Heptachlor	0.030	0.030U		UJ	ug/L	G
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	G
				Methoxychlor	0.10	0.10U		UJ	ug/L	G
				Toxaphene	2.0	2.0U		UJ	ug/L	G
8082	FWGLL2mw-269C-1538-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150579										
8082	FWGSCFmw-005-1519-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8260B	FWGEQUIPRINSE5-1582-GW	AQ	EB							
				Acetone	10	6.3J		JB	ug/L	O,L
				Methylene chloride	2.0	0.51J		J	ug/L	L
8260B	FWGSCFmw-005-1519-GW	AQ	N							
				Carbon disulfide	1.0	0.64J		J	ug/L	L,J
8260B	FWGTEAM1-TRIP	AQ	TB							
				Acetone	10	2.3J		J	ug/L	L
				Methylene chloride	2.0	0.35J B		JB	ug/L	Pj,F,L
8260B	FWGTEAM2-TRIP	AQ	TB							
				Acetone	10	1.6J		J	ug/L	L
8260B	FWGTRIP-TEAM3	AQ	TB							
				Acetone	10	1.4J		J	ug/L	L
8270C	FWGEQUIPRINSE5-1582-GW	AQ	EB							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	J
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	0.91J B		JB	ug/L	L,F
8270C	FWGLL1mw-082C-1527-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	J
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	2.0J B		JB	ug/L	L,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150579										
8270C	FWGLL1mw-085C-1530-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	J
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	2.5J B		JB	ug/L	L,N,F
8270C	FWGLL2mw-261C-1533-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	J
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	0.87J		JB	ug/L	L,N
8270C	FWGLL2mw-269C-1538-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	J
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	1.4J B		JB	ug/L	L,N,F
8270C	FWGLL2mw-270C-1539-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	J
				Benzoic acid	10	10U		UJ	ug/L	D
8270C	FWGSCFmw-004-1518-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	J
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	0.92J B		JB	ug/L	L,N,P,F
				Phenol	1.0	0.81J		J	ug/L	L,P
8270C	FWGSCFmw-005-1519-GW	AQ	N							
				2,4-Dinitrophenol	6.6	6.6U		UJ	ug/L	J
				Benzoic acid	10	10U		UJ	ug/L	D

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A0G150579										
8270C	FWGSCFmw-DUP6-1571-GW	AQ	FD							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	J
				Benzoic acid	10	10U		UJ	ug/L	D
				bis(2-Ethylhexyl) phthalate	10	2.9J B		JB	ug/L	L,N,F

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE5-1582-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150579020

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C								**Dilution: 1**													
Benzoic acid	10		ug/L	U	YES	**UJ**		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE5-1582-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579020

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	6.3		ug/L	J	YES	~~UJ~~ JB								J		JB					O,L
Methylene chloride	0.51		ug/L	J	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	0.91		ug/L	J B	YES	~~UJ~~ JB			JB					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-082C-1527-GF **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150579005

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Barium	9.9		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Cadmium	0.18		ug/L	B	YES	J								J							L
Thallium	0.16		ug/L	B	YES	UJ								J							Cb,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-082C-1527-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150579004

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C							**Dilution: 1**														
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-082C-1527-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579004

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	2.0		ug/L	J B	YES	~~UJ~~ BD			JB					J		JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-085C-1530-GF **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150579003

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	2.8		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.14		ug/L	B	YES	UJ								J							Cb,L
Zinc	4.1		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-085C-1530-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150579002

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-085C-1530-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579002

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	2.5		ug/L	J B	YES	UJ J8			UB					J		UJ B					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-261C-1533-GF **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150579017

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Cobalt	2.2		ug/L	B	YES	J								J							L
Nickel	3.9		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-261C-1533-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150579016

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-261C-1533-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579016

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	0.87		ug/L	J	YES	~~UJ~~ JB								J		JB					L,N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-269C-1538-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150579006

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C							**Dilution: 1**														
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-269C-1538-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579006

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-269C-1538-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579006

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C							**Dilution: 1**														
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	1.4		ug/L	J B	YES	UJ			UB					J		UB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-270C-1539-GF **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150579019

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6020						**Dilution: 1**															
Zinc	3.5		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-270C-1539-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150579018

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-270C-1539-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579018

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
Endrin ketone	0.0090		ug/L	J	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-004-1518-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150579011

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C							**Dilution: 1**														
Benzoic acid	10		ug/L	U	YES	**UJ**		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-004-1518-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579011

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	0.92		ug/L	J B	YES	UJ			J B					J		J B					L,N,P,F
Phenol	0.81		ug/L	J	YES	J								J							L,P

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-005-1519-GF **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A0G150579010

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 6010B						**Dilution: 1**															
Chromium	3.0		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-005-1519-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A0G150579009

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C						**Dilution: 1.32**															
2,4-Dinitrophenol	6.6		ug/L	U	YES	UJ				UJ											J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-005-1519-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150579009

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C							**Dilution: 1**														
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-005-1519-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579009

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8082						**Dilution: 1**															
Aroclor 1016	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1221	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1232	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1242	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1248	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1254	0.50		ug/L	U	YES	UJ							UJ								G
Aroclor 1260	0.50		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8260B						**Dilution: 1**															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-005-1519-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579009

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Carbon disulfide	0.64		ug/L	J	YES	J				J				J							L,J

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-DUP6-1571-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A0G150579013

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8270C							**Dilution: 1**														
Benzoic acid	10		ug/L	U	YES	UJ		UJ													D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-DUP6-1571-GW **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579013

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8081A						**Dilution: 1**															
4,4'-DDD	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.030		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.030		ug/L	U	YES	UJ							UJ								G
Aldrin	0.030		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.030		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.030		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.030		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.030		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.025		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.030		ug/L	U	YES	UJ							UJ								G
Endrin	0.030		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.030		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.030		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.030		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.030		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.030		ug/L	U	YES	UJ							UJ								G
Methoxychlor	0.10		ug/L	U	YES	UJ							UJ								G
Toxaphene	2.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ				UJ											J
bis(2-Ethylhexyl) phthalate	2.9		ug/L	J B	YES	~~UJ~~ JB			JB					J		JB					L,N,F

Project Number and Name: 30240.0006 - RVAAP (OH) **Library Used:** Ravenna GW 11-7-07

ADR 8.1 Report Date: 9/15/2010 16:29

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM1-TRIP
Lab Report Batch : A0G150579
Lab ID : TALCAN
Sample Date : 07/15/2010
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A0G150579001

Reviewed By / Date : ASD 9/15/2010
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B																					
									Dilution: 1												
Acetone	2.3		ug/L	J	YES	J								J							L
Methylene chloride	0.35		ug/L	J B	YES	J J B			J B					J							Pj,F,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM2-TRIP
Lab Report Batch : A0G150579
Lab ID : TALCAN
Sample Date : 07/15/2010
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A0G150579008

Reviewed By / Date : ASD 9/15/2010
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.6		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTRIP-TEAM3 **Lab Report Batch :** A0G150579 **Lab ID :** TALCAN

Sample Date : 07/15/2010 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A0G150579015

Reviewed By / Date : ASD 9/15/2010 **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV	Reason Codes
Analysis Method : 8260B						**Dilution: 1**															
Acetone	1.4		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A0G150579 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
8270C	AQ	bis(2-Ethylhexyl) phthalate	FWGSCFmw-004-	RES	0.92	J B	FWGSCFmw-DU	RES	2.9	J B	103.7	30	ug/L
	AQ	Phenol		RES	0.81	J		RES	1.0	U	200.0	30	ug/L

**Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.*

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Surrogate Recovery Outlier Report

Lab Report Batch: A0G150579 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGLL2mw-269C-1538-GW	A0G150579006	8081A	1	AQ	Decachlorobiphenyl	33	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	34	50.0	150.0	10.0	All Target
FWGSCFmw-005-1519-GW	A0G150579009	8081A	1	AQ	Decachlorobiphenyl	29	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	32	50.0	150.0	10.0	All Target
FWGSCFmw-DUP6-1571-GW	A0G150579013	8081A	1	AQ	Decachlorobiphenyl	48	50.0	150.0	10.0	All Target

Method Blank Outlier Report

Lab Reporting Batch : A0G150579 **Lab ID:** TALCAN

Analysis Method : 8260B **Analysis Date :** 07/26/2010

Preparation Type : 5030B **Preparation Date :** 07/26/2010

Method Blank Lab Sample ID : A0G260000253B **Preparation Batch :** 0207253

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.88	2.0	ug/L	J	Common Contaminant

Methylene chloride was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGTEAM1-TRIP	A0G150579001	1	0.35	J B	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A0G150579 **Lab ID:** TALCAN

Analysis Method : 8270C **Analysis Date :** 07/23/2010

Preparation Type : 3520C **Preparation Date :** 07/19/2010

Method Blank Lab Sample ID : A0G190000033B **Preparation Batch :** 0200033

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.91	10	ug/L	J	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE5-1582-G	A0G150579020	1	0.91	J B	ug/L
FWGLL1mw-082C-1527-GW	A0G150579004	1	2.0	J B	ug/L
FWGLL1mw-085C-1530-GW	A0G150579002	1	2.5	J B	ug/L
FWGLL2mw-269C-1538-GW	A0G150579006	1	1.4	J B	ug/L
FWGSCFmw-004-1518-GW	A0G150579011	1	0.92	J B	ug/L
FWGSCFmw-DUP6-1571-G	A0G150579013	1	2.9	J B	ug/L

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A0G150579 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE5-1582	A0G150579020	8260B	AQ	Acetone	J	6.3	10	ug/L
				Methylene chloride	J	0.51	2.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	0.91	10	ug/L
FWGLL1mw-082C-1527-G	A0G150579005	6010B		Barium	B	9.9	10.0	ug/L
		6020		Cadmium	B	0.18	0.50	ug/L
				Thallium	B	0.16	1.0	ug/L
FWGLL1mw-082C-1527-G	A0G150579004	8270C		bis(2-Ethylhexyl) phthalate	J B	2.0	10	ug/L
FWGLL1mw-085C-1530-G	A0G150579003	6010B		Cobalt	B	2.8	5.0	ug/L
		6020		Thallium	B	0.14	1.0	ug/L
				Zinc	B	4.1	10.0	ug/L
FWGLL1mw-085C-1530-G	A0G150579002	8270C		bis(2-Ethylhexyl) phthalate	J B	2.5	10	ug/L
FWGLL2mw-261C-1533-G	A0G150579017	6010B		Cobalt	B	2.2	5.0	ug/L
				Nickel	B	3.9	10.0	ug/L
FWGLL2mw-261C-1533-G	A0G150579016	8270C		bis(2-Ethylhexyl) phthalate	J	0.87	10	ug/L
FWGLL2mw-269C-1538-G	A0G150579006			bis(2-Ethylhexyl) phthalate	J B	1.4	10	ug/L
FWGLL2mw-270C-1539-G	A0G150579019	6020		Zinc	B	3.5	10.0	ug/L
FWGLL2mw-270C-1539-G	A0G150579018	8081A		Endrin ketone	J	0.0090	0.030	ug/L
FWGSCFmw-004-1518-G	A0G150579011	8270C		bis(2-Ethylhexyl) phthalate	J B	0.92	10	ug/L
				Phenol	J	0.81	1.0	ug/L
FWGSCFmw-005-1519-G	A0G150579010	6010B		Chromium	B	3.0	5.0	ug/L
FWGSCFmw-005-1519-G	A0G150579009	8260B		Carbon disulfide	J	0.64	1.0	ug/L
FWGSCFmw-DUP6-1571-	A0G150579013	8270C		bis(2-Ethylhexyl) phthalate	J B	2.9	10	ug/L
FWGTEAM1-TRIP	A0G150579001	8260B		Acetone	J	2.3	10	ug/L
				Methylene chloride	J B	0.35	2.0	ug/L
FWGTEAM2-TRIP	A0G150579008			Acetone	J	1.6	10	ug/L
FWGTRIP-TEAM3	A0G150579015			Acetone	J	1.4	10	ug/L

QC Outlier Report: Trip Blank

Lab Reporting Batch : A0G150579 **Lab ID:** TALCAN
Method/Preparation Batch : 0207253 / 0207253 **Analysis Date :** 07/26/2010
Client Sample ID : FWGTEAM1-TRIP **Preparation Date :** 07/26/2010
Lab Sample ID : A0G150579001 **Preparation Type :** 5030B

Analysis Method : 8260B

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	2.3	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	0.35	2.0	ug/L	J B	Common Contaminant

Methylene chloride contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.6	10	ug/L	J	Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	1.4	10	ug/L	J	Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGEQUIPRINSE5-1582-G	A0G150579020	1	6.3	J	ug/L

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A0G150579 **Lab ID:** TALCAN
Method/Preparation Batch : 0210187 / 0210187 **Analysis Date :** 07/29/2010
Client Sample ID : FWGEQUIPRINSE5-1582-GW **Preparation Date :** 07/29/2010
Lab Sample ID : A0G150579020 **Preparation Type :** 5030B

Analysis Method : 8260B

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	10	10	ug/L		Common Contaminant

2-Butanone contamination found in the equipment blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	6.3	10	ug/L	J	Common Contaminant

Acetone contamination found in the equipment blank did not qualify any samples.

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.51	2.0	ug/L	J	Common Contaminant

Methylene chloride contamination found in the equipment blank did not qualify any samples.

