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14. ABSTRACT

This document presents a summary of the facility-wide groundwater monitoring conducted in April 2011. 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 APRIL 2011 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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September 7, 2011

FWGWMP April 2011 Final Sampling Event Report
Distribution List

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Ohio EPA	1	2
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NGB Cleanup Program Manager	0	1

Ohio EPA – Ohio EPA Twinsburg Office
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..

CONTRACTOR'S STATEMENT OF INDEPENDENT TECHNICAL REVIEW

Environmental Quality Management, Inc. (EQM) has completed the *Final Facility-Wide Groundwater Monitoring Program Report on the April 2011 Sampling Event.* Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in this project. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions was verified. This included review of data quality objectives; technical assumptions, methods, procedures, and materials used; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing United States Corps of Engineers policy.

Colleen Lear, LG
Senior Project Geologist

9/1/11
Date

John M. Miller, CHMM
Senior Project Manager

9/1/11
Date

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Sample Delivery Group: A1D060428
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LIST OF GENERAL ACRONYMS

ADR	Automatic Data Review
AOC	Area of Concern
BRAC	U.S. Army Base Realignment and Closure
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CLP	Contract Laboratory Program
CUGs	Cleanup Goals
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
HMX	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
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
Ntu	Nephelometric turbidity unit
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
RBC	Risk-Based Cleanup
RDX	Hexahydro-1,3,5-trinitro-1,3,5-triazine
RI	Remedial Investigation
RL	Reporting Limit
RSL	Regional Screening Level
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
SCF	Sharon Conglomerate Formation
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