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.91	10	ug/L	J B	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL1mw-082C-1527-GW	A0G150579004	1	2.0	J B	ug/L
FWGLL1mw-085C-1530-GW	A0G150579002	1	2.5	J B	ug/L
FWGLL2mw-261C-1533-GW	A0G150579016	1	0.87	J	ug/L
FWGLL2mw-269C-1538-GW	A0G150579006	1	1.4	J B	ug/L
FWGSCFmw-004-1518-GW	A0G150579011	1	0.92	J B	ug/L
FWGSCFmw-DUP6-1571-G	A0G150579013	1	2.9	J B	ug/L

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A0G150579 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE5-1582	A0G150579020	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Potassium	U	1000	200.00	ug/L
				Sodium	U	1000	200.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0207253 **Analysis Method :** 8260B **Analysis Date :** 07/26/2010

Preparation Batch : 0207253 **Preparation Type :** 5030B **Preparation Date :** 07/26/2010

Lab Reporting Batch : A0G150579 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	Matrix	Analyte Name	Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0G260000253C	AQ	Carbon disulfide	132		30.00	40.00	123.00	30.00
A0G260000253L		Carbon disulfide	130	1.7	30.00	40.00	123.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGLL1mw-082C-1527-GW	A0G150579004
FWGLL1mw-085C-1530-GW	A0G150579002
FWGLL2mw-269C-1538-GW	A0G150579006
FWGSCFmw-004-1518-GW	A0G150579011
FWGSCFmw-005-1519-GW	A0G150579009
FWGSCFmw-DUP6-1571-GW	A0G150579013
FWGTEAM1-TRIP	A0G150579001
FWGTEAM2-TRIP	A0G150579008

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0201101 **Analysis Method :** 8270C **Analysis Date :** 07/23/2010

Preparation Batch : 0201101 **Preparation Type :** 3520C **Preparation Date :** 07/20/2010

Lab Reporting Batch : A0G150579 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	Matrix	Analyte Name	Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0G200000101C	AQ	2,4-Dinitrophenol	23		10.00	29.00	146.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGLL2mw-261C-1533-GW	A0G150579016

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0197015 **Analysis Method :** 6020 **Analysis Date :** 07/30/2010

Preparation Batch : 0197015 **Preparation Type :** 3005A **Preparation Date :** 07/16/2010

Lab Reporting Batch : A0G150579 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	Matrix	Analyte Name	Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0G160000015C	AQ	Beryllium	123		60.00	80.00	120.00	20.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE5-1582-GW	A0G150579020
FWGLL1mw-082C-1527-GF	A0G150579005
FWGLL1mw-085C-1530-GF	A0G150579003
FWGLL2mw-261C-1533-GF	A0G150579017
FWGLL2mw-269C-1538-GF	A0G150579007
FWGLL2mw-270C-1539-GF	A0G150579019
FWGSCFmw-004-1518-GF	A0G150579012
FWGSCFmw-005-1519-GF	A0G150579010
FWGSCFmw-DUP6-1571-GF	A0G150579014

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 0200033 **Analysis Method :** 8270C **Analysis Date :** 07/23/2010

Preparation Batch : 0200033 **Preparation Type :** 3520C **Preparation Date :** 07/19/2010

Lab Reporting Batch : A0G150579 **Lab ID:** TALCAN

			Reported Values		Project Limits (Percent)			
LCS Lab Sample ID	Matrix	Analyte Name	Percent Recovery	RPD	Rejection Point	Lower Limit	Upper Limit	RPD
A0G190000033C	AQ	2,4-Dinitrophenol	16		10.00	29.00	146.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE5-1582-GW	A0G150579020
FWGLL1mw-082C-1527-GW	A0G150579004
FWGLL1mw-085C-1530-GW	A0G150579002
FWGLL2mw-269C-1538-GW	A0G150579006
FWGLL2mw-270C-1539-GW	A0G150579018
FWGSCFmw-004-1518-GW	A0G150579011
FWGSCFmw-005-1519-GW	A0G150579009
FWGSCFmw-DUP6-1571-GW	A0G150579013

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 30240.0006 - RVAAP (OH)

QC Outlier Report: Holding Times

Lab Report Batch: A0G150579 **Lab ID:** TALCAN

					Actual Holding Time			Criteria				Reported Dates (and Times)		
Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Prep Method	Coll To Prep	Prep To Ana	Coll To Ana	Coll To Prep	Prep To Ana	Coll To Ana	Unit of Meas	Collection Date	Preparation Date	Analysis Date
FWGEQUIPRINSE5-	A0G150579020	8270C	AQ	3520C	11.0	2.0		7	40		Days	07/15/2010	07/26/2010	07/28/2010
FWGLL1mw-082C-15	A0G150579004	8270C	AQ	3520C	11.0	2.0		7	40		Days	07/15/2010	07/26/2010	07/28/2010
FWGLL1mw-085C-15	A0G150579002	8270C	AQ	3520C	11.0	2.0		7	40		Days	07/15/2010	07/26/2010	07/28/2010
FWGLL2mw-261C-15	A0G150579016	8270C	AQ	3520C	11.0	2.0		7	40		Days	07/15/2010	07/26/2010	07/28/2010
FWGLL2mw-261C-15	A0G150579016S	8270C	AQ	3520C	11.0	2.0		7	40		Days	07/15/2010	07/26/2010	07/28/2010
FWGLL2mw-261C-15	A0G150579016D	8270C	AQ	3520C	11.0	2.0		7	40		Days	07/15/2010	07/26/2010	07/28/2010
FWGLL2mw-269C-15	A0G150579006	8270C	AQ	3520C	11.0	2.0		7	40		Days	07/15/2010	07/26/2010	07/28/2010
FWGLL2mw-270C-15	A0G150579018	8270C	AQ	3520C	11.0	2.0		7	40		Days	07/15/2010	07/26/2010	07/28/2010
FWGSCFmw-004-15	A0G150579011	8270C	AQ	3520C	11.0	2.0		7	40		Days	07/15/2010	07/26/2010	07/28/2010
FWGSCFmw-005-15	A0G150579009	8270C	AQ	3520C	11.0	2.0		7	40		Days	07/15/2010	07/26/2010	07/28/2010
FWGSCFmw-DUP6-1	A0G150579013	8270C	AQ	3520C	11.0	2.0		7	40		Days	07/15/2010	07/26/2010	07/28/2010

APPENDIX E

INVESTIGATIVE DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLANS

Ohio | Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

August 12, 2010

RE: RAVENNA ARMY AMMUNITION PLANT, PORTAGE/TRUMBULL COUNTIES, DRAFT, INVESTIGATION DERIVED WASTE AND DISPOSAL PLAN, FWGWMP, JULY 2010 SAMPLING EVENT

Mr. Mark Patterson
Installation Manager
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, OH 44266

CERTIFIED MAIL
7009 1680 0001 9552 2254

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Draft, Investigation-Derived Waste Characterization and Disposal Plan (IDW), for the Facility-Wide Groundwater Monitoring Program, July 2010 Sampling Event, at the Ravenna Army Ammunition Plant, Ravenna, OH" document. This document was received at Ohio EPA, Northeast District Office (NEDO), Division of Emergency and Remedial response (DERR), on August 10, 2010, and is dated August 9, 2010. The document was prepared for the U.S. Army Corps of Engineers (USACE) – Louisville District, by Environmental Quality Management, Inc. (EQM), under contract no. W912QR-04-D-0036.

The report is approved and Ohio EPA concurs that the IDW (groundwater and decontamination fluids) from the July 2010 Sampling Event may be disposed of as contaminated, non-hazardous waste and that it be sent off-site for disposal to a permitted water treatment facility.

If you have any questions, please call me at (330) 963-1207.

Sincerely,

Vicki Deppisch
Project Coordinator
Division of Emergency and Remedial Response

VD/kss

cc: Eileen Mohr, Ohio EPA, NEDO, DERR
Katie Elgin, OHARNG RTLS
Glen Beckham, USACE Louisville
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DRAFT

FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

INVESTIGATION-DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLAN JULY 2010 SAMPLING EVENT

RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO

MARC Contract Number W912QR-04-D-0036
Delivery Order No. 0006

Prepared for:

U.S. Army Corps of Engineers
600 Martin Luther King Jr. Place
Louisville, Kentucky 40202

Prepared by:

Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati Ohio 45240

August 9, 2010

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APPENDICES

Appendix 1 Investigation-Derived Waste Analytical Report

ACRONYMS

AOC	Area of Concern
EQM	Environmental Quality Management, Inc.
EPA	U.S. Environmental Protection Agency
IDW	Investigation-derived wastes
Ohio EPA	Ohio Environmental Protection Agency
PPE	Personal protective equipment
RCRA	Resource Conservation and Recovery Act
RVAAP	Ravenna Army Ammunition Plant
SAP	Sampling and Analysis Plan
SVOC	Semi-volatile organic compounds
TCLP	Toxicity Characteristic Leaching Procedure
USACE	US Army Corps of Engineers
VOC	Volatile organic compounds

1.0 INTRODUCTION

Investigative activities were conducted during the Facility Wide Groundwater Monitoring Program sampling events in July 2010 at the Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio, resulting in the generation of investigation-derived wastes (IDW) consisting of purge-water and equipment decontamination water wastes. The IDW purge water was generated in the course of sampling each well. The IDW decontamination waters were generated from the cleaning and decontamination activities for non-dedicated equipment needed to sample the wells. The purpose of this report is to characterize and classify the IDW for proper disposal. The report includes:

- A summary of the IDW generated and its origin,
- A review of the analytical results used for waste characterization,
- Classification of the IDW per the *Facility Wide Sampling and Analysis Plan*,
- Recommendations for disposal.

This document follows guidance established by the US Army Corps of Engineers (USACE) and the Ohio EPA regarding IDW disposition at RVAAP.

2.0 OPERATIONAL HISTORY AND WASTE GENERATION

Information regarding the operational history and suspected contaminants for the Facility Wide Groundwater Monitoring Program Plan is presented in Section 1.2 of the *Final Part 1- Sampling and Analysis Plan Addendum for the Facility-Wide Groundwater Monitoring Program Plan at the Ravenna Army Ammunition Plant, Ravenna, Ohio* (SAP Addendum) (Portage, 2004). Section 4.6 of the SAP Addendum describes procedures used for sampling and managing IDW at RVAAP.

Water (purged groundwater and decontamination water) IDW was generated during the July 2010 sampling event and well redevelopment activities at Load Line 12. The purge water collected from the Areas of Concern (AOCs) sampled was stored in drums labeled for purge water disposal, as opposed to previous events where each AOC had its own drum. The decision to composite the purge water was decided in a telephone conference between M. Patterson (RVAAP), E. Mohr (OEPA) and V. Deppisch (OEPA) on January 16, 2008. Purge water was generated in accordance with the Facility Wide Sampling and Analysis Plan (SAP), Section 4.3.4.2 (SAIC, 2001) under the Micro-Purging criteria. Decontamination water was generated from the washing, rinsing, and decontamination procedures used for all non-dedicated sampling equipment. The decontamination water was stored in a drum separate from the purge water. These decontamination procedures are described in Section 4.3.8 Decontamination Procedures of the Facility Wide SAP.

The drum container label number, the type and size of drum container used, estimated volume within each drum, and the source of purge waste water or decontamination fluid is presented in Table 2.1 below.

Table 2.1. IDW Inventory of Drums

Drum Label	Drum Type & Size	Contents	Estimated Volume	Location/Source
EQM 2010-3	55 Gal. Steel	Decontamination/Rinse Water	~30-gallons	Equipment Rinse/Decontamination
EQM 2010-4	55 Gal. Steel	Purge water	~45-gallons	Load Lines 1, 2, 3, 4, 12; and Sharon Conglomerate deep wells
EQM 2010-5	55 Gal. Steel	Purge water	~45-gallons	Load Lines 1, 2, 3, 4, 12; and Sharon Conglomerate deep wells
EQM 2010-6	55 Gal. Steel	Purge water	~45-gallons	Load Lines 1, 2, 3, 4, 12; and Sharon Conglomerate deep wells
EQM 2010-7	55 Gal. Steel	Purge water	~45-gallons	Load Lines 1, 2, 3, 4, 12; and Sharon Conglomerate deep wells

3.0 MANAGEMENT OF ENVIRONMENTAL MEDIA

All environmental media were managed in a manner that minimized potential risk to human health and the environment. IDW was handled as nonhazardous material pending waste characterization and classification based on analytical results. The Facility-Wide SAP (SAIC, 2001) and the Final Part 1 Sampling and Analysis Plan (Portage, 2004) describe approved procedures used for containerizing and handling IDW.

All liquid indigenous (purged groundwater) IDW generated from each monitoring well micro-purging was placed into the 55-gallon drum as previously agreed upon by RVAAP, USACE and Ohio EPA. The purge water was transferred daily from each well location after sampling by closed-top 5-gallon buckets to the appropriately labeled 55-gallon drum located and staged inside Building 1036.