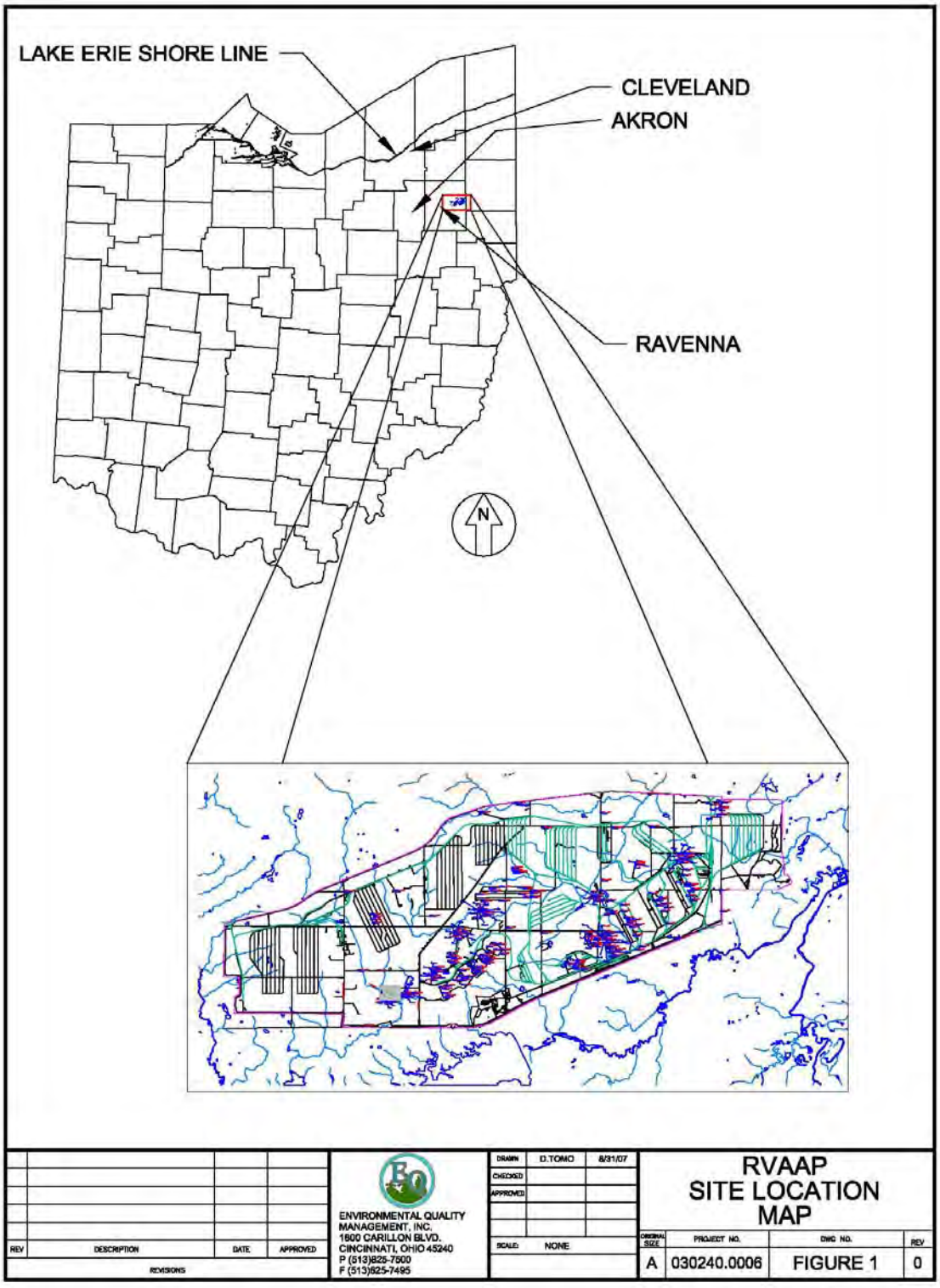

Figure 1-1. General Location Map

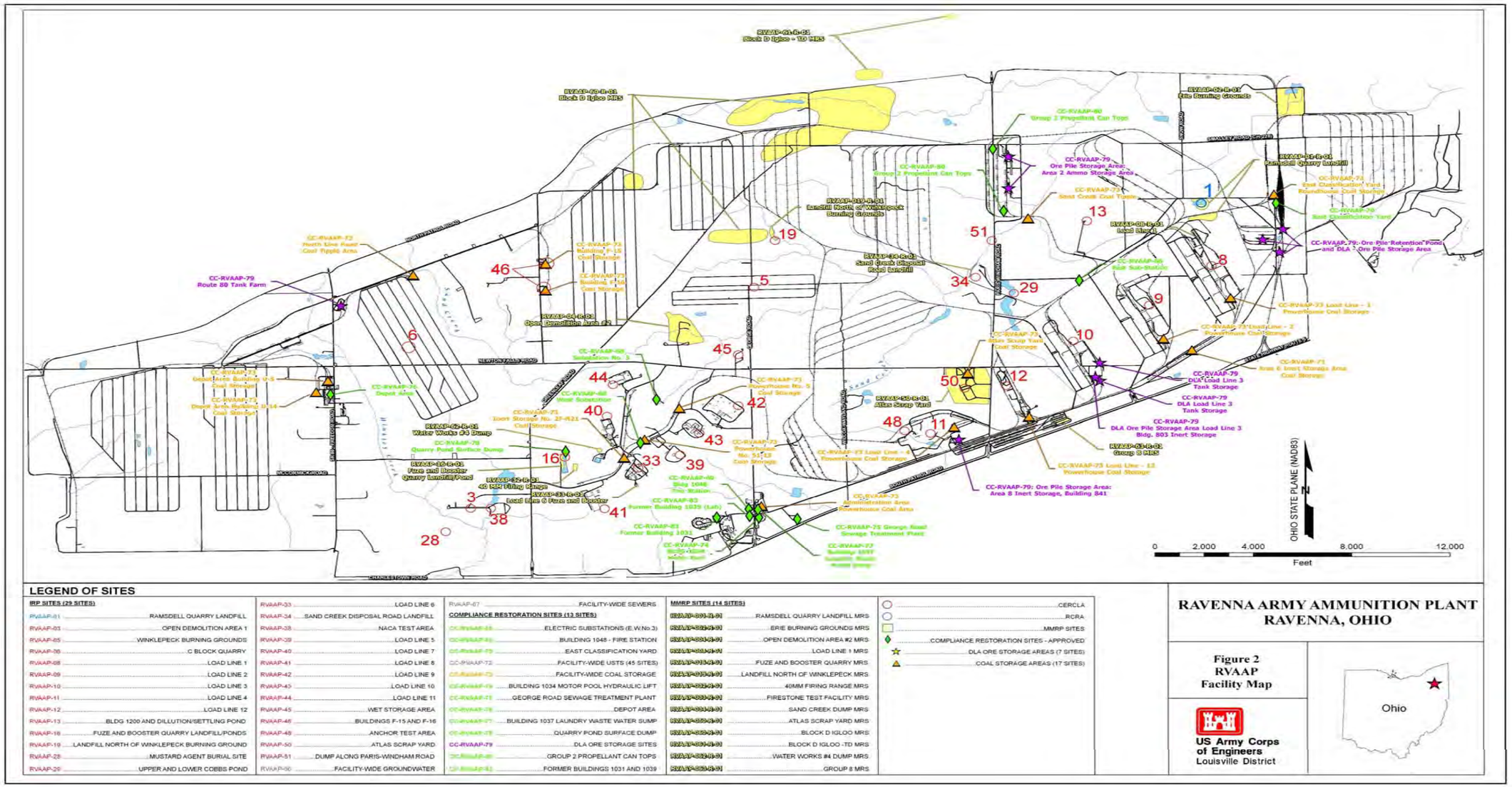

Figure 1-2. RVAAP Facility Map

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 Area (DA) 2 wells, DETmw-003 and DETmw-004. The RQL and DA2 wells are sampled twice a year.

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 (QAPP) 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* (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 Section 5 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 States Army Corps of Engineers (USACE) submitted to the Ohio 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 and 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 April 2011 event is presented in Appendix B.

1.3 Scope of Work for the April 2011 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 April 2011 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 42 wells identified in Appendix B (this includes the 6 deep Sharon Conglomerate wells).
- Conducted the semiannual monitoring of the 5 RCRA wells (RQLmw-007, RQLmw-008, RQLmw-009, DETmw-003, and DETmw-004).
- 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 April 2011 sampling event. The report is structured in the following way:

Volume 1

- Section 1.0 – Introduction.
- Section 2.0 – Description of Project Activities. This section describes project-specific details not contained in the FWSAP and FWGWMPP. Additionally, details are provided on how the tasks described above were performed.
- Section 3.0 – Results of Investigation. The results of the sampling event are summarized including groundwater elevation measurements, analytical results, and data verification/validation information.
- Section 4.0 – Summary of Results.
- Section 5.0 – References.

- Appendix A - Correspondence Documenting the Current Monitoring Well Schedule.
- Appendix B – List of Wells Sampled During the April 2011 Event.
- Appendix C – Water Level Measurements/Field Log Book and Purge Records/Daily Quality Control Reports.
- Appendix D – Data Verification Reports/Laboratory Data Sheets.

Volume 2

- Appendix D – Data Verification Reports/Laboratory Data Sheets.
- Appendix E – Investigation-Derived Waste Characterization and Disposal Plan.
- Appendix F – Reporting Limits that Currently Do Not Meet the RVAAP QAPP Practical Quantitation Limits (PQLs) and/or Region 9 Preliminary Remediation Goals (PRGs).
- Appendix G - Correspondence & Comment/Response Tables
- Plates

SECTION 2

PROJECT ACTIVITIES

2.1 Groundwater Level Monitoring

Depth to water from the top of the inner casing was measured in the 36 FWGWMP wells and the 6 deep basal Sharon Conglomerate wells during April 4-6 2011. 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 the RVAAP monitoring wells in October 2010 are presented on Plates 2, 3, and 4. The potentiometric maps were generated from the October 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. 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 are representative of the Sharon or Homewood Aquifers, the groundwater elevation data are compared as indicated on the attached table.

The groundwater elevation of water in the Homewood Aquifer (well LL10mw-003) is more than 78 feet higher than the basal Sharon Conglomerate well (well SCFmw-1). This demonstrates that the Homewood Aquifer and Sharon Conglomerate are not representative of the same hydraulic unit. If the aquifers were 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 basal portion of the Sharon Aquifer. The groundwater elevations of the five basal Sharon Aquifer wells are 1.28 to 24.57 feet higher than the shallow Sharon Conglomerate groundwater elevations at the same locations. The average elevation difference is over 9 feet. Again this groundwater elevation difference indicates that the shallow Sharon Conglomerate and the basal portion of 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.

2.2 Groundwater Sampling

All identified quarterly monitoring wells were sampled from April 4-7, 2011. Wells were sampled using micropurge techniques in accordance with the specifications contained in the FWGWMPP and FWSAP with the exception of the wells noted below that were sampled with a bailer. 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 (>500 ntu) were noted at 6 of the wells. These wells were:

LL1mw-081	LL1mw-067	LL4mw-195
LL4mw-199	RQLmw-007	ASYmw-003

None of these wells have exhibited elevated sediment levels during the sampling event. Based on the lack of well measurements, and the reported hard bottom of the wells, EQM believes there is no significant sediment accumulation in these wells.

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*." 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. Additionally, the 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 the following wells:

- LL1mw-067 and LL1mw-085 were sampled using a Teflon bailer due to well conditions. Both of these wells appear to have shifted resulting in a slight bend at approximately 6-8 below the top of the casing. This has resulted in not being able to lower a pump into the well; however a bailer and water level measurement tape

pass freely. EQM has examined both of these wells and does not believe that the overall well integrity has been compromised.

- BKGmw-008, DETmw-004, B12mw-012, and RQLmw-017 all had < 1.5 feet of water in the casing and exhibited very slow recharge. Therefore the decision was made to use a Teflon bailer for purging and sampling.

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 samples were 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 March 2001 *Facility-Wide Sampling and Analysis Plan for Environmental Investigations at the Ravenna Army Ammunition Plant*.

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), two wells were sampled for perchlorates. The 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-084 – Duplicate Sample	LL1mw-081 – MS/MSD
LL2mw-267 – Duplicate Sample	LL2mw-269 – MS/MSD
RQLmw-009 – Duplicate Sample	RQLmw-008 – MS/MSD
LL4mw-199 – Duplicate Sample	BKGmw-018 – 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)
Nitroaromatics & Nitramines: (Explosives)	GC Semivolatile Organics Explosives (8330)
Nitrocellulose as N (Propellant)	General Chemistry (WS-WC-0050)
Nitrate/Nitrites	General Chemistry (353.2)[2]
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)
Perchlorates	Method 6860
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. Five 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, in tabular form, all analyses and associated QA/QC for the April 2011 monitoring event. 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.

Table 2-2 QA Table for April 2011 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	Explosive & Propellant	Pesticide / PCBs	Perchlorate	Nitrate / Nitrite	Filtered Metals / Cyanide
ASYmw-003	FWGASYmw-003C-1704-GW/GF	04/07/11	GW		EQUIPRinse4-1760	FWGTeam3-Trip				X	X	X	X			X
B12mw-010	FWGB12mw-010C-1712-GW/GF	04/05/11	GW		EQUIPRinse2-1758	FWGTeam1-Trip				X	X	X	X			X
B12mw-012	FWGB12mw-012C-1713-GW/GF	04/5-6/11	GW		EQUIPRinse3-1759	FWGTeam1-Trip				X	X	X	X			X
BKGmw005	FWGBKGmw-005C-1705-GW/GF	04/07/11	GW		EQUIPRinse4-1760	FWGTeam1-Trip				X	X	X	X			X
BKGmw006	FWGBKGmw-006C-1706-GW/GF	04/06/11	GW		EQUIPRinse3-1759	FWGTeam1-Trip				X	X	X	X			X
BKGmw008	FWGBKGmw-008C-1707-GW/GF	04/06/11	GW		EQUIPRinse3-1759	FWGTeam1-Trip				X	X	X	X			X
BKGmw010	FWGBKGmw-010C-1708-GW/GF	04/05/11	GW		EQUIPRinse2-1758	FWGTeam3-Trip				X	X	X	X			X
BKGmw015	FWGBKGmw-015C-1709-GW/GF	04/06/11	GW		EQUIPRinse3-1759	FWGTeam1-Trip				X	X	X	X			X
BKGmw018	FWGBKGmw-018C-1710-GW/GF	04/07/11	GW		EQUIPRinse4-1760	FWGTeam1-Trip	YES			X	X	X	X			X
BKGmw021	FWGBKGmw-021C-1711-GW/GF	04/06/11	GW		EQUIPRinse3-1759	FWGTeam1-Trip				X	X	X	X			X
CBLmw-004	FWGCBLmw-004C-1714-GW/GF	04/07/11	GW		EQUIPRinse4-1760	FWGTeam1-Trip				X	X	X	X			X
DETmw-003	FWGDETmw-003C-1739-GW/GF	04/05/11	GW		EQUIPRinse2-1758	FWGTeam1-Trip				X	X	X	X			X
DETmw-004	FWGDETmw-004C-1740-GW/GF	04/4-5/11	GW		EQUIPRinse2-1758	FWGTeam2-Trip				X	X	X	X			X
LL1mw-067	FWGLL1mw-067C-1715-GW/GF	04/05/11	GW		EQUIPRinse2-1758	FWGTeam3-Trip				X	X	X	X			X
LL1mw-081	FWGLL1mw-081C-1716-GW/GF	04/05/11	GW		EQUIPRinse2-1758	FWGTeam3-Trip	YES			X	X	X	X			X
LL1mw-082	FWGLL1mw-082C-1718-GW/GF	04/05/11	GW		EQUIPRinse2-1758	FWGTeam3-Trip				X	X	X	X			X
LL1mw-084	FWGLL1mw-084C-1719-GW/GF	04/05/11	GW	DUP2-1747	EQUIPRinse2-1758	FWGTeam1-Trip		FWGLL1mw-084C-1752S-GW/GF	TRIPBLANK	X	X	X	X			X
LL1mw-085	FWGLL1mw-085C-1720-GW/GF	04/05/11	GW		EQUIPRinse2-1758	FWGTeam1-Trip				X	X	X	X			X
LL2mw-266	FWGLL2mw-266C-1721-GW/GF	04/07/11	GW		EQUIPRinse4-1760	FWGTeam2-Trip				X	X	X	X			X
LL2mw-267	FWGLL2mw-267C-1722-GW/GF	04/07/11	GW	DUP3-1748	EQUIPRinse4-1760	FWGTeam2-Trip		FWGLL2mw-267C-1753S-GW/GF	TRIPBLANK	X	X	X	X			X
LL2mw-269	FWGLL2mw-269C-1723-GW/GF	04/07/11	GW		EQUIPRinse4-1760	FWGTeam3-Trip	YES			X	X	X	X			X
LL3mw-236	FWGLL3mw-236C-1724-GW/GF	04/07/11	GW		EQUIPRinse4-1760	FWGTeam3-Trip				X	X	X	X			X
LL3mw-239	FWGLL3mw-239C-1725-GW/GF	04/07/11	GW		EQUIPRinse4-1760	FWGTeam2-Trip				X	X	X	X			X
LL4mw-193	FWGLL4mw-193C-1726-GW/GF	04/04/11	GW		EQUIPRinse1-1757	FWGTeam2-Trip				X	X	X	X			X
LL4mw-195	FWGLL4mw-195C-1727-GW/GF	04/04/11	GW		EQUIPRinse1-1757	FWGTeam1-Trip				X	X	X	X			X
LL4mw-196	FWGLL4mw-196C-1728-GW/GF	04/04/11	GW		EQUIPRinse1-1757	FWGTeam1-Trip				X	X	X	X	X		X
LL4mw-197	FWGLL4mw-197C-1729-GW/GF	04/04/11	GW		EQUIPRinse1-1757	FWGTeam1-Trip				X	X	X	X	X		X
LL4mw-198	FWGLL4mw-198C-1730-GW/GF	04/04/11	GW		EQUIPRinse1-1757	FWGTeam2-Trip				X	X	X	X			X
LL4mw-199	FWGLL4mw-199C-1731-GW/GF	04/04/11	GW	DUP4-1749	EQUIPRinse1-1757	FWGTeam3-Trip		FWGLL4mw-199C-1754S-GW/GF	TRIPBLANK	X	X	X	X			X
LL4mw-200	FWGLL4mw-200C-1732-GW/GF	04/04/11	GW		EQUIPRinse1-1757	FWGTeam3-Trip				X	X	X	X			X
RQLmw-007	FWGRQLmw-007C-1733-GW/GF	04/06/11	GW		EQUIPRinse3-1759	FWGTeam3-Trip				X	X	X	X			X
RQLmw-008	FWGRQLmw-008C-1734-GW/GF	04/06/11	GW		EQUIPRinse3-1759	FWGTeam3-Trip	YES			X	X	X	X			X
RQLmw-009	FWGRQLmw-009C-1735-GW/GF	04/06/11	GW	DUP5-1750	EQUIPRinse3-1759	FWGTeam1-Trip		FWGRQLmw-009C-1755S-GW/GF	TRIPBLANK	X	X	X	X			X
RQLmw-014	FWGRQLmw-014C-1736-GW/GF	04/06/11	GW		EQUIPRinse3-1759	FWGTeam3-Trip				X	X	X	X			X
RQLmw-016	FWGRQLmw-016C-1737-GW/GF	04/06/11	GW		EQUIPRinse3-1759	FWGTeam3-Trip				X	X	X	X			X
RQLmw-017	FWGRQLmw-017C-1738-GW/GF	04/5-6/11	GW		EQUIPRinse3-1759	FWGTeam3-Trip				X	X	X	X*			X*
SCFmw-001	FWGSCFmw-001-1741-GW/GF	04/06/11	GW		EQUIPRinse3-1759	FWGTeam2-Trip				X	X	X	X		X	X
SCFmw-002	FWGSCFmw-002-1742-GW/GF	04/06/11	GW		EQUIPRinse3-1759	FWGTeam2-Trip				X	X	X	X		X	X
SCFmw-003	FWGSCFmw-003-1743-GW/GF	04/06/11	GW		EQUIPRinse3-1759	FWGTeam2-Trip	YES			X	X	X	X		X	X
SCFmw-004	FWGSCFmw-004-1744-GW/GF	04/05/11	GW	DUP1-1751	EQUIPRinse2-1758	FWGTeam2-Trip		FWGSCFmw-004-1756S-GW/GF	TRIPBLANK	X	X	X	X		X	X
SCFmw-005	FWGSCFmw-005-1745-GW/GF	04/05/11	GW		EQUIPRinse2-1758	FWGTeam2-Trip				X	X	X	X		X	X
SCFmw-006	FWGSCFmw-006-1746-GW/GF	04/05/11	GW		EQUIPRinse2-1758	FWGTeam2-Trip				X	X	X	X		X	X

* Pesticides and Cyanide were not analyzed due to insufficient water in well.