4.0 DISCUSSION OF ANALYTICAL RESULTS

Per Section 7.4 of the *Facility-Wide SAP* (2001), IDW Characterization and Classification for Disposal, all IDW indigenous wastes were characterized for disposal by taking composite samples collected from each of the segregated waste streams. There were only two segregated waste streams that needed to be investigated: one for the purge water generated, and one for the decontamination procedures. Each waste stream had a composite sample taken by using a "drum thief" until a total of approximately 4 liters

was withdrawn in equal amounts from all drums of that particular waste stream. Each waste stream composite sample was submitted to TestAmerica Laboratories, North Canton for full toxicity characteristic leaching procedure (TCLP) analysis using the following methods in accordance with the Facility-Wide SAP (SAIC, 2001):

- TCLP Mercury by SW846 1311/7470A
- TCLP Metals (Silver, arsenic, barium, cadmium, chromium, lead, and selenium) by SW846 1311/6010B
- TCLP Semi-volatile organic compounds (SVOCs) by SW846 1311/8270C
- TCLP Volatile organic compounds (VOCs) by SW846 1311/8260B
- Reactive Cyanide by SW846 7.3.3
- Reactive Sulfide by SW846 7.3.4
- Flash Point by SW846 1010
- pH by SW846 9040B

A trip blank was submitted with the samples and analyzed for Volatile Organic Compounds. The IDW analytical results are presented in Appendix 1.

5.0 RECOMMENDATIONS FOR DISPOSAL

Table 7-1 in the *Facility-Wide SAP* (SAIC, 2001) presents all the maximum concentration of contaminants for the toxicity characteristic for hazardous wastes as per 40 CFR 261.24. Analytical results for the July 2010 groundwater sampling event's IDW were compared against these criteria to determine whether waste streams generated were potentially hazardous or non-hazardous.

5.1 Groundwater

IDW was generated during the well sampling activities by micro-purging monitoring wells associated with this investigation. After comparing the analytical data results generated from groundwater sampling activities to the contaminants and their regulatory levels from Table 7-1 1 in the *Facility-Wide SAP* (SAIC, 2001), the data indicated that no regulatory criteria for Resource Conservation and Recovery Act (RCRA) hazardous waste determinations were exceeded. Table 5.1 below presents the detected results compared to the regulatory characteristic for hazardous wastes as per 40 CFR 261.24.

It is recommended that the drums containing purged groundwater be classified as contaminated, but non-hazardous and that it be sent off-site for disposal to a permitted water treatment facility in accordance with the *Facility-Wide SAP* (SAIC, 2001) guidance under Section 7.0 "Investigation-Derived Waste".

Table 5.1 Detected Analytical Results

Sample ID	Detected Contaminant	Detected Result	Regulatory Level[1]	Above Regulatory Yes/No
FWG-IDW-MWPURGEJULY2010	Barium	0.088 mg/L J	100 mg/L	No
	Flashpoint	>180°F	<140°F	No
	pH	7.6	<2 or >12.5	No
FWG-IDW-MWDECONJULY2010	Arsenic	0.026 mg/L J	5.0 mg/L	No
	Barium	0.0015 mg/L J	100 mg/L	No
	Cadmium	0.0007 mg/L J	1.0 mg/L	No
	Reactive Cyanide	58.4	See Table Notes	No
	Flashpoint	>180°F	<140°F	No
	pH	8.7	<2 or >12.5	No
TRIP BLANK	None Detected			

J = Estimated result. Result is less than reporting limit.
Reactive Cyanide Note: Despite the presence of a low concentration of reactive cyanide the waste streams are deemed nonhazardous as they do not meet the hazardous waste criteria set forth in OAC 3725-51-23 (i.e., reacts violently with water or produces toxic gases, fumes or vapors between the ph of 2 and 12.5).
Note that the flags used to qualify the data are consistent with USACE Laboratory Chemistry Guidelines and the RVAAP quarterly groundwater reports.
1 = USEPA Regulatory Characteristic Levels (40 CFR 261.20 through 24).

5.2 Decontamination Fluids

A composite sample collected from decontamination fluids generated from cleaning of non-dedicated sampling equipment used during the investigation indicated that all analytes were below TCLP threshold values and therefore should be classified as non-hazardous. It is recommended that the water in this drum be classified as contaminated, non-hazardous, and be sent off-site for disposal to a permitted water treatment facility in accordance with the *Facility-Wide SAP* (SAIC, 2001) guidance under Section 7.0 Investigation-Derived Waste.

5.3 Summary of Disposal Recommendations

It is recommended that all drums be classified as contaminated, but non-hazardous and that they be sent off-site for disposal to a permitted water treatment facility. The TCLP/Characteristic test results for both composite samples show that no chemical was detected in levels that required a labeling of hazardous. Table 5.2 presents a summary of each drum and the recommended disposal options for the waste streams presented and previously discussed.

Table 5.2. Summary of Drum Containers, TCLP/Characteristic Waste Criteria, and Disposal Recommendations

Drum Container Label	Media	TCLP Criteria	Disposal Recommendation
EQM 2010-3	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2010-4	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2010-5	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2010-6	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2010-7	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal

6.0 REFERENCES

SAIC, 2001. *Facility-Wide Sampling and Analysis Plan for Environmental Investigations at the Ravenna Army Ammunition Plant, Ravenna, Ohio.*

Portage Environmental, 2004, *RVAAP Facility Wide Groundwater Monitoring Program Plan.*

APPENDIX 1

INVESTIGATION-DERIVED WASTE ANALYTICAL REPORT

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. 30240.0006

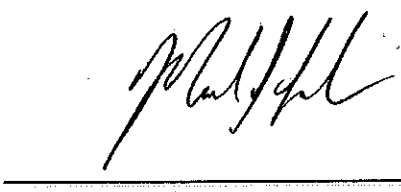
RVAAP (OH)

Lot #: A0G160505

Erik Corbin

Environmental Quality Mgt., I
1800 Carillon Blvd
Cincinnati, OH 45240

TESTAMERICA LABORATORIES, INC.



Approved for release.
Mark J. Loeb
Project Manager II
7/30/2010 3:54 PM

Mark J. Loeb
Project Manager
mark.loeb@testamericainc.com

July 30, 2010

ACCREDITED IN ACCORDANCE WITH nelac

4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 www.testamericainc.com

CASE NARRATIVE

A0G160505

The following report contains the analytical results for two water samples and one quality control sample submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received July 15, 2010, according to documented sample acceptance procedures.

The Reactive Cyanide and Reactive Sulfide analysis were performed at the TestAmerica Buffalo Laboratory. Refer to the narrative provided in the Buffalo data package.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on July 29, 2010. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

All parameters were evaluated to the method detection limit and include qualified results where applicable.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 4.2°C.

GC/MS VOLATILES

There were no client requested Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples in batch 0202467. Therefore, the laboratory has included a Laboratory Control Sample Duplicate (LCSD) in the QC batch. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system.

GC/MS SEMIVOLATILES

The analytical results met the requirements of the laboratory's QA/QC program.

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

EXECUTIVE SUMMARY - Detection Highlights

A0G160505

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWG-IDW-MWPURGEJULY2010 07/15/10 14:30 002				
Barium - TCLP	0.088 B	10.0	mg/L	SW846 6010B
Flashpoint	>180		deg F	SW846 1010
pH (liquid)	7.6		No Units	SW846 9040B
FWG-IDW-MWDECONJULY2010 07/15/10 14:45 003				
Arsenic - TCLP	0.026 B	0.50	mg/L	SW846 6010B
Barium - TCLP	0.0015 B	10.0	mg/L	SW846 6010B
Cadmium - TCLP	0.00070 B	0.10	mg/L	SW846 6010B
Flashpoint	>180		deg F	SW846 1010
pH (liquid)	8.7		No Units	SW846 9040B

ANALYTICAL METHODS SUMMARY

A0G160505

PARAMETER	ANALYTICAL METHOD
pH Aqueous	SW846 9040B
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Pensky-Martens Method for Determining Ignitability	SW846 1010
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Volatile Organics by GC/MS	SW846 8260B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A0G160505

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L395G	001	TRIP BLANK	07/15/10	14:15
L395N	002	FWG-IDW-MWPURGEJULY2010	07/15/10	14:30
L3950	003	FWG-IDW-MWDECONJULY2010	07/15/10	14:45

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Environmental Quality Mgt., Inc.

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: A0G160505-001 **Work Order #...:** L395G1AA **Matrix.....:** WQ
Date Sampled...: 07/15/10 14:15 **Date Received..:** 07/15/10
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202467
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	5.0	ug/L	0.13
2-Butanone (MEK)	ND	20	ug/L	0.57
Carbon tetrachloride	ND	5.0	ug/L	0.13
Chlorobenzene	ND	5.0	ug/L	0.15
Chloroform	ND	5.0	ug/L	0.16
1,2-Dichloroethane	ND	5.0	ug/L	0.22
1,1-Dichloroethylene	ND	5.0	ug/L	0.19
Tetrachloroethylene	ND	5.0	ug/L	0.29
Trichloroethylene	ND	5.0	ug/L	0.17
Vinyl chloride	ND	5.0	ug/L	0.22

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(78 - 115)
1,2-Dichloroethane-d4	98	(77 - 120)
Toluene-d8	99	(78 - 111)
4-Bromofluorobenzene	87	(80 - 114)

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJULY2010

TCLP GC/MS Volatiles

Lot-Sample #...: A0G160505-002 **Work Order #...:** L395N1AA **Matrix.....:** WG
Date Sampled...: 07/15/10 14:30 **Date Received..:** 07/15/10
Leach Date.....: 07/20/10 **Prep Date.....:** 07/21/10 **Analysis Date..:** 07/21/10
Leach Batch #..: P020001 **Prep Batch #...:** 0202403
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	0.025	mg/L	0.00013
2-Butanone (MEK)	ND	0.25	mg/L	0.00057
Carbon tetrachloride	ND	0.025	mg/L	0.00013
Chlorobenzene	ND	0.025	mg/L	0.00015
Chloroform	ND	0.025	mg/L	0.00016
1,2-Dichloroethane	ND	0.025	mg/L	0.00022
1,1-Dichloroethylene	ND	0.070	mg/L	0.00019
Tetrachloroethylene	ND	0.070	mg/L	0.00029
Trichloroethylene	ND	0.050	mg/L	0.00017
Vinyl chloride	ND	0.025	mg/L	0.00022

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	113	(86 - 125)
1,2-Dichloroethane-d4	107	(80 - 122)
Toluene-d8	102	(90 - 122)
4-Bromofluorobenzene	89	(84 - 125)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJULY2010

TCLP GC/MS Semivolatiles

Lot-Sample #...: A0G160505-002 **Work Order #...:** L395N1AD **Matrix.....:** WG
Date Sampled...: 07/15/10 14:30 **Date Received..:** 07/15/10
Leach Date.....: 07/20/10 **Prep Date.....:** 07/21/10 **Analysis Date..:** 07/23/10
Leach Batch #..: P020111 **Prep Batch #...:** 0202046
Dilution Factor: 1
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Cresol	ND	0.0040	mg/L	0.00080
m-Cresol & p-Cresol	ND	0.040	mg/L	0.00075
1,4-Dichlorobenzene	ND	0.0040	mg/L	0.00034
2,4-Dinitrotoluene	ND	0.020	mg/L	0.00027
Hexachlorobenzene	ND	0.020	mg/L	0.00010
Hexachlorobutadiene	ND	0.020	mg/L	0.00027
Hexachloroethane	ND	0.020	mg/L	0.00080
Nitrobenzene	ND	0.0040	mg/L	0.000040
Pentachlorophenol	ND	0.040	mg/L	0.0024
Pyridine	ND	0.020	mg/L	0.00035
2,4,5-Trichloro-phenol	ND	0.020	mg/L	0.00030
2,4,6-Trichloro-phenol	ND	0.020	mg/L	0.00080

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(27 - 110)
2-Fluorobiphenyl	51	(20 - 110)
Terphenyl-d14	64	(44 - 110)
Phenol-d5	46	(10 - 110)
2-Fluorophenol	51	(10 - 110)
2,4,6-Tribromophenol	52	(28 - 110)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJULY2010

TCLP Metals

Lot-Sample #...: A0G160505-002 **Matrix.....:** WG
Date Sampled...: 07/15/10 14:30 **Date Received..:** 07/15/10
Leach Date.....: 07/20/10 **Leach Batch #..:** P020111

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0202025						
Mercury	ND	0.0020	mg/L	SW846 7470A	07/21/10	L395N1AN
		Dilution Factor: 1		MDL.....: 0.00012		
Arsenic	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L395N1AF
		Dilution Factor: 1		MDL.....: 0.0032		
Barium	**0.088 B**	**10.0**	**mg/L**	**SW846 6010B**	**07/21-07/22/10**	**L395N1AG**
		Dilution Factor: 1		MDL.....: 0.00067		
Cadmium	ND	0.10	mg/L	SW846 6010B	07/21-07/22/10	L395N1AH
		Dilution Factor: 1		MDL.....: 0.00066		
Chromium	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L395N1AJ
		Dilution Factor: 1		MDL.....: 0.0022		
Lead	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L395N1AK
		Dilution Factor: 1		MDL.....: 0.0019		
Selenium	ND	0.25	mg/L	SW846 6010B	07/21-07/22/10	L395N1AL
		Dilution Factor: 1		MDL.....: 0.0041		
Silver	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L395N1AM
		Dilution Factor: 1		MDL.....: 0.0022		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJULY2010

General Chemistry

Lot-Sample #...: A0G160505-002 Work Order #...: L395N Matrix.....: WG
Date Sampled...: 07/15/10 14:30 Date Received..: 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)	7.6		No Units	SW846 9040B	07/16/10	0201125
	Dilution Factor: 1			MDL.....:		
Flashpoint	>180		deg F	SW846 1010	07/27/10	0208367
	Dilution Factor: 1			MDL.....:		