2.5 Investigation Derived Waste

An Investigation Derived Waste 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 a separate 55-gallon drum stored inside Building 1036. Pending analysis of the monitoring well samples, IDW fluids were stored in the 55-gallon drums until the IDW Report was approved by the Ohio EPA. The IDW was then disposed of in accordance with FWSAP requirements. The IDW Report is presented in Appendix E.

SECTION 3

RESULTS

3.1 Groundwater Elevations

Groundwater elevations for the 42 FWGWMP quarterly wells were obtained from April 4-6, 2011 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, 3, and 4) based on all RVAAP groundwater measurements taken during the October 2010 event are also included in this report.

3.2 Summary of Analytical Results

Summaries of laboratory analytical results are presented in Tables 3-2, 3-3, 3-5, 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 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 3-4.

- 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.

Table 3-1. April 2011 FWGWMP Monitoring Well Measurements

Well	Monitoring Zone	Top of Casing (TOC) Elevation[a] (ft)	Quarterly Groundwater Elevation (Jul/2010) (ft)	Annual Groundwater Elevation (Oct/2010) (ft)	Quarterly Groundwater Elevation (Jan/2011) (ft)	Quarterly Groundwater Elevation (Apr/2011) (ft)	Depth to Water (ft below TOC) Apr/2011	Reported Construction Depth from TOC[a] (ft)	Measured Depth from TOC (ft) Apr/2011	Reported Construction Depth/Measured Depth (ft) Apr/2011	Description of Bottom Apr/2011
ASYmw-003	Sharon	982.21	NM	967.31	NM	970.16	12.05	23.5	23.42	0.08	Hard
B12mw-010	Sharon	1,005.92	NM	985.80	NM	989.30	16.62	23.2	22.85	0.35	Hard
B12mw-012	Sharon	1,006.32	NM	984.50	NM	983.32	23.00	24.9	24.80	0.10	Hard
BKGmw-005	Unconsolidated	1,151.94	NM	1,137.10	NM	1,141.16	10.78	21	20.85	0.15	Hard
BKGmw-006	Sharon	1,028.88	NM	1,005.27	NM	1,006.03	22.85	37.6	37.49	0.11	Hard
BKGmw-008	Sharon	972.90	NM	952.71	NM	955.56	17.34	27.5	27.36	0.14	Hard
BKGmw-010	Sharon	1,006.18	NM	985.44	NM	991.58	14.60	21.6	21.95	-0.35	Hard
BKGmw-015	Sharon	1,040.40	NM	989.82	NM	991.84	48.56	52.9	53.01	-0.11	Hard
BKGmw-018	Sharon	1,045.56	NM	1,028.95	NM	1,029.57	15.99	27.2	27.51	-0.31	Hard
BKGmw-021	Unconsolidated	974.66	NM	955.06	NM	960.81	13.85	20.6	21.45	-0.85	Hard
CBLmw-004	Homewood	1,174.84	NM	1,136.69	NM	1,139.39	35.45	46.8	47.01	-0.21	Hard
DETmw-003	Unconsolidated	1,036.81	NM	1,026.98	NM	1,027.81	9.00	13	16.00	-3.00	Hard
DETmw-004	Unconsolidated	1,038.68	NM	1,026.99	NM	1,028.46	10.22	12	13.88	-1.88	Hard
LL1mw-067	Sharon	980.36	960.66	959.01	957.95	959.36	21.00	25.6	25.70	-0.10	Hard
LL1mw-081	Sharon	998.92	968.48	965.06	966.24	968.63	30.29	41.9	41.96	-0.06	Hard
LL1mw-082	Sharon	1,006.45	977.76	970.11	972.16	978.10	28.35	41.8	41.50	0.30	Hard
LL1mw-084	Sharon	998.73	969.30	965.58	967.20	970.43	28.30	39.3	39.10	0.20	Medium
LL1mw-085	Sharon	996.84	960.51	958.76	958.43	960.13	36.71	44.7	45.15	-0.45	Hard
LL2mw-266	Sharon	1,016.28	1,003.89	1,001.40	1,003.83	1,005.75	10.53	22.2	22.65	-0.45	Hard
LL2mw-267	Sharon	1,014.81	1,004.43	1,002.60	1,005.13	1,006.02	8.79	22.0	22.00	0.00	Hard
LL2mw-269	Sharon	1,011.62	994.07	992.31	994.27	995.37	16.25	29.4	30.29	-0.89	Hard
LL3mw-236	Sharon	1,011.17	994.73	998.65	995.49	994.95	16.22	26.2	26.65	-0.45	Hard
LL3mw-239	Sharon	1,003.50	978.28	991.32	977.60	979.88	23.62	36.8	36.92	-0.12	Hard
LL4mw-193	Unconsolidated	982.92	NM	975.63	NM	976.80	6.12	23.5	24.30	-0.80	Hard
LL4mw-195	Unconsolidated	982.59	NM	974.67	NM	972.47	10.12	22.3	22.80	-0.50	Hard
LL4mw-196	Unconsolidated	984.55	970.77	970.08	970.47	971.30	13.25	21.4	21.74	-0.34	Hard
LL4mw-197	Unconsolidated	985.46	970.72	970.00	970.21	970.87	14.59	22.7	23.59	-0.89	Hard
LL4mw-198	Unconsolidated	983.42	NM	970.03	NM	976.83	6.59	22.3	21.65	0.65	Hard
LL4mw-199	Unconsolidated	977.28	NM	972.04	NM	970.23	7.05	22.6	23.15	-0.55	Hard
LL4mw-200	Unconsolidated	987.93	NM	968.54	NM	970.32	17.61	25	25.12	-0.12	Hard
RQLmw-007	Sharon	965.91	NM	968.88	NM	960.29	5.62	18.2	18.59	-0.39	Hard
RQLmw-008	Sharon	966.08	NM	955.01	NM	959.80	6.28	18.5	18.61	-0.11	Hard
RQLmw-009	Sharon	964.58	NM	955.39	NM	960.23	4.35	18.4	18.72	-0.32	Hard
RQLmw-014	Sharon	973.49	NM	954.93	NM	953.49	20.00	31.6	31.49	0.11	Hard
RQLmw-016	Sharon	996.60	NM	950.30	NM	959.25	37.35	41.6	41.59	0.01	Hard
RQLmw-017	Sharon	991.23	NM	958.40	NM	960.13	31.10	32.5	32.70	-0.20	Hard
SCFmw-001	Sharon Conglon	1,120.71	1,031.65	958.68	1,031.02	1,031.00	89.71	213.61	214.52	-0.91	Hard
SCFmw-002	Sharon Conglon	984.56	965.39	1,029.43	964.71	965.84	18.72	149.65	149.79	-0.14	Hard
SCFmw-003	Sharon Conglon	958.47	949.68	963.50	948.91	950.01	8.46	139.65	139.60	0.05	Hard
SCFmw-004	Sharon Conglon	944.17	943.46	948.53	943.28	944.17	0.00	112.47	113.20	-0.73	Hard
SCFmw-005	Sharon Conglon	960.80	949.32	942.22	948.67	950.24	10.56	156.41	158.50	-2.09	Hard
SCFmw-006	Sharon Conglon	965.92	947.92	947.32	947.34	947.34	18.58	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

- Tables 3-2, 3-3, 3-5, 3-6, 3-7, and 3-8 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 PRGs and The Region 3 Risk Based Cleanup (RBC) table. At this time the RSLs are presented for informational purposes only; however, they 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 3-2. The following compounds were detected at concentrations above the method detection limits:

- 1,3,5-Trinitrobenzene – LL1mw-081 (0.11 µg/L J), LL1mw-084 (3.3 µg/L J), LL2mw-267 (0.062 µg/L J), LL3mw-239 (0.15 µg/L). There is no MCL for 1,3,5-Trinitrobenzene. The Region 9 PRG is 1,100 µg/L.