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONJULY2010

TCLP GC/MS Volatiles

Lot-Sample #...: A0G160505-003 **Work Order #...:** L39501AA **Matrix.....:** WG
Date Sampled...: 07/15/10 14:45 **Date Received..:** 07/15/10
Leach Date.....: 07/20/10 **Prep Date.....:** 07/21/10 **Analysis Date..:** 07/21/10
Leach Batch #..: P020001 **Prep Batch #...:** 0202403
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	0.025	mg/L	0.00013
2-Butanone (MEK)	ND	0.25	mg/L	0.00057
Carbon tetrachloride	ND	0.025	mg/L	0.00013
Chlorobenzene	ND	0.025	mg/L	0.00015
Chloroform	ND	0.025	mg/L	0.00016
1,2-Dichloroethane	ND	0.025	mg/L	0.00022
1,1-Dichloroethylene	ND	0.070	mg/L	0.00019
Tetrachloroethylene	ND	0.070	mg/L	0.00029
Trichloroethylene	ND	0.050	mg/L	0.00017
Vinyl chloride	ND	0.025	mg/L	0.00022

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	110	(86 - 125)
1,2-Dichloroethane-d4	104	(80 - 122)
Toluene-d8	103	(90 - 122)
4-Bromofluorobenzene	91	(84 - 125)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONJULY2010

TCLP GC/MS Semivolatiles

Lot-Sample #...: A0G160505-003 **Work Order #...:** L39501AD **Matrix.....:** WG
Date Sampled...: 07/15/10 14:45 **Date Received..:** 07/15/10
Leach Date.....: 07/20/10 **Prep Date.....:** 07/21/10 **Analysis Date..:** 07/23/10
Leach Batch #..: P020111 **Prep Batch #...:** 0202046
Dilution Factor: 1
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Cresol	ND	0.0040	mg/L	0.00080
m-Cresol & p-Cresol	ND	0.040	mg/L	0.00075
1,4-Dichlorobenzene	ND	0.0040	mg/L	0.00034
2,4-Dinitrotoluene	ND	0.020	mg/L	0.00027
Hexachlorobenzene	ND	0.020	mg/L	0.00010
Hexachlorobutadiene	ND	0.020	mg/L	0.00027
Hexachloroethane	ND	0.020	mg/L	0.00080
Nitrobenzene	ND	0.0040	mg/L	0.000040
Pentachlorophenol	ND	0.040	mg/L	0.0024
Pyridine	ND	0.020	mg/L	0.00035
2,4,5-Trichloro-phenol	ND	0.020	mg/L	0.00030
2,4,6-Trichloro-phenol	ND	0.020	mg/L	0.00080

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(27 - 110)
2-Fluorobiphenyl	56	(20 - 110)
Terphenyl-d14	74	(44 - 110)
Phenol-d5	44	(10 - 110)
2-Fluorophenol	49	(10 - 110)
2,4,6-Tribromophenol	64	(28 - 110)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONJULY2010

TCLP Metals

Lot-Sample #...: A0G160505-003 **Matrix.....:** WG
Date Sampled...: 07/15/10 14:45 **Date Received..:** 07/15/10
Leach Date.....: 07/20/10 **Leach Batch #..:** P020111

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0202025						
Mercury	ND	0.0020	mg/L	SW846 7470A	07/21/10	L39501AN
		Dilution Factor: 1		MDL.....: 0.00012		
Arsenic	**0.026 B**	**0.50**	**mg/L**	**SW846 6010B**	**07/21-07/22/10**	**L39501AF**
		Dilution Factor: 1		MDL.....: 0.0032		
Barium	**0.0015 B**	**10.0**	**mg/L**	**SW846 6010B**	**07/21-07/22/10**	**L39501AG**
		Dilution Factor: 1		MDL.....: 0.00067		
Cadmium	**0.00070 B**	**0.10**	**mg/L**	**SW846 6010B**	**07/21-07/22/10**	**L39501AH**
		Dilution Factor: 1		MDL.....: 0.00066		
Chromium	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L39501AJ
		Dilution Factor: 1		MDL.....: 0.0022		
Lead	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L39501AK
		Dilution Factor: 1		MDL.....: 0.0019		
Selenium	ND	0.25	mg/L	SW846 6010B	07/21-07/22/10	L39501AL
		Dilution Factor: 1		MDL.....: 0.0041		
Silver	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L39501AM
		Dilution Factor: 1		MDL.....: 0.0022		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONJULY2010

General Chemistry

Lot-Sample #...: A0G160505-003 Work Order #...: L3950 Matrix.....: WG
Date Sampled...: 07/15/10 14:45 Date Received..: 07/15/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)	8.7		No Units	SW846 9040B	07/16/10	0201125
	Dilution Factor: 1			MDL.....:		
Flashpoint	>180		deg F	SW846 1010	07/27/10	0208367
	Dilution Factor: 1			MDL.....:		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A0G160505 **Work Order #...:** L4HP61AA **Matrix.....:** WATER
MB Lot-Sample #: A0G210000-467

Prep Date.....: 07/20/10
Analysis Date..: 07/20/10 **Prep Batch #...:** 0202467
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	5.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	20	ug/L	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/L	SW846 8260B
Chlorobenzene	ND	5.0	ug/L	SW846 8260B
Chloroform	ND	5.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethylene	ND	5.0	ug/L	SW846 8260B
Tetrachloroethylene	ND	5.0	ug/L	SW846 8260B
Trichloroethylene	ND	5.0	ug/L	SW846 8260B
Vinyl chloride	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(78 - 115)
1,2-Dichloroethane-d4	95	(77 - 120)
Toluene-d8	99	(78 - 111)
4-Bromofluorobenzene	89	(80 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP GC/MS Volatiles

Client Lot #...: A0G160505 **Work Order #...:** L4C051AA **Matrix.....:** SOLID
MB Lot-Sample #: A0G190000-065
Leach Date.....: 07/20/10 **Prep Date.....:** 07/21/10 **Analysis Date..:** 07/21/10
Leach Batch #..: P020001 **Prep Batch #...:** 0202403
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	0.025	mg/L	SW846 8260B
2-Butanone (MEK)	ND	0.25	mg/L	SW846 8260B
Carbon tetrachloride	ND	0.025	mg/L	SW846 8260B
Chlorobenzene	ND	0.025	mg/L	SW846 8260B
Chloroform	ND	0.025	mg/L	SW846 8260B
1,2-Dichloroethane	ND	0.025	mg/L	SW846 8260B
1,1-Dichloroethylene	ND	0.070	mg/L	SW846 8260B
Tetrachloroethylene	ND	0.070	mg/L	SW846 8260B
Trichloroethylene	ND	0.050	mg/L	SW846 8260B
Vinyl chloride	ND	0.025	mg/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	110	(86 - 125)
1,2-Dichloroethane-d4	107	(80 - 122)
Toluene-d8	104	(90 - 122)
4-Bromofluorobenzene	90	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP GC/MS Semivolatiles

Client Lot #...: A0G160505 **Work Order #...:** L4FT11AA **Matrix.....:** WATER
MB Lot-Sample #: A0G210000-046
Leach Date.....: 07/20/10 **Prep Date.....:** 07/21/10 **Analysis Date..:** 07/22/10
Leach Batch #..: P020111 **Prep Batch #...:** 0202046
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
o-Cresol	ND	0.0040	mg/L	SW846 8270C
m-Cresol & p-Cresol	ND	0.040	mg/L	SW846 8270C
1,4-Dichlorobenzene	ND	0.0040	mg/L	SW846 8270C
2,4-Dinitrotoluene	ND	0.020	mg/L	SW846 8270C
Hexachlorobenzene	ND	0.020	mg/L	SW846 8270C
Hexachlorobutadiene	ND	0.020	mg/L	SW846 8270C
Hexachloroethane	ND	0.020	mg/L	SW846 8270C
Nitrobenzene	ND	0.0040	mg/L	SW846 8270C
Pentachlorophenol	ND	0.040	mg/L	SW846 8270C
Pyridine	ND	0.020	mg/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	0.020	mg/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	0.020	mg/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	45	(27 - 110)
2-Fluorobiphenyl	44	(20 - 110)
Terphenyl-d14	62	(44 - 110)
Phenol-d5	38	(10 - 110)
2-Fluorophenol	42	(10 - 110)
2,4,6-Tribromophenol	48	(28 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A0G160505 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A0G200000-320 **Prep Batch #...:** 0202025						
Leach Date.....: 07/20/10 **Leach Batch #..:** P020111						
Mercury	ND	0.0020	mg/L	SW846 7470A	07/21/10	L4E4K1AK
		Dilution Factor: 1				
Arsenic	**0.0060 B**	**0.50**	**mg/L**	**SW846 6010B**	**07/21-07/22/10**	**L4E4K1AC**
		Dilution Factor: 1				
Barium	**0.0031 B**	**10.0**	**mg/L**	**SW846 6010B**	**07/21-07/22/10**	**L4E4K1AD**
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	07/21-07/22/10	L4E4K1AE
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L4E4K1AF
		Dilution Factor: 1				
Lead	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L4E4K1AG
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	07/21-07/22/10	L4E4K1AH
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L4E4K1AJ
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A0G160505 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A0G210000-025 **Prep Batch #...:** 0202025						
Mercury	ND	0.0020	mg/L	SW846 7470A	07/21/10	L4FR71AJ
		Dilution Factor: 1				
Arsenic	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L4FR71AA
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	07/21-07/22/10	L4FR71AC
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	07/21-07/22/10	L4FR71AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L4FR71AE
		Dilution Factor: 1				
Lead	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L4FR71AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	07/21-07/22/10	L4FR71AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	07/21-07/22/10	L4FR71AH
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G160505 **Work Order #...:** L4HP61AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A0G210000-467 L4HP61AD-LCSD
Prep Date.....: 07/20/10 **Analysis Date..:** 07/20/10
Prep Batch #...: 0202467
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Vinyl chloride	60	(55 - 121)			SW846 8260B
	58	(55 - 121)	3.3	(0-30)	SW846 8260B
1,1-Dichloroethylene	**95**	**(65 - 119)**			**SW846 8260B**
	90	**(65 - 119)**	**5.2**	**(0-20)**	**SW846 8260B**
Chloroform	97	(87 - 119)			SW846 8260B
	97	(87 - 119)	0.40	(0-30)	SW846 8260B
1,2-Dichloroethane	97	(83 - 122)			SW846 8260B
	93	(83 - 122)	3.8	(0-30)	SW846 8260B
2-Butanone (MEK)	79	(53 - 173)			SW846 8260B
	79	(53 - 173)	0.39	(0-40)	SW846 8260B
Carbon tetrachloride	86	(81 - 126)			SW846 8260B
	84	(81 - 126)	2.6	(0-30)	SW846 8260B
Trichloroethylene	**103**	**(80 - 122)**			**SW846 8260B**
	101	**(80 - 122)**	**2.0**	**(0-20)**	**SW846 8260B**
Benzene	**100**	**(79 - 116)**			**SW846 8260B**
	99	**(79 - 116)**	**1.3**	**(0-20)**	**SW846 8260B**
Tetrachloroethylene	90	(83 - 116)			SW846 8260B
	89	(83 - 116)	1.5	(0-30)	SW846 8260B
Chlorobenzene	**92**	**(81 - 115)**			**SW846 8260B**
	92	**(81 - 115)**	**0.34**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(78 - 115)
	107	(78 - 115)
1,2-Dichloroethane-d4	92	(77 - 120)
	93	(77 - 120)
Toluene-d8	101	(78 - 111)
	101	(78 - 111)
4-Bromofluorobenzene	95	(80 - 114)
	98	(80 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A0G160505 **Work Order #...:** L4HDR1AA **Matrix.....:** SOLID
LCS Lot-Sample#: A0G210000-403
Prep Date.....: 07/21/10 **Analysis Date..:** 07/21/10
Prep Batch #...: 0202403
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**105**	**(76 - 118)**	**SW846 8260B**
2-Butanone (MEK)	87	(40 - 110)	SW846 8260B
Carbon tetrachloride	92	(71 - 124)	SW846 8260B
Chlorobenzene	**103**	**(76 - 113)**	**SW846 8260B**
Chloroform	110	(82 - 117)	SW846 8260B
1,2-Dichloroethane	101	(78 - 122)	SW846 8260B
1,1-Dichloroethylene	**96**	**(67 - 128)**	**SW846 8260B**
Tetrachloroethylene	119	(64 - 121)	SW846 8260B
Trichloroethylene	**113**	**(76 - 119)**	**SW846 8260B**
Vinyl chloride	83	(47 - 123)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	113	(86 - 124)
1,2-Dichloroethane-d4	104	(80 - 122)
Toluene-d8	107	(90 - 122)
4-Bromofluorobenzene	99	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A0G160505 **Work Order #...:** L4FT11AC **Matrix.....:** WATER
LCS Lot-Sample#: A0G210000-046
Prep Date.....: 07/21/10 **Analysis Date..:** 07/22/10
Prep Batch #...: 0202046
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
o-Cresol	68	(23 - 110)	**SW846 8270C**
m-Cresol & p-Cresol	56	(28 - 110)	**SW846 8270C**
1,4-Dichlorobenzene	50	(13 - 110)	**SW846 8270C**
2,4-Dinitrotoluene	72	(45 - 119)	**SW846 8270C**
Hexachlorobenzene	64	(46 - 112)	**SW846 8270C**
Hexachlorobutadiene	44	(10 - 110)	**SW846 8270C**
Hexachloroethane	43	(10 - 110)	**SW846 8270C**
Nitrobenzene	67	(29 - 118)	**SW846 8270C**
Pentachlorophenol	40	(10 - 116)	**SW846 8270C**
Pyridine	57	(15 - 110)	**SW846 8270C**
2,4,5-Trichloro-phenol	65	(36 - 110)	**SW846 8270C**
2,4,6-Trichloro-phenol	60	(32 - 110)	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(27 - 110)
2-Fluorobiphenyl	60	(20 - 110)
Terphenyl-d14	73	(44 - 110)
Phenol-d5	49	(10 - 110)
2-Fluorophenol	57	(10 - 110)
2,4,6-Tribromophenol	65	(28 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: A0G160505 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A0G210000-025 **Prep Batch #...:** 0202025					
Mercury	98	(50 - 150)	SW846 7470A	07/21/10	L4FR71AT
		Dilution Factor: 1			
Arsenic	93	(50 - 150)	SW846 6010B	07/21-07/22/10	L4FR71AK
		Dilution Factor: 1			
Barium	101	(50 - 150)	SW846 6010B	07/21-07/22/10	L4FR71AL
		Dilution Factor: 1			
Cadmium	103	(50 - 150)	SW846 6010B	07/21-07/22/10	L4FR71AM
		Dilution Factor: 1			
Chromium	107	(50 - 150)	SW846 6010B	07/21-07/22/10	L4FR71AN
		Dilution Factor: 1			
Lead	97	(50 - 150)	SW846 6010B	07/21-07/22/10	L4FR71AP
		Dilution Factor: 1			
Selenium	106	(50 - 150)	SW846 6010B	07/21-07/22/10	L4FR71AQ
		Dilution Factor: 1			
Silver	110	(50 - 150)	SW846 6010B	07/21-07/22/10	L4FR71AR
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G160505 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)		Work Order #: L4D5F1AA	LCS Lot-Sample#: A0G200000-125		
	99	(97 - 103)	SW846 9040B	07/16/10	0201125
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP GC/MS Volatiles

Client Lot #...: A0G160505 **Work Order #...:** L38MG1AF-MS **Matrix.....:** SOLID
MS Lot-Sample #: A0G150552-001 L38MG1AG-MSD
Date Sampled...: 07/10/10 **Date Received..:** 07/15/10
Leach Date.....: 07/20/10 **Prep Date.....:** 07/21/10 **Analysis Date..:** 07/21/10
Leach Batch #..: P020001 **Prep Batch #...:** 0202403
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**103**	**(76 - 117)**			**SW846 8260B**
	102	**(76 - 117)**	**1.0**	**(0-30)**	**SW846 8260B**
2-Butanone (MEK)	81	(37 - 110)			SW846 8260B
	85	(37 - 110)	3.7	(0-30)	SW846 8260B
Carbon tetrachloride	82	(72 - 124)			SW846 8260B
	86	(72 - 124)	4.0	(0-30)	SW846 8260B
Chlorobenzene	**102**	**(72 - 114)**			**SW846 8260B**
	102	**(72 - 114)**	**0.28**	**(0-30)**	**SW846 8260B**
Chloroform	109	(82 - 117)			SW846 8260B
	106	(82 - 117)	2.7	(0-30)	SW846 8260B
1,2-Dichloroethane	101	(80 - 120)			SW846 8260B
	99	(80 - 120)	2.3	(0-30)	SW846 8260B
1,1-Dichloroethylene	**89**	**(67 - 129)**			**SW846 8260B**
	90	**(67 - 129)**	**0.56**	**(0-30)**	**SW846 8260B**
Tetrachloroethylene	115	(60 - 119)			SW846 8260B
	113	(60 - 119)	1.6	(0-30)	SW846 8260B
Trichloroethylene	**113**	**(72 - 121)**			**SW846 8260B**
	115	**(72 - 121)**	**1.2**	**(0-30)**	**SW846 8260B**
Vinyl chloride	82	(54 - 118)			SW846 8260B
	82	(54 - 118)	0.69	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	115	(86 - 125)
	113	(86 - 125)
1,2-Dichloroethane-d4	101	(80 - 122)
	100	(80 - 122)
Toluene-d8	105	(90 - 122)
	106	(90 - 122)
4-Bromofluorobenzene	98	(84 - 125)
	99	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP GC/MS Semivolatiles

Lot-Sample #...: A0G160505 **Work Order #...:** L4APW1AT **Matrix.....:** SOLID
MS Lot-Sample #: A0G160604-001
Date Sampled...: 07/15/10 14:15 **Date Received..:** 07/16/10
Leach Date.....: 07/20/10 **Prep Date.....:** 07/21/10 **Analysis Date..:** 07/23/10
Leach Batch #..: P020113 **Prep Batch #...:** 0202045
Dilution Factor: 10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
o-Cresol	**68**	**(33 - 115)**	**SW846 8270C**
2-Methylphenol	**68**	**(33 - 115)**	**SW846 8270C**
m-Cresol & p-Cresol	**70**	**(46 - 109)**	**SW846 8270C**
1,4-Dichlorobenzene	**55**	**(18 - 110)**	**SW846 8270C**
2,4-Dinitrotoluene	**47**	**(31 - 131)**	**SW846 8270C**
Hexachlorobenzene	**65**	**(36 - 132)**	**SW846 8270C**
Hexachlorobutadiene	**52**	**(18 - 116)**	**SW846 8270C**
Hexachloroethane	**47**	**(18 - 110)**	**SW846 8270C**
Nitrobenzene	**63**	**(19 - 211)**	**SW846 8270C**
Pentachlorophenol	**47**	**(10 - 140)**	**SW846 8270C**
Pyridine	**66**	**(10 - 148)**	**SW846 8270C**
2,4,5-Trichloro-phenol	**59**	**(24 - 143)**	**SW846 8270C**
2,4,6-Trichloro-phenol	**62**	**(36 - 135)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(29 - 111)
2-Fluorobiphenyl	65	(22 - 110)
Terphenyl-d14	76	(40 - 119)
Phenol-d5	58	(10 - 110)
2-Fluorophenol	58	(10 - 110)
2,4,6-Tribromophenol	67	(17 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: A0G160505 **Matrix.....:** WG
Date Sampled...: 07/15/10 14:45 **Date Received..:** 07/15/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A0G160505-003 **Prep Batch #...:** 0202025							
Leach Date.....: 07/20/10 **Leach Batch #..:** P020111							
Mercury	88	(50 - 150)			SW846 7470A	07/21/10	L39501CA
	88	(50 - 150)	0.56	(0-20)	SW846 7470A	07/21/10	L39501CC
		Dilution Factor: 1					
Arsenic	93	(50 - 150)			SW846 6010B	07/21-07/22/10	L39501AU
	94	(50 - 150)	1.2	(0-20)	SW846 6010B	07/21-07/22/10	L39501AV
		Dilution Factor: 5					
Barium	103	(50 - 150)			SW846 6010B	07/21-07/22/10	L39501AW
	104	(50 - 150)	0.97	(0-20)	SW846 6010B	07/21-07/22/10	L39501AX
		Dilution Factor: 5					
Cadmium	105	(50 - 150)			SW846 6010B	07/21-07/22/10	L39501A0
	107	(50 - 150)	2.1	(0-20)	SW846 6010B	07/21-07/22/10	L39501A1
		Dilution Factor: 5					
Chromium	112	(50 - 150)			SW846 6010B	07/21-07/22/10	L39501A2
	114	(50 - 150)	1.4	(0-20)	SW846 6010B	07/21-07/22/10	L39501A3
		Dilution Factor: 5					
Lead	102	(50 - 150)			SW846 6010B	07/21-07/22/10	L39501A4
	104	(50 - 150)	2.0	(0-20)	SW846 6010B	07/21-07/22/10	L39501A5
		Dilution Factor: 5					
Selenium	102	(50 - 150)			SW846 6010B	07/21-07/22/10	L39501A6
	104	(50 - 150)	1.9	(0-20)	SW846 6010B	07/21-07/22/10	L39501A7
		Dilution Factor: 5					
Silver	90	(50 - 150)			SW846 6010B	07/21-07/22/10	L39501A8
	108	(50 - 150)	17	(0-20)	SW846 6010B	07/21-07/22/10	L39501A9
		Dilution Factor: 5					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G160505 **Work Order #...:** L395N-SMP L395N-DUP **Matrix.....:** WG

Date Sampled...: 07/15/10 14:30 **Date Received..:** 07/15/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Flashpoint						SD Lot-Sample #: A0G160505-002		
	>180	>180	deg F	0.0	(0-20)	SW846 1010	07/27/10	0208367
		Dilution Factor: 1						
pH (liquid)						SD Lot-Sample #: A0G160505-002		
	7.6	7.7	No Units	0.39	(0-20)	SW846 9040B	07/16/10	0201125
		Dilution Factor: 1						

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A0G160505 **Work Order #...:** L4AJR-SMP L4AJR-DUP **Matrix.....:** WASTE

Date Sampled...: 07/15/10 09:50 **Date Received..:** 07/16/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Flashpoint						SD Lot-Sample #: A0G160579-001		
	>180	>180	deg F	0.0	(0-20)	SW846 1010	07/27/10	0208367

Dilution Factor: 1

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: 1
Address: 1800 Carillon Blvd.	Telephone: 513-825-7500	Telephone: 513-825-7500	Telephone: 330-497-9396	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email:	Turnaround Time	Analyses	
Phone: 513-825-7500		TAT if different from below PERSOW ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Pickup			
Project Number: 30240.0006	Shipping/Tracking No:			
PO# 16720				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Field Filtered Sample	Perform MS/MSD	VOCs	TCLP SVOCs	Metals	Mercury	Reactive Cyanide/Sulfide	pH	Ignitability	Sample Specific Notes / Special Instructions: Cooler ID
Trip Blank	7/15/10	14:15		X						2							X							TSO10
FWG-IDW-MWPURGEJULY2010	7/15/10	14:30		X									5				X	X	X	X	X	X	X	TSO10
FWG-IDW-MWDECONJULY2010	7/15/10	14:45		X									5				X	X	X	X	X	X	X	TSO10

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company: EQM	Date/Time: 7-15-10 1520	Received by:	Company: TestAmerica	Date/Time: 7/15/10 1520
Relinquished by:	Company: TestAmerica	Date/Time: 7/15/10 1615	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TAL NC	Date/Time: 7/15/10 1615

Temps may not meet requirements if sample collection is close to FedEx pick up time. ~~All VOAs in cooler~~

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TAL-0018 (1008)

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 240160505
North Canton Facility

Client EQM Project RVAAP By: Deana Mc
Cooler Received on 7/15/10 Opened on 7/15/10 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # T5010 Multiple Coolers ☐ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 1 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt 4.2 °C See back of form for multiple coolers/temps ☐
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☐ No ☐ NA ☒
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 051010-HNO_3; Sulfuric Acid Lot# 121709-H_2SO_4; Sodium Hydroxide Lot# 100108 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
MWPURGEJULY		7/15/10	
MWDECONJULY		1	

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

BUFFALO DATA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Analytical Report

SDG Number: A0G160505

Project Description(s)

Work Order RTG1296 - Reactive Cyanide / Reactive Sulfide

For:

Mark Loeb

TestAmerica North Canton

4101 Shuffel Drive NW

North Canton, OH 44720

Sally Hoffman

Project Manager

Sally.Hoffman@testamericainc.com

Monday, July 26, 2010

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Persuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0G160505

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0G160505

Received: 07/20/10
Reported: 07/26/10 09:56

TestAmerica Buffalo
Current Certifications

As of 06/17/2010

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire *	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
North Dakota	CWA, RCRA	R-176
Oklahoma	CWA, RCRA	9421
Oregon*	CWA,RCRA	NY200003
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412 -08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for p arameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0G160505

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0G160505

Received: 07/20/10
Reported: 07/26/10 09:56

CASE NARRATIVE

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0G160505

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0G160505

Received: 07/20/10
Reported: 07/26/10 09:56

DATA QUALIFIERS AND DEFINITIONS

NR Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0G160505

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0G160505

Received: 07/20/10
Reported: 07/26/10 09:56

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWDECONJULY2010 (RTG1296-02 - Water)					**Sampled: 07/15/10 14:45**		**Recvd: 07/20/10 08:40**		
General Chemistry Parameters									
HCN Released From Waste	**58.4**		10.0	mg/L	1.00	07/23/10 08:00	RJF	10G1641	Section 7.3

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0G160505

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0G160505

Received: 07/20/10
Reported: 07/26/10 09:56

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
FWG-IDW-MWDECONJULY2010	RTG1296-02	Water	07/15/10 14:45	07/20/10 08:40	
FWG-IDW-MWPURGEJULY2010	RTG1296-01	Water	07/15/10 14:30	07/20/10 08:40	

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0G160505

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0G160505

Received: 07/20/10
Reported: 07/26/10 09:56

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWDECONJULY2010 (RTG1296-02 - Water)					**Sampled: 07/15/10 14:45**		**Recvd: 07/20/10 08:40**		
General Chemistry Parameters									
HCN Released From Waste	**58.4**		10.0	mg/L	1.00	07/23/10 08:00	RJF	10G1641	Section 7.3
H2S Released From Waste	ND		10.0	mg/L	1.00	07/22/10 11:00	RJF	10G1559	Section 7.3