- 1,3-Dinitrobenzene – LL1mw-084 (0.41 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-081 (0.057 µg/L J), LL1mw-084 (8.4 µg/L J), LL2mw-267 (0.49 µg/L), LL3mw-236 (0.18 µg/L J), LL3mw-239 (0.2 µg/L). There is no MCL for 2,4,6-Trinitrotoluene. The Region 9 PRG is 2.2 µg/L.

- 2,4-Dinitotoluene – LL1mw-081 (0.058 µg/L J), LL1mw-084 (1.7 µg/L J), LL2mw-267 (0.26µg/L), LL3mw-239 (0.12 µg/L J). There is no MCL for 2,4-Dinitrotoluene. The Region 9 PRG is 73 µg/L.

- 2-Amino-4,6-dintirotoluene – LL1mw-081 (1.4 µg/L), LL1mw-084 (13 µg/L J), LL2mw-267 (1.5 µg/L), LL3mw-239 (0.64 µg/L). There is no MCL or Region 9 PRG for 2-Amino-4,6-dintirotoluene.

- 4-Amino-2,6-dintirotoluene – DETmw-004 (0.10 µg/L J), LL1mw-081 (1.8 µg/L), LL1mw-084 (26 µg/L), LL2mw-267 (1.3 µg/L), LL3mw-236 (0.18 µg/L J), LL3mw-239 (0.85 µg/L). There is no MCL or Region 9 PRG for 4-Amino-2,6-dintirotoluene.

- 2,6-Dinitotoluene – LL1mw-084 (0.69 µg/L J)). There is no MCL for 2,6-Dinitrotoluene. The Region 9 PRG is 36 µg/L.

- Nitrobenzene – LL1mw-084 (0.096 µg/L J), LL3mw-238 (0.25 µg/L J). There is no MCL for nitrobenzene. The Region 9 PRG is 3.4 µg/L.

- 2-Nitrotoluene – RQLmw-014 (0.32 µg/L J). There is no MCL for 2-Nitrotoluene. The Region 9 PRG is 0.049 µg/L.

- 4- Nitrotoluene – LL4mw-200 (0.11 µg/L J). There is no MCL for 4-Nitrotoluene. The Region 9 PRG is 0.66 µg/L.

- HMX – BKGmw-005 (0.73 µg/L J), DETmw-004 (2.4 µg/L), LL1mw-081 (0.7 µg/L), LL1mw-082 (0.4 µg/L), LL1mw-084 (179 µg/L J), LL2mw-267 (1.2 µg/L), LL2mw-269 (0.078 µg/L J), LL3mw-239 (0.25 µg/L J). There is no MCL for HMX. The Region 9 PRG is 1,800 µg/L.

- Nitrate/Nitrite – SCFmw-002 (0.007 mg/L J), SCFmw-006 (0.02 mg/L J). 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.

- Nitroguanidine – LL3mw-236 (13 µg/L J). There is no MCL or Region 9 PRG for nitroguanidine.

- RDX – DETmw-004 (5.4 µg/), LL1mw-081 (1.6 µg/L J), LL1mw-084 (0.42µg/L J), LL2mw-267 (1.3 µg/L J), LL3mw-239 (1.7 µg/L J). There is no MCL for RDX. The Region 9 PRG is 0.61 µg/L.

As shown in Table 3-2, the following explosives or propellants were detected at levels above the MCL or Region 9 PRGs during the April 2011 sampling:

- 2,4,6-Trinitotoluene at a concentration exceeding the Region 9 PRG of 2.2 µg/L at LL1mw-084 (8.4 µg/L J).

- 2-Nitrotoluene at a concentration exceeding the Region 9 PRG of 0.049 µg/L at RQLmw-014 (0.32 µg/L J).

- RDX at a concentration exceeding the Region 9 PRG of 0.61 µg/L at DETmw-004 (5.4 µg/), LL1mw-081 (1.6 µg/L J), LL2mw-267 (1.3 µg/L J), LL3mw-239 (1.7 µg/L J).

Table 3-2. FWGWMP April 2011 Explosive and Propellant Analytical Results

Station ID					ASYmw-003	B12mw-010	B12mw-012	BKGmw-005	BKGmw-006	BKGmw-008	BKGmw-010
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGASYmw-003C-1704-GW	FWGB12mw-010C-1712-GW	FWGB12mw-012C-1713-GW	FWGBKGmw-005C-1705-GW	FWGBKGmw-006C-1706-GW	FWGBKGmw-008C-1707-GW	FWGBKGmw-010C-1708-GW
Date Collected					4/7/2011	4/5/2011	4/5/2011	4/7/2011	4/6/2011	4/6/2011	4/6/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.11 U	0.11 U	0.12 U	0.10 U	0.10 U	0.099 U	0.12 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.11 U	0.11 U	0.12 U	0.10 U	0.10 U	0.099 U	0.12 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.11 U	0.11 U	0.12 U	0.10 U	0.10 U	0.099 U	0.12 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.11 U	0.11 U	0.12 U	0.10 U	0.10 U	0.099 U	0.12 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.11 U	0.11 U	0.12 U	0.10 U	0.10 U	0.099 U	0.12 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.11 U	0.11 U	0.12 U	0.10 U	0.10 U	0.099 U	0.12 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.54 U	0.53 U	0.60 U	0.50 U	0.50 U	0.50 U	0.60 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.54 U	0.53 U	0.60 U	0.50 U	0.50 U	0.50 U	0.60 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.11 U	0.11 U	0.12 U	0.10 U	0.10 U	0.099 U	0.12 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.54 U	0.53 U	0.60 U	0.50 U	0.50 U	0.50 U	0.60 U
HMX	µg/L	NS	1800	1800	0.11 U	0.11 U	0.12 U	**0.073 J**	0.10 U	0.099 U	0.12 U
Nitrate-Nitrite	mg/L	1	1	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	µg/L	NS	3.4	0.12	0.11 U	0.11 U	0.12 U	0.10 U	0.10 U	0.099 U	0.12 U
Nitrocellulose	mg/L	NS	NS	110000	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.70 U	0.69 U	0.77 U	0.66 U	0.66 U	0.64 U	0.78 U
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	0.70 U	0.69 U	0.77 U	0.66 U	0.66 U	0.64 U	0.78 U
RDX	µg/L	NS	0.61	0.61	0.11 U	0.11 U	0.12 U	0.10 U	0.10 U	0.099 U	0.12 U
Tetryl	µg/L	NS	360	150	0.11 U	0.11 U	0.12 U	0.10 U	0.10 U	0.099 U	0.12 U

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

Due to excessive particulates, LL4mw-195, LL4mw-196, LL4mw-198, LL4mw-199, BKGmw-006, RQLmw-008, RQLmw-007, B12mw-012, LL2mw-269, and ASYmw-003 were filtered in the laboratory.