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0G160505

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0G160505

Received: 07/20/10
Reported: 07/26/10 09:56

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: FWG-IDW-MWPURGEJULY2010 (RTG1296-01 - Water)					**Sampled: 07/15/10 14:30**		**Recvd: 07/20/10 08:40**		
General Chemistry Parameters									
HCN Released From Waste	ND		10.0	mg/L	1.00	07/23/10 08:00	RJF	10G1641	Section 7.3
H2S Released From Waste	ND		10.0	mg/L	1.00	07/22/10 11:00	RJF	10G1559	Section 7.3

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0G160505

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0G160505

Received: 07/20/10
Reported: 07/26/10 09:56

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
General Chemistry Parameters									
Section 7.3	10G1559	RTG1296-01	100.00	mL	100.00	mL	07/22/10 11:00	RJF	Reactivity
Section 7.3	10G1559	RTG1296-02	100.00	mL	100.00	mL	07/22/10 11:00	RJF	Reactivity
Section 7.3	10G1641	RTG1296-01	5.00	mL	5.00	mL	07/23/10 08:00	RJF	Reactivity
Section 7.3	10G1641	RTG1296-02	5.00	mL	5.00	mL	07/23/10 08:00	RJF	Reactivity

TestAmerica North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

SDG Number: A0G160505

Project: Reactive Cyanide / Reactive Sulfide
Project Number: A0G160505

Received: 07/20/10
Reported: 07/26/10 09:56

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
General Chemistry Parameters										
Blank Analyzed: 07/22/10 (Lab Number:10G1559-BLK1, Batch: 10G1559)										
H2S Released From Waste			10.0	mg/L	ND					
LCS Analyzed: 07/22/10 (Lab Number:10G1559-BS1, Batch: 10G1559)										
H2S Released From Waste		570	10.0	mg/L	160	28	10-100			
General Chemistry Parameters										
Blank Analyzed: 07/23/10 (Lab Number:10G1641-BLK1, Batch: 10G1641)										
HCN Released From Waste			10.0	mg/L	ND					
LCS Analyzed: 07/23/10 (Lab Number:10G1641-BS1, Batch: 10G1641)										
HCN Released From Waste		1000	10.0	mg/L	717	72	10-100			

TestAmerica Laboratories, Inc.

Laboratory TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228

SAMPLE ANALYSIS REQUISITION

Lab Request SR120162

Report Package: Report

Need Analytical Report 2010-07-29

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A0G160505-2	L395N	FWG-IDW-MWPURGEJULY2010	2010-07-15 14:30	WATER, 7.3.3, Reactive Cyanide (Buffalo)
A0G160505-2	L395N	FWG-IDW-MWPURGEJULY2010	2010-07-15 14:30	WATER, 7.3.4, Reactive Sulfide (Buffalo)
A0G160505-3	L3950	FWG-IDW-MWDECONJULY2010	2010-07-15 14:45	WATER, 7.3.3, Reactive Cyanide (Buffalo)
A0G160505-3	L3950	FWG-IDW-MWDECONJULY2010	2010-07-15 14:45	WATER, 7.3.4, Reactive Sulfide (Buffalo)

Please use Client Sample ID for report

Call MARK LOEB with questions at 330-497-9396

at the TAL North Canton Laboratory

Shipping Method: FED EX

Need detection limit and analysis date included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: _____ Date/Time: 7/16/10 0800

Relinquished by: _____ Date/Time: _____

Received for lab by: _____ Date/Time: 7/16/10 0840 [illegible]

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

END OF REPORT

APPENDIX F

REPORTING LIMITS THAT CURRENTLY DO NOT MEET THE RVAAP QAPP PQLs AND/OR REGION 9 PRGS

VOCs

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	0.12	5.0
71-43-2	Benzene	0.22	1.0	1.0	0.35	5.0
67-66-3	Chloroform	0.16	1.0	1.0	0.17	NA
10061-01-5	cis-1,3-Dichloropropene	0.12	1.0	1.0	0.4	NA
75-01-4	Vinyl chloride	0.21	1.0	1.0	0.02	2.0
79-34-5	1,1,2,2-Tetrachloroethane	0.22	1.0	1.0	0.055	NA
106-93-4	1,2-Dibromoethane	0.24	1.0	1.0	0.0056	NA
79-01-6	Trichloroethene	0.28	1.0	1.0	0.028	5.0
127-18-4	Tetrachloroethene	0.19	1.0	1.0	0.1	5.0
75-27-4	Bromodichloromethane	0.14	1.0	1.0	0.18	NA
79-00-5	1,1,2-Trichloroethane	0.22	1.0	1.0	0.2	5.0
124-48-1	Dibromochloromethane	0.19	1.0	1.0	0.13	NA
10061-02-6	Trans-1,3-Dichloropropene	0.17	1.0	1.0	0.4	NA
56-23-5	Carbon tetrachloride	0.19	1.0	1.0	0.17	5.0

Note: All units are µg/L
NA = Not Available

SVOCs

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
111-44-4	Bis(2-Chloroethyl) ether	0.088	1.0	10	0.01	NA
50-32-8	Benzo(a)pyrene	0.048	0.20	10	0.0092	0.2
53-70-3	Dibenz(a,h)anthracene	0.039	0.20	10	0.0093	NA
118-74-1	Hexachlorobenzene	0.065	0.20	10	0.042	1.0
205-99-2	Benzo(b)fluoranthene	0.049	0.20	10	0.092	NA
193-39-5	Indeno(1,2,3-cd)pyrene	0.065	0.20	10	0.092	NA
56-55-3	Benzo(a)anthracene	0.052	0.20	10	0.092	NA
91-94-1	3,3'-Dichlorobenzidine	0.48	5.0	10	0.15	NA
106-46-7	1,4-Dichlorobenzene	0.52	1.0	10	0.5	75
87-86-5	Pentachlorophenol	0.48	5.0	25	0.56	1.0
87-68-3	Hexachlorobutadiene	0.51	1.0	10	0.86	NA
88-06-2	2,4,6-Trichlorophenol	1.4	5.0	10	3.6	NA

Note: All units are µg/L
NA = Not Available

Pesticides

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
60-57-1	Dieldrin	0.0067	0.030	0.05	0.0042	NA
309-00-2	Aldrin	0.0061	0.030	0.05	0.004	NA
1024-57-3	Heptachlor epoxide	0.0065	0.030	0.05	0.0074	0.2
319-84-6	alpha-BHC	0.0062	0.030	0.05	0.011	NA
76-44-8	Heptachlor	0.0062	0.030	0.05	0.015	0.4

Note: All units are µg/L
NA = Not Available

Explosives

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
88-72-2	2-Nitrotoluene	0.1	0.48	0.2	120	NA
99-08-1	3-Nitrotoluene	0.1	0.48	0.2	0.049	NA
99-99-0	4-Nitrotoluene	0.1	0.48	0.2	0.66	NA

Note: All units are µg/L
NA = Not Available

PCBs

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
11104-28-2	PCB-1221	0.49	0.50	0.50	0.034	5.0
11141-16-5	PCB-1232	0.41	0.50	0.50	0.034	5.0
53469-21-9	PCB-1242	0.11	0.50	0.50	0.034	5.0
12672-29-6	PCB-1248	0.049	0.50	0.50	0.034	5.0
11097-69-1	PCB-1254	0.087	0.50	0.50	0.034	5.0
11096-82-5	PCB-1260	0.071	0.50	0.50	0.034	5.0

Note: All units are µg/L
NA = Not Available

Inorganics

CAS No.	Analyte Name	MDL	Lab RL	RVAAP QAPP PQL	Region 9 PRG	MCL
7440-70-2	Calcium	80	100	100	NS	NA
7440-23-5	Sodium	410	1000	200	NS	NA
7440-09-7	Potassium	72	1000	200	NS	NA

Note: All units are µg/L
NA = Not Available
These compounds will not meet the reporting limits specified in the QAPP. However, these chemicals have consistently been found naturally occurring on the site at values that exceed the QAPP RLs.

APPENDIX G

CORRESPONDENCE & COMMENT/RESPONSE TABLE

Ohio | Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

January 11, 2011

RE: RAVENNA ARMY AMMUNITION PLANT,
PORTAGE/TRUMBULL COUNTIES,
DRAFT, FWGWMP JULY 2010
SAMPLING EVENT REPORT,
RESPONSE TO OHIO EPA COMMENTS,
DATED DECEMBER 6, 2010

Mr. Mark Patterson
Installation Manager
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, OH 44266

CERTIFIED MAIL
7008 3230 0003 5419 9581

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Response to Ohio EPA Comments, Facility-Wide Ground Water Monitoring Program (FWGWMP) Draft July 2010 Sampling Event" document. The "Investigative Derived Waste and Characterization and Disposal Plan" (IDW) has been included in Appendix E in this document. The document was received at Ohio EPA, Northeast District Office (NEDO), Division of Emergency and Remedial Response (DERR), on December 7, 2010. The document was prepared for the U.S. Army Corps of Engineers (USACE) – Louisville District, by Environmental Quality Management, Inc. (EQM), under contract no. W912QR-04-D-0036.

The IDW plan, Appendix E, was previously approved. The comments have been adequately addressed. Please forward one copy of the replacement pages and titles.

If you have any questions, please call me at (330) 963-1207.

Sincerely,

/Vicki Deppisch

Vicki Deppisch, Project Coordinator
Division of Emergency and Remedial Response

VD/kss

cc: Eileen Mohr, Ohio EPA, DERR, NEDO
Katie Tait, OHARNG RTLS
Maj. Ed Meade, OHARNG RTLS
Glen Beckham, USACE Louisville
Mark Krivansky, AEC
John Miller, EQM
Mark Nichter, USACE Louisville
Conni McCambridge, Ohio EPA, DERR, NEDO

ec: Mike Eberle, Ohio EPA, DERR, NEDO
Todd Fisher, Ohio EPA, DERR, NEDO

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087-1924

330 | 963 1200
330 | 487 0769 (fax)
www.epa.ohio.gov

Ohio | Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

November 18, 2010

RE: RAVENNA ARMY AMMUNITION PLANT, PORTAGE/TRUMBULL COUNTIES, FWGWMP, DRAFT, JULY 2010 SAMPLING EVENT REPORT (# 267000859036)

Mr. Mark Patterson
Installation Manager
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, OH 44266

CERTIFIED MAIL
7008 3230 0003 5419 9789

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Draft, Facility-Wide Ground Water Monitoring Program (FWGWMP) July 2010 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio" document. The "Investigative Derived Waste and Characterization and Disposal Plan" (IDW) has been included as Appendix E. The document was dated and received at Ohio EPA, Northeast District Office (NEDO), Division of Emergency and Remedial Response (DERR) on October 25, 2010. The document was prepared for the U.S. Army Corps of Engineers (USACE) – Louisville District, by Environmental Quality Management, Inc. (EQM), under contract no. W912QR-04-D-0036. This document was reviewed by Ohio EPA personnel in NEDO, DERR, and NEDO's Division of Drinking and Ground Waters (DDAGW).

This monitoring event was completed under the FWGWMP. Fifty-one wells were sampled during a six-day sampling event on July 8, 9, and 12 through July 15, 2010.

The IDW plan, Appendix E, was approved in an August 12, 2010 letter from Ohio EPA. Enclosed are Ohio EPA's comments that need to be addressed before the entire document can be approved.

The Director's Final Findings and Orders require that the responses to comments (RTCs) be received within fifteen (15) days of the Army's receipt of Ohio EPA's correspondence, and that the revised document be submitted within thirty (30) days of the Army's receipt of Agency correspondence.

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087-1924

330 | 963 1200
330 | 487 0769 (fax)
www.epa.ohio.gov

If you have any questions, please call me at (330) 963-1207.

Sincerely,

Vicki Deppisch
Project Coordinator
Division of Emergency and Remedial Response

VD/kss

enclosure

cc: Eileen Mohr, Ohio EPA, DERR, NEDO
John Miller, EQM
Katie Tait, OHARNG RTLS
Maj. Ed Meade, OHARNG RTLS
Glen Beckham, USACE Louisville
Mark Nichter, USACE Louisville
Justin Burke, Ohio EPA, DERR, CO
Mark Krivansky, AEC
Conni McCambridge, Ohio EPA, DERR, NEDO

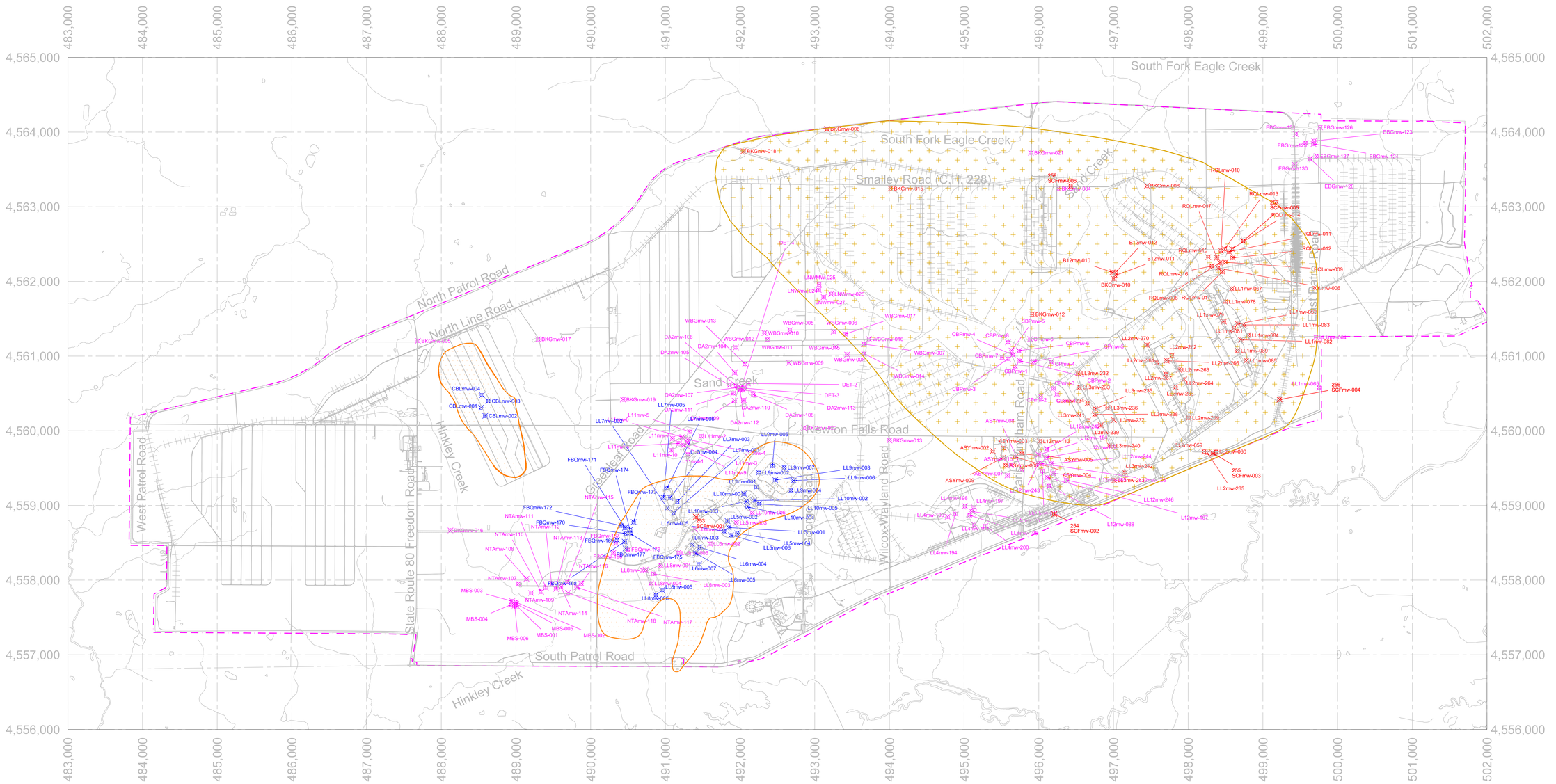
ec: Mike Eberle, Ohio EPA, DERR, NEDO
Todd Fisher, Ohio EPA, DERR, NEDO
Bob Guthrie, Management Solutions

PRELIMINARY DRAFT FACILITY-WIDE GROUNDWATER MONITORING PROGRAM
(REPORT ON THE JULY 2010 SAMPLING EVENT)
RAVENNA ARMY AMMUNITION PLANT, RAVENNA OHIO
COMMENT RESPONSE TABLE
NOVEMBER 18, 2010

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
O-1	Section 2.1, pg. 7		The text indicated that *"...the groundwater elevations from the new Sharon Conglomerate wells were evaluated and determined not to be representative of either the Homewood or the Sharon aquifers, therefore they were not used to determine the potentiometric contours."* The submittal noted that the January 2010 groundwater elevation data from the six Sharon Conglomerate wells were not used to construct potentiometric maps (Section 2.1, pg. 7). It is unclear how the groundwater elevations for the Sharon Conglomerate will be utilized in the future.	Please provide an explanation as to how the groundwater elevation data from these wells will be utilized in the FWGWMP in the future. This issue has previously been noted and needs to be resolved.	Section 2.1 (beginning on Line 27) provides an explanation as to how the Sharon Conglomerate wells were used to develop Plate 4 which is a potentiometric map for the Sharon Conglomerate wells. The following text will be revised to clarify how the Sharon Conglomerate well information was used. *"...the groundwater elevations from the new Sharon Conglomerate wells were evaluated and determined not to be representative of either the Homewood aquifer or the upper portion of the Sharon aquifer. These wells were installed with their screened intervals positioned at the basal portion of the Sharon Conglomerate sandstone. Therefore the groundwater elevations collected from these wells were used to determine the potentiometric contours for a separate map (Plate 4) as described below."*
O-2	Section 2.2, Page 8 and Section 3.1.1, pg. 13		Well purge logs reported high turbidity values in several Load Line 12 wells (i.e., LL12mw-113, LL12mw-128, LL12mw-243, and LL12mw-244) that utilized low-flow purging and sampling techniques. While the text discusses that these four wells were redeveloped in July 2010, it is unclear whether these observed turbidity values are related to r well design issues and how this possibility was ruled out.	Please provide an explanation as to whether these high turbidity values are/are not related to well design and how the turbidity issue for Load Line 12 wells will be resolved.	Based on the continuing sediment accumulation and high turbidity readings there is the possibility that the current well design is contributing to the turbidity issue. This does not, however have a negative impact on the quality of data from the sampling of these wells or the representativeness of the data (the metals samples are filtered for each event). As stated in the Ohio EPA Technical Guidance Manual for groundwater ***"Turbidity**, which is the visible presence of suspended mineral and organic particles in a ground water sample, also is not an indicator of ground water*

PRELIMINARY DRAFT FACILITY-WIDE GROUNDWATER MONITORING PROGRAM
(REPORT ON THE JULY 2010 SAMPLING EVENT)
RAVENNA ARMY AMMUNITION PLANT, RAVENNA OHIO
COMMENT RESPONSE TABLE
NOVEMBER 18, 2010

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
					chemical stabilization and does not distinguish between stagnant casing water and formation water."
O-3	Data Tables		It was noted that some of the wells in LL-12 continue to have elevated levels of nitrate, including some above the MCL. LL12mw-113 also had an elevated arsenic level.	No response required.	Noted.



LEGEND

- UNCONSOLIDATED WELL
- HOMEWOOD MEMBER WELL
- SHARON MEMBER WELL
- PROPERTY LINE
- HOMEWOOD MEMBER
- SHARON MEMBER

0 50 1000

SCALE (METERS)

N

COORDINATE SYSTEM UTM NAD 83 ZONE 17

NOTE: THE UNCONSOLIDATED AQUIFER OVERLAYS THE HOMEWOOD AND SHARON MEMBERS, EXCEPT AS INDICATED ON PLATE 2

REV	DESCRIPTION	DATE	APPROVED
1	ADDED NOTE	12-04-08	BT
2	ADDED SFCmw-001 THRU 006	9-10-09	JM

REVISIONS

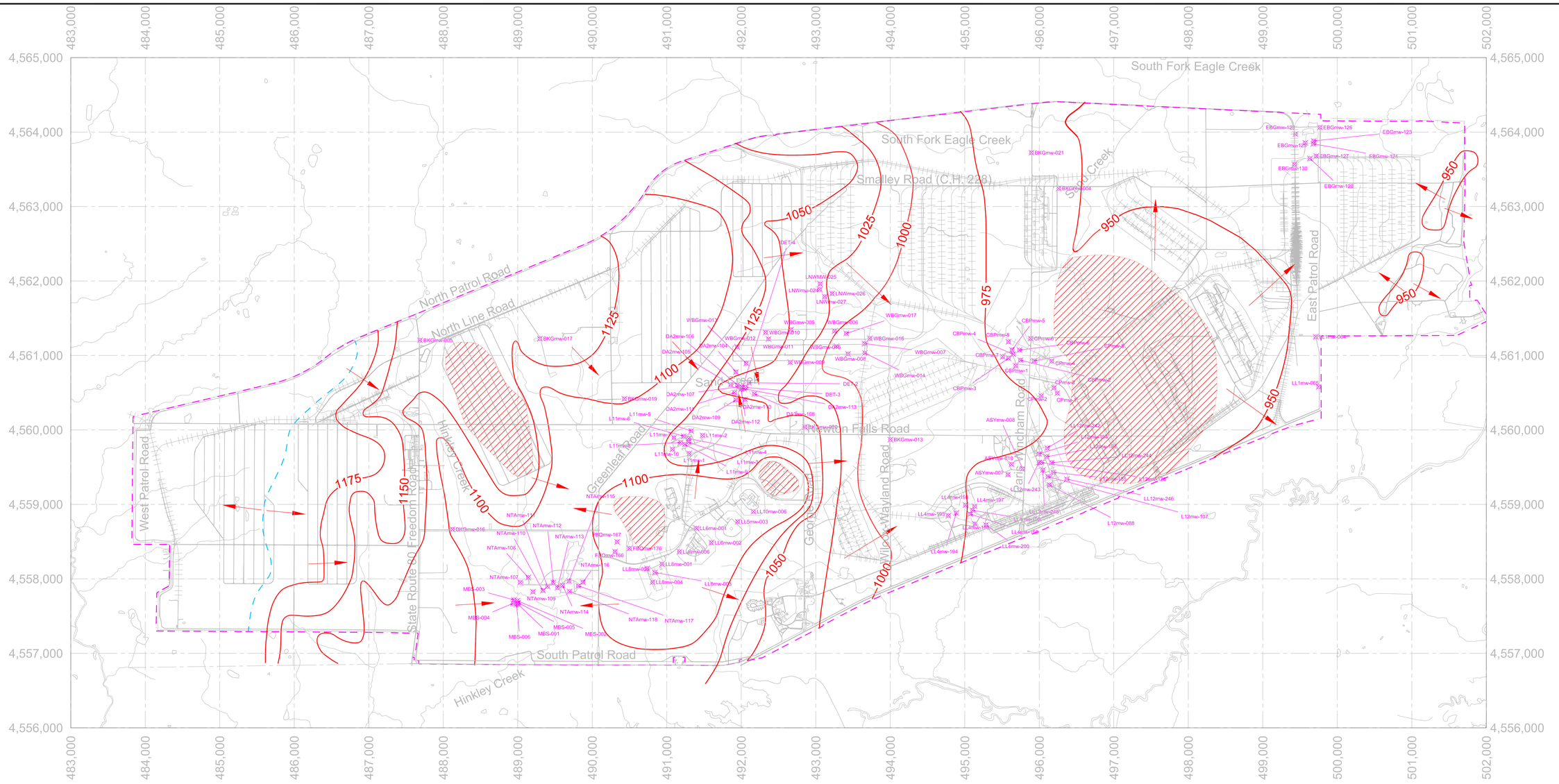
DRAWN	D.TOMO	10/22/07
CHECKED		
APPROVED		

SCALE: NONE

ENVIRONMENTAL QUALITY MANAGEMENT, INC.
1800 CARILLON BLVD.
CINCINNATI, OHIO 45240
P (513)825-7500
F (513)825-7495

MONITORING WELLS AT RVAAP

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
E	030240.0006	PLATE 1	2



Well ID	Elevation (ft, amsl)
BKGmw-004	952.96
BKGmw-005	1140.42
BKGmw-013	976.45
BKGmw-016	1096.90
BKGmw-017	1118.74
BKGmw-019	1102.89
BKGmw-020	1047.36
BKGmw-021	957.28
LL1mw-064	931.96
LL1mw-065	931.15
LL4mw-193	976.50
LL4mw-194	975.54
LL4mw-195	971.44
LL4mw-196	970.98
LL4mw-197	970.60
LL4mw-198	973.60
LL4mw-199	969.15
LL4mw-200	969.12
LL5mw-003	1107.38
LL6mw-001	1110.32
LL6mw-002	1108.11

Well ID	Elevation (ft, amsl)
LL6mw-006	1108.67
LL8mw-001	1109.47
LL8mw-002	1105.89
LL8mw-003	1105.96
LL8mw-004	1104.46
LL10mw-006	1111.05
LL11mw-001	1091.73
L L11mw-002	1079.28
LL11mw-003	1088.40
LL11mw-004	1084.64
LL11mw-005	1072.62
LL11mw-006	1083.62
LL11mw-007	1068.40
LL11mw-008	1087.66
LL11mw-009	1089.44
LL11mw-010	1079.15
LL12mw-088	973.29
LL12mw-107	969.64
LL12mw-128	966.35
LL12mw-153	97117
LL12mw-154	969.40

Well ID	Elevation (ft, amsl)
LL12mw-182	973.47
LL12mw-184	969.52
LL12mw-185	972.32
LL12mw-187	969.53
LL12mw-188	976.53
LL12mw-242	972.01
LL12mw-243	970.76
LL12mw-244	969.65
LL12mw-245	971.16
LL12mw-246	966.62
ASYmw-007	967.80
ASYmw-008	973.63
ASYmw-010	967.54
CBPmw-001	961.81
CBPmw-002	959.87
CBPmw-003	961.93
CBPmw-004	959.79
CBPmw-005	959.06
CBPmw-006	959.16
CBPmw-007	959.92
CBPmw-008	956.90