Table 3-2. FWGWMP April 2011 Explosive and Propellant Analytical Results

Station ID					BKGmw-015	BKGmw-018	BKGmw-021	CBLmw-004	DETmw-003	DETmw-004	LL1mw-067
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGBKGmw-015C-1709-GW	FWGBKGmw-018C-1710-GW	FWGBKGmw-021C-1711-GW	FWGCBLmw-004C-1714-GW	FWGDETmw-003C-1739-GW	FWGDETmw-004C-1740-GW	FWGLL1mw-067C-1715-GW
Date Collected					4/6/2011	4/7/2011	4/6/2011	4/7/2011	4/5/2011	4/4-5/2011	4/5/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.098 U	0.098 U	0.099 U	0.11 U	0.11 U	0.12 U	0.11 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.098 U	0.098 U	0.099 U	0.11 U	0.11 U	0.12 U	0.11 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.098 U	0.098 U	0.099 U	0.11 U	0.11 U	0.12 U	0.11 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.098 U	0.098 U	0.099 U	0.11 U	0.11 U	0.12 U	0.11 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.098 U	0.098 U	0.099 U	0.11 U	0.11 U	0.12 U	0.11 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.098 U	0.098 U	0.099 U	0.11 U	0.11 U	0.12 U	0.11 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.49 U	0.49 U	0.50 U	0.56 U	0.55 U	0.58 U	0.54 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.49 U	0.49 U	0.50 U	0.56 U	0.55 U	0.58 U	0.54 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.098 U	0.098 U	0.099 U	0.11 U	0.11 U	**0.10 J**	0.11 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.49 U	0.49 U	0.50 U	0.56 U	0.55 U	0.58 U	0.54 U
HMX	µg/L	NS	1800	1800	0.098 U	0.098 U	0.099 U	0.11 U	0.11 U	**2.4**	0.11 U
Nitrate-Nitrite	mg/L	1	1	3	N/A	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	0.099 U	0.11 U	0.11 U	0.12 U	0.11 U
Nitrocellulose	mg/L	NS	NS	110000	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.64 U	0.64 U	0.64 U	0.73 U	0.72 U	0.75 U	0.70 U
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	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	0.73 U	0.72 U	0.75 U	0.70 U
RDX	µg/L	NS	0.61	0.61	0.098 U	0.098 U	0.099 U	0.11 U	0.11 U	**5.4**	0.11 U
Tetryl	µg/L	NS	360	150	0.098 U	0.098 U	0.099 U	0.11 U	0.11 U	0.12 U	0.11 U

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

Due to excessive particulates, LL4mw-195, LL4mw-196, LL4mw-198, LL4mw-199, BKGmw-006, RQLmw-008, RQLmw-007, B12mw-012, LL2mw-269, and ASYmw-003 were filtered in the laboratory.

Table 3-2. FWGWMP April 2011 Explosive and Propellant Analytical Results

Station ID					LL1mw-081	LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-081C-1716-GW	FWGLL1mw-082C-1718-GW	FWGLL1mw-084C-1719-GW	FWGLL1mw-085C-1720-GW	FWGLL2mw-266C-1721-GW	FWGLL2mw-267C-1722-GW	FWGLL2mw-269C-1723-GW
Date Collected					4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/7/2011	4/7/2011	4/7/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	**0.11 J**	0.11 U	**3.3 J**	0.10 U	0.11 U	**0.062 J**	0.10 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.099 U	0.11 U	**0.41 J**	0.10 U	0.11 U	0.12 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	**0.057 J**	0.11 U	**8.4 J**	0.10 U	0.11 U	**0.49**	0.10 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	**0.058 J**	0.11 U	**1.7 J**	0.10 U	0.11 U	**0.26**	0.10 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.099 U	0.11 U	**0.69 J**	0.10 U	0.11 U	0.12 U	0.10 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	**1.4**	0.11 U	**13 J**	0.10 U	0.11 U	**1.5**	0.10 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.50 U	0.56 U	0.55 U	0.52 U	0.56 U	0.60 U	0.50 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.50 U	0.56 U	0.55 U	0.52 U	0.56 U	0.60 U	0.50 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	**1.8**	0.11 U	**26 J**	0.10 U	0.11 U	**1.3**	0.10 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.50 U	0.56 U	0.55 U	0.52 U	0.56 U	0.60 U	0.50 U
HMX	µg/L	NS	1800	1800	**0.70**	**0.40**	**0.79 J**	0.10 U	0.11 U	**1.2**	**0.078 J**
Nitrate-Nitrite	mg/L	1	1	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	µg/L	NS	3.4	0.12	0.099 U	0.11 U	**0.096 J**	0.10 U	0.11 U	0.12 U	0.10 U
Nitrocellulose	mg/L	NS	NS	110000	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.64 U	0.72 U	0.72 U	0.68 U	0.72 U	0.77 U	0.65 U
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	0.64 U	0.72 U	0.72 U	0.68 U	0.72 U	0.77 U	0.65 U
RDX	µg/L	NS	0.61	0.61	**1.6**	**0.42**	**0.42 J**	0.10 U	0.11 U	**1.3 J**	0.10 U
Tetryl	µg/L	NS	360	150	0.099 U	0.11 U	0.11 U	0.10 U	0.11 U	0.12 U	0.10 U

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

Due to excessive particulates, LL4mw-195, LL4mw-196, LL4mw-198, LL4mw-199, BKGmw-006, RQLmw-008, RQLmw-007, B12mw-012, LL2mw-269, and ASYmw-003 were filtered in the laboratory.

Table 3-2. FWGWMP April 2011 Explosive and Propellant Analytical Results

Station ID					L3mw-236	LL3mw-239	LL4mw-193	LL4mw-195	LL4mw-196	LL4mw-197	LL4mw-198
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-236C-1724-GW	FWGLL3mw-239C-1725-GW	FWGLL4mw-193C-1726-GW	FWGLL4mw-195C-1727-GW	FWGLL4mw-196C-1728-GW	FWGLL4mw-197C-1729-GW	FWGLL4mw-198C-1730-GW
Date Collected					4/7/2011	4/7/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.10 U	**0.15**	0.11 U	0.097 U	0.10 U	0.099 U	0.098 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.10 U	0.11 U	0.11 U	0.097 U	0.10 U	0.099 U	0.098 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	**0.18**	**0.20**	0.11 U	0.097 U	0.10 U	0.099 U	0.098 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.10 U	**0.12**	0.11 U	0.097 U	0.10 U	0.099 U	0.098 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.10 U	0.11 U	0.068 UJ	0.097 U	0.10 U	0.099 U	0.098 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.10 U	**0.64**	0.11 U	0.097 U	0.10 U	0.099 U	0.098 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.50 U	0.55 U	0.56 U	0.48 U	0.52 U	0.50 U	0.49 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.50 U	0.55 U	0.56 U	0.48 U	0.52 U	0.50 U	0.49 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	**0.18**	**0.85**	0.11 U	0.097 U	0.10 U	0.099 U	0.098 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.50 U	0.55 U	0.56 U	0.48 U	0.52 U	0.50 U	0.49 U
HMX	µg/L	NS	1800	1800	0.10 U	**0.25 J**	0.11 U	0.097 U	0.10 U	0.099 U	0.098 U
Nitrate-Nitrite	mg/L	1	1	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	µg/L	NS	3.4	0.12	0.10 U	0.11 U	0.11 U	0.097 U	0.10 U	0.099 U	0.098 U
Nitrocellulose	mg/L	NS	NS	110000	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.65 U	0.72 U	0.72 U	0.63 U	0.67 U	0.64 U	0.64 U
Nitroguanidine	µg/L	NS	NS	3700	**13 J**	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	0.65 U	0.72 U	0.72 U	0.63 U	0.67 U	0.64 U	0.64 U
RDX	µg/L	NS	0.61	0.61	0.10 U	**1.7**	0.11 U	0.097 U	0.10 U	0.099 U	0.098 U
Tetryl	µg/L	NS	360	150	0.10 U	0.11 U	0.11 U	0.097 U	0.10 U	0.099 U	0.098 U

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

Due to excessive particulates, LL4mw-195, LL4mw-196, LL4mw-198, LL4mw-199, BKGmw-006, RQLmw-008, RQLmw-007, B12mw-012, LL2mw-269, and ASYmw-003 were filtered in the laboratory.