Well ID	Elevation (ft, amsl)
CPmw-001	973.40
CPmw-002	972.16
CPmw-003	972.34
CPmw-004	970.77
CPmw-005	961.50
CPmw-006	957.38
DETmw-001B	1042.32
DETmw-002	1028.95
DETmw-003	1027.66
DETmw-004	1029.17
DA2mw-104	1051.66
DA2mw-105	1042.44
DA2mw-106	1036.04
DA2mw-107	1035.12
DA2mw-108	1026.58
DA2mw-109	1057.27
DA2mw-110	1056.17
DA2mw-111	1038.36
DA2mw-112	1030.89
DA2mw-113	1029.77
EBGmw-123	938.54
EBGmw-124	938.49

Well ID	Elevation (ft, amsl)
EBGmw-125	938.52
EBGmw-126	938.70
EBGmw-127	938.75
EBGmw-128	938.92
EBGmw-129	939.07
EBGmw-130	938.07
FBQmw-166	1103.29
FBQmw-167	1111.42
FBQmw-176	1121.46
LNWmw-024	1025.50
LNWmw-025	1024.15
LNWmw-026	1024.07
LNWmw-027	1020.08
NTAmw-107	1067.38
NTAmw-108	1067.56
NTAmw-109	1067.74
NTAmw-110	1068.23
NTAmw-111	1077.74
NTAmw-112	1069.25
NTAmw-113	1068.66
NTAmw-114	1072.60
NTAmw-115	1075.91

Well ID	Elevation (ft, amsl)
NTAmw-116	1090.10
NTAmw-117	1081.41
NTAmw-118	1072.65
WBGmw-005	1049.28
WBGmw-006	1008.22
WBGmw-007	982.76
WBGmw-008	993.84
WBGmw-009	1034.33
WBGmw-010	1061.05
WBGmw-011	1060.98
WBGmw-012	1051.60
WBGmw-013	1058.79
WBGmw-014	980.38
WBGmw-015	1000.50
WBGmw-016	979.33
WBGmw-017	998.46
MBS-001	1064.69
MBS-002	1065.11
MBS-003	1065.74
MBS-004	1065.06
MBS-005	1064.67
MBS-006	1064.63

0 50 1000

SCALE (METERS)

LEGEND

- UNCONSOLIDATED WELL
- PROPERTY LINE
- 1100 GROUNDWATER DIRECTION
- UNCONSOLIDATED AQUIFER MISSING
- INFERRED GROUNDWATER DIVIDE

N

COORDINATE SYSTEM UTM NAD 83 ZONE 17

ENVIRONMENTAL QUALITY MANAGEMENT, INC.
1800 CARILLON BLVD,
CINCINNATI, OHIO 45240
P (513)825-7500
F (513)825-7495

REV	DESCRIPTION	DATE	APPROVED

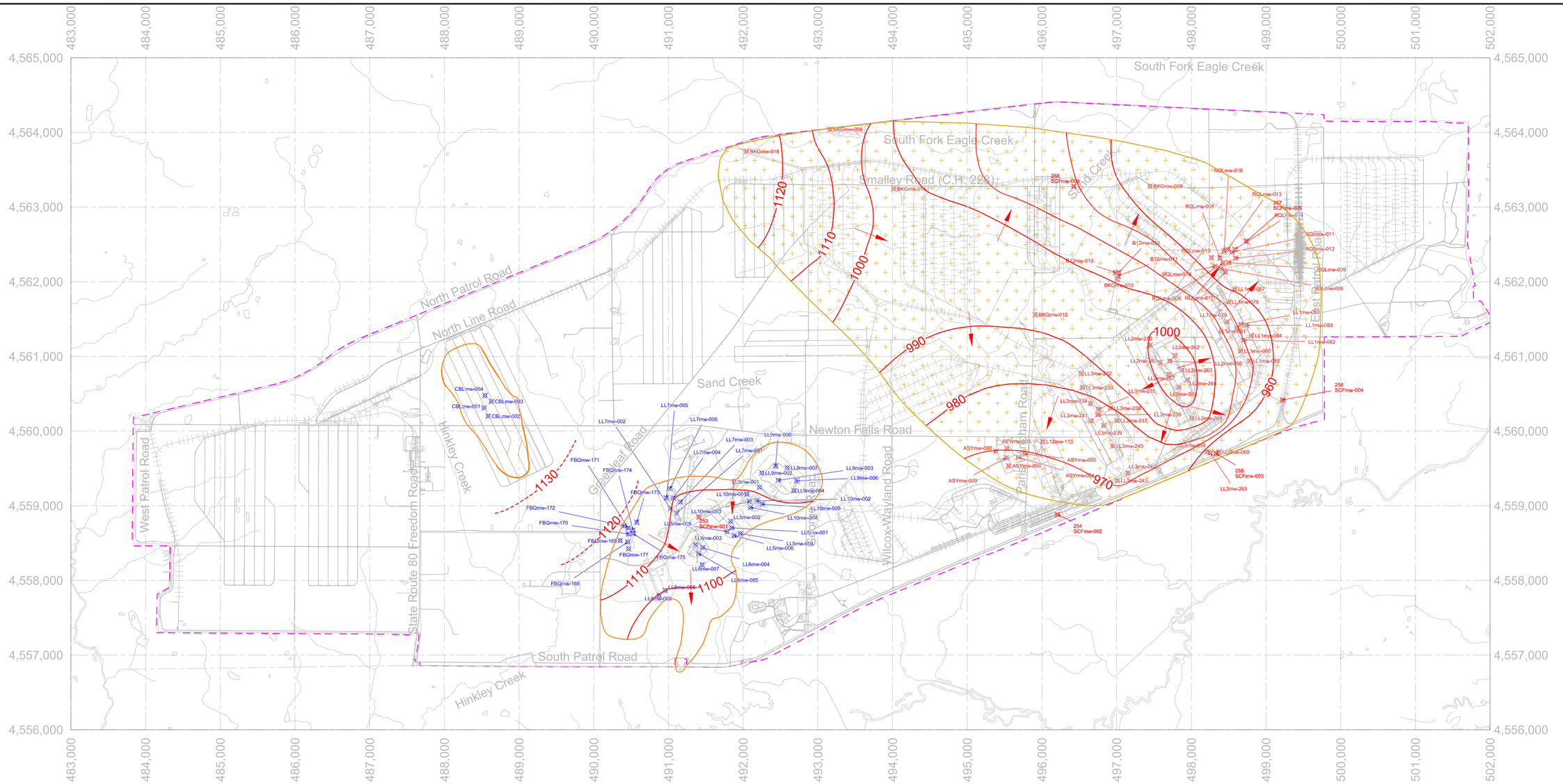
REVISIONS

DRAWN	D.TOMO	3-30-09
CHECKED	W.THOMPSON	3-30-09
APPROVED		

SCALE: NONE

POTENTIOMETRIC SURFACE OF UNCONSOLIDATED AQUIFER (JAN. 2010)

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
E	030240.0006	PLATE 2	1



HOMEWOOD MEMBER WELLS

Well ID	Elevation (ft, amsl)
LL5mw-001	1107.42
LL5mw-002	1107.35
LL5mw-004	1107.48
LL5mw-005	1107.39
LL5mw-006	1107.39
LL6mw-003	1108.49
LL6mw-004	1107.91
LL6mw-005	1108.22
LL6mw-007	1109.63
LL7mw-001	1108.36
LL7mw-002	1112.46
LL7mw-003	1108.83
LL7mw-004	1110.93
LL7mw-005	1113.39
LL7mw-006	1113.06
LL8mw-005	1101.99
LL8mw-006	1106.69
LL9mw-001	1118.84
LL9mw-002	1116.47
LL9mw-003	1124.15
LL9mw-004	1110.08

Well ID	Elevation (ft, amsl)
LL9mw-005	1114.80
LL9mw-006	1110.52
LL9mw-007	1110.36
LL10mw-001	1107.14
LL10mw-002	1108.83
LL10mw-003	1109.29
LL10mw-004	1108.41
LL10mw-005	1109.28
CBLmw-001	1134.46
CBLmw-002	1134.23
CBLmw-003	1135.61
CBLmw-004	1135.90
FBQmw-168	1120.98
FBQmw-169	1115.64
FBQmw-170	1120.33
FBQmw-171	1121.91
FBQmw-172	1119.78
FBQmw-173	1118.98
FBQmw-174	1119.08
FBQmw-175	1119.22
FBQmw-177	1114.96

SHARON MEMBER WELLS

Well ID	Elevation (ft, amsl)
BKGmw-006	1004.45
BKGmw-008	953.56
BKGmw-010	990.63
BKGmw-012	991.27
BKGmw-015	991.15
BKGmw-018	1023.94
LL1mw-063	964.78
LL1mw-067	958.01
LL1mw-078	960.01
LL1mw-079	961.68
LL1mw-080	983.56
LL1mw-081	965.26
LL1mw-082	969.68
LL1mw-083	958.23
LL1mw-084	966.17
LL1mw-085	958.44
LL2mw-059	951.51
LL2mw-060	950.26
LL2mw-261	1004.36
LL2mw-262	1002.99
LL2mw-263	1002.95
LL2mw-264	1005.07

Well ID	Elevation (ft, amsl)
LL2mw-265	949.94
LL2mw-266	1003.84
LL2mw-267	1005.22
LL2mw-268	1002.58
LL2mw-269	994.73
LL2mw-270	1002.23
LL3mw-232	977.35
LL3mw-233	976.59
LL3mw-234	996.69
LL3mw-235	989.89
LL3mw-236	992.45
LL3mw-237	988.48
LL3mw-238	991.57
LL3mw-239	976.89
LL3mw-240	978.71
LL3mw-241	984.34
LL3mw-242	981.79
LL3mw-243	974.33
ASYmw-001	967.99
ASYmw-002	968.27
ASYmw-003	968.03
ASYmw-004	969.20

Well ID	Elevation (ft, amsl)
ASYmw-005	971.29
ASYmw-006	967.72
ASYmw-009	968.84
B12mw-010	987.33
B12mw-011	984.36
B12mw-012	982.77
RQLmw-006	957.27
RQLmw-007	956.05
RQLmw-008	956.66
RQLmw-009	957.04
RQLmw-010	953.13
RQLmw-011	951.01
RQLmw-012	952.52
RQLmw-013	952.06
RQLmw-014	950.58
RQLmw-015	956.34
RQLmw-016	958.06
RQLmw-017	958.65

SHARON CONGLOMERATE WELLS

Well ID	Elevation (ft, amsl)
SCFmw-001	1030.94
SCFmw-002	964.16
SCFmw-003	948.98
SCFmw-004	943.47
SCFmw-005	947.85
SCFmw-006	947.43

*WELLS NOT USED TO PRODUCE POTENTIOMETRIC MAP

SHARON SHALE WELLS

Well ID	Elevation (ft, amsl)
LL12mw-113	974.84
LL12mw-183	969.46
LL12mw-186	972.59
LL12mw-189	974.79

*WELLS NOT USED TO PRODUCE POTENTIOMETRIC MAP

0 50 1000

SCALE (METERS)

LEGEND

- HOMEWOOD MEMBER WELL
- SHARON MEMBER WELL
- PROPERTY LINE
- 1100 / 1030 — LINE OF EQUAL GROUNDWATER ELEVATION (ft,amsl) (INTERMEDIATE DASHED)
- GROUNDWATER DIRECTION
- HOMEWOOD MEMBER
- SHARON MEMBER

N

COORDINATE SYSTEM UTM NAD 83 ZONE 17

ENVIRONMENTAL QUALITY MANAGEMENT, INC.
1800 CARILLON BLVD.
CINCINNATI, OHIO 45240
P (513)825-7500
F (513)825-7495

REV	DESCRIPTION	DATE	APPROVED
1	ADDED SFCmw-001 THRU 006	9-10-09	JM

REVISIONS

DRAWN	D.TOMO	3-30-09
CHECKED	W.THOMPSON	3-30-09
APPROVED		

SCALE: NONE

POTENTIOMETRIC SURFACE OF BEDROCK -HOMEWOOD AND SHARON (JAN. 2010)

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
E	030240.0006	PLATE 3	1

491,000 492,000 493,000 494,000 495,000 496,000 497,000 498,000 499,000

4,564,000 4,563,000 4,562,000 4,561,000 4,560,000 4,559,000

South Fork Eagle Creek

Smalley Road (C.R. 228)

Sand Creek

East Patrol Road

Sand Creek

Newton Falls Road

George Road

Wilcox Wayland Road

Paris Windham Road

SCFmw-001

SCFmw-002

SCFmw-003

SCFmw-004

SCFmw-005

SCFmw-006

990

980

970

960

950

940

SHARON CONGLOMERATE WELLS

Well ID	Elevation (ft, amsl)
SCFmw-001	1030.94
SCFmw-002	964.16
SCFmw-003	948.98
SCFmw-004	943.47
SCFmw-005	947.85
SCFmw-006	947.43

0 500 1000

N

LEGEND

PROPERTY LINE

980 LINE OF EQUAL GROUNDWATER ELEVATION (ft,amsl)

990 (INTERMEDIATE DASHED)

GROUNDWATER DIRECTION

COORDINATE SYSTEM UTM NAD 83 ZONE 17

REV	DESCRIPTION	DATE	APPROVED

REVISIONS

ENVIRONMENTAL QUALITY MANAGEMENT, INC.
1800 CARILLON BLVD.
CINCINNATI, OHIO 45240
P (513)825-7500
F (513)825-7495

DRAWN	D.TOMO	6-23-10
CHECKED		
APPROVED		
SCALE:	NONE	

POTENTIOMETRIC SURFACE OF SHARON CONGLOMERATE (JAN.2010)

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
B	030240.0006	PLATE 4	0