Table 3-2. FWGWMP April 2011 Explosive and Propellant Analytical Results

Station ID					LL4mw-199	LL4mw-200	RQLmw-007	RQLmw-008	RQlmw-009	RQLmw-014	RQLmw-016
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL4mw-199C-1731-GW	FWGLL4mw-200C-1732-GW	FWGRQLmw-007C-1733-GW	FWGRQLmw-008C-1734-GW	FWGRQLmw-009C-1735-GW	FWGRQLmw-014C-1736-GW	FWGRQLmw-016C-1737-GW
Date Collected					4/4/2011	4/4/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.099 U	0.097 U	0.10 U	0.098 U	0.10 U	0.098 U	0.11 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.099 U	0.097 U	0.10 U	0.098 U	0.10 U	0.098 U	0.11 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.099 U	0.097 U	0.10 U	0.098 U	0.10 U	0.098 U	0.11 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.099 U	0.097 U	0.10 U	0.098 U	0.10 U	0.098 U	0.11 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.099 U	0.097 U	0.10 U	0.098 U	0.10 U	0.098 U	0.11 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.099 U	0.097 U	0.10 U	0.098 U	0.10 U	0.098 U	0.11 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.50 U	0.48 U	0.52 U	0.49 U	0.50 U	**0.32 J**	0.53 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.50 U	0.48 U	0.52 U	0.49 U	0.50 U	0.49 U	0.53 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.099 U	0.097 U	0.10 U	0.098 U	0.10 U	0.098 U	0.11 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.50 U	**0.11 J**	0.52 U	0.49 U	0.50 U	0.49 U	0.53 U
HMX	µg/L	NS	1800	1800	0.099 U	0.097 U	0.10 U	0.098 U	0.10 U	0.098 U	0.11 U
Nitrate-Nitrite	mg/L	1	1	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	µg/L	NS	3.4	0.12	0.099 U	0.097 U	0.10 U	0.098 U	0.10 U	0.098 U	0.11 U
Nitrocellulose	mg/L	NS	NS	110000	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.64 U	0.63 U	0.67 U	0.64 U	0.65 U	0.64 U	0.69 U
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	0.64 U	0.63 U	0.67 U	0.64 U	0.65 U	0.64 U	0.69 U
RDX	µg/L	NS	0.61	0.61	0.099 U	0.097 U	0.10 U	0.098 U	0.10 U	0.098 U	0.11 U
Tetryl	µg/L	NS	360	150	0.099 U	0.097 U	0.10 U	0.098 U	0.10 U	0.098 U	0.11 U

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

Due to excessive particulates, LL4mw-195, LL4mw-196, LL4mw-198, LL4mw-199, BKGmw-006, RQLmw-008, RQLmw-007, B12mw-012, LL2mw-269, and ASYmw-003 were filtered in the laboratory.

Table 3-2. FWGWMP April 2011 Explosive and Propellant Analytical Results

Station ID					RQLmw-017	SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGRQLmw-017C-1738-GW	FWGSCFmw-001-1741-GW	FWGSCFmw-002-1742-GW	FWGSCFmw-003-1743-GW	FWGSCFmw-004-1744-GW	FWGSCFmw-005-1745-GW	FWGSCFmw-006-1746-GW
Date Collected					4/5-6/2011	4/6/2011	4/6/2011	4/6/2011	4/5/2011	4/5/2011	4/5/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.11 U	0.11 U	0.10 U	0.10 U	0.12 U	0.12 U	0.10 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.11 U	0.11 U	0.10 U	0.10 U	0.12 U	0.12 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.11 U	0.11 U	0.10 U	0.10 U	0.12 U	0.12 U	0.10 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.11 U	0.11 U	0.10 U	0.10 U	0.12 U	0.12 U	0.10 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.11 U	0.11 U	0.10 U	0.10 U	0.12 U	0.12 U	0.10 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.11 U	0.11 U	0.10 U	0.10 U	0.12 U	0.12 U	0.10 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.54 U	0.53 U	0.52 U	0.50 U	0.61 U	0.58 U	0.51 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.54 U	0.53 U	0.52 U	0.50 U	0.61 U	0.58 U	0.51 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.11 U	0.11 U	0.10 U	0.10 U	0.12 U	0.12 U	0.10 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.54 U	0.53 U	0.52 U	0.50 U	0.61 U	0.58 U	0.51 U
HMX	µg/L	NS	1800	1800	0.11 U	0.11 U	0.10 U	0.10 U	0.12 U	0.12 U	0.10 U
Nitrate-Nitrite	mg/L	1	1	3	N/A	0.1 UJ	**0.007 J**	0.1 UJ	0.1 UJ	0.1 UJ	**0.02 J**
Nitrobenzene	µg/L	NS	3.4	0.12	0.11 U	0.11 U	0.10 U	0.10 U	0.12 U	0.12 U	0.10 U
Nitrocellulose	mg/L	NS	NS	110000	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.70 U	0.69 U	0.68 U	0.65 U	0.79 U	0.75 U	0.66 U
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	20 U	20 U	20 U	20 U	20 U
PETN	µg/L	NS	NS	NS	0.70 U	0.69 U	0.68 U	0.65 U	0.79 U	0.75 U	0.66 U
RDX	µg/L	NS	0.61	0.61	0.11 U	0.11 U	0.10 U	0.10 U	0.12 U	0.12 U	0.10 U
Tetryl	µg/L	NS	360	150	0.11 U	0.11 U	0.10 U	0.10 U	0.12 U	0.12 U	0.10 U

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

Due to excessive particulates, LL4mw-195, LL4mw-196, LL4mw-198, LL4mw-199, BKGmw-006, RQLmw-008, RQLmw-007, B12mw-012, LL2mw-269, and ASYmw-003 were filtered in the laboratory.

Table 3-2. FWGWMP April 2011 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. 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 3-3. Note that during the sampling event there was <1.6 feet of water in well RQLmw-017. Due to insufficient recharge a sample for cyanide was not collected from this well. The inorganics detected in the samples included: aluminum, antimony, arsenic, barium, cadmium, calcium, cobalt, copper, cyanide, iron, lead, magnesium, manganese, nickel, potassium, sodium, thallium, 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 3-4. 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 3-4:

Aluminum

- Bedrock Zone: **–** B12mw-010 (198 µg/L**)**, BKGmw-010 (132 µg/L), LL1mw-084 (246 µg/L), LL2mw-267 (33 µg/L J), RQLmw-007 (154 µg/L), RQLmw-009 (402 µg/L)**.** The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: – BKGmw-005 (62.5 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: **–** RQLmw-007 (0.27 µg/L J), SCFmw-001 (0.95 µg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: – DETmw-003 (0.2 µg/L J), LL4mw-199 (0.52 µg/L J). 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**: –** B12mw-010 (3.7 µg/L J), LL1mw-082 (3.6 µg/L J), LL3mw-239 (3.6 µg/L J), RQLmw-008 (11.3 µg/L), SCFmw-002 (14.2 µg/L), SCFmw-005 (4.9 µg/L J), SCFmw-006 (13.5 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: – None. 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.

Cadmium

- Bedrock Zone: - LL1mw-082 (0.17 µg/L J), LL1mw-084 (1.5 µg/L). 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. The Region 9 PRG is 18 µg/L.

Cobalt

- Bedrock Zone**:** - RQLmw-017 (4.9 µg/L J), RQLmw-008 (1.5 µg/L J), RQLmw-014 (11.8 µg/L J), B12mw-010 (1.6 µg/L J), LL1mw-081 (5.7 µg/L), LL1mw-082 (14.3µg/L), LL1mw-084 (14.6 µg/L J), LL1mw-085 (5.3 µg/L) LL2mw-266 (8.2 µg/L), LL2mw-267 (1.5 µg/L J), LL3mw-236 (2.7 µg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: - LL4mw-195 (3.3 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: - LL1mw-84 (9.9 µg/L), LL1mw-085 (11.1 µg/L), RQLmw-008 (4.9 µg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
  The Groundwater Bedrock Zone Background Criteria is 0 µg/L.
- Unconsolidated Zone: - None. 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.

Cyanide

- Bedrock Zone: – LL2mw-266 (0.0064 mg/L J), LL2mw-269 (0.0084 mg/L J), LL3mw-242 (0.0056 mg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 mg/L.
- Unconsolidated Zone: - LL4mw-197 (0.0076 mg/L J). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 mg/L
  The MCL is 0.2 mg/L. The Region 9 PRG is 0.73 mg/L.

Lead

- Bedrock Zone: - None. The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: - RQLmw-009 (2.4 (µg/L J). 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 (1620 µg/L), LL1mw-081 (2170 µg/L), LL1mw-082 (1,640 µg/L), LL2mw-269 (1,590 µg/L J), RQLmw-014 (2,800 (µg/L), RQLmw-016 (6,830 (µg/L), RQLmw-017 (4,820 (µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 1,340 µg/L.

- Unconsolidated Zone: - LL4mw-195 (3,490 (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: - None. The Groundwater Bedrock Zone Background Criteria (filtered) is 83.4 µg/L.
- Unconsolidated Zone: - DETmw-003 (2.6 (µg/L J), LL4mw-195 (3.8 (µg/L J), LL4mw-198 (25.3 (µg/L). 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.

Thallium

- Bedrock Zone – BKGmw-006 (0.21 (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 Thallium is 2.0 µg/L. The Region 9 PRG is 2.4µg/L.

Zinc

- Bedrock Zone: - LL1mw-082 (70.4 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 52.3 µg/L.
- Unconsolidated Zone: - LL4mw-198 (61.6 µg/L). 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 Chemicals of Concern (COCs) is ongoing and includes a geochemical study to better characterize the groundwater quality as it pertains to metals at the site. Additionally, further sampling at various facility wells will be conducted in 2011 to further gauge the extent of any contamination in the groundwater.

Table 3-3. FWGWMP April 2011 Inorganics Analytical Results

Station ID					ASYmw-003	B12mw-010	B12mw-012	BKGmw-005	BKGmw-006	BKGmw-008	BKGmw-010
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGASYmw-003C-1704-GF	FWGB12mw-010C-1712-GF	FWGB12mw-012C-1713-GF	FWGBKGmw-005C-1705-GF	FWGBKGmw-006C-1706-GF	FWGBKGmw-008C-1707-GF	FWGBKGmw-010C-1708-GF
Date Collected					4/7/2011	4/5/2011	4/5/2011	4/7/2011	4/6/2011	4/6/2011	4/6/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	37000	50.0 U	**198**	50.0 U	**62.5**	50.0 U	50.0 U	**132**
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
Arsenic	µg/L	10	0.045	0.045	5.0 U	**3.7 J**	5.0 U	5.0 U	5.0 U	3.3 UJ	5.0 U
Barium	µg/L	2000	2600	7300	**18.6**	**4.4 J**	**13.0**	**14.5**	**8.5 J**	**3.7 J**	**17.4**
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
Cadmium	µg/L	5	18	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**173000**	**5910**	**52700**	**84400**	**65100**	**23200**	**10300**
Chromium	µg/L	100	110	55000*	5.0 U	**1.8 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	11	5.0 U	**1.6 J**	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	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.020 U	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	26000	50.0 U	**296**	50.0 U	**36.5 J**	**518**	50.0 U	**28.1 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
Magnesium	µg/L	NS	NS	NS	**57200**	**4080**	**35800**	**19800**	**20000**	**9570**	**12300**
Manganese	µg/L	50	880	880	**189 J**	**52.6**	**4.4 J**	**6.1 J**	**191**	**9.7 J**	**602**
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
Nickel	µg/L	NS	730	730	10.0 U	**19.7**	**2.2 J**	10.0 U	10.0 U	10.0 U	**66.0**
Potassium	µg/L	NS	NS	NS	**982 J**	**553 J**	**1870**	**444 J**	**1120**	**444 J**	**556 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
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
Sodium	µg/L	NS	NS	NS	**26200**	**3870**	**16900**	**3560**	**40500**	**8860**	**4010**
Thallium	µg/L	2	2.4	NS	1.0 U	1.0 U	0.16 UJ	1.0 U	**0.21 J**	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
Zinc	µg/L	5000	11000	11000	10.0 U	**6.9 J**	**4.1 JB**	10.0 U	**2.4 JB**	**4.3 JB**	**7.9 JB**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed - Insufficent water volume in well - sample for cyanide not collected.

Table 3-3. FWGWMP April 2011 Inorganics Analytical Results

Station ID					BKGmw-015	BKGmw-018	BKGmw-021	CBLmw-004	DETmw-003	DETmw-004	LL1mw-067
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGBKGmw-015C-1709-GF	FWGBKGmw-018C-1710-GF	FWGBKGmw-021C-1711-GF	FWGCBLmw-004C-1714-GF	FWGDETmw-003C-1739-GF	FWGDETmw-004C-1740-GF	FWGLL1mw-067C-1715-GF
Date Collected					4/6/2011	4/7/2011	4/6/2011	4/7/2011	4/5/2011	4/4-5/2011	4/5/2011
Sample Type					Grab	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	50.0 U
Antimony	µg/L	6	15	15	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.20 J**	2.0 U
Arsenic	µg/L	10	0.045	0.045	5.0 U	5.0 U	5.0 U	5.0 U	**11.0**	5.0 U	5.0 U
Barium	µg/L	2000	2600	7300	**249**	**12.0**	**26.0**	**21.6**	**46.8**	**49.9**	**27.4**
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
Cadmium	µg/L	5	18	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**30700**	**29000**	**74800**	**5470**	**88200**	**116000**	**37200**
Chromium	µg/L	100	110	55000*	5.0 U	5.0 U	5.0 U	5.0 U	**3.4 J**	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	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
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
Iron	µg/L	300	11000	26000	50.0 U	50.0 U	50.0 U	50.0 U	**1780**	50.0 U	**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
Magnesium	µg/L	NS	NS	NS	**13000**	**3960**	**39100**	**2340**	**32900**	**23500**	**41800**
Manganese	µg/L	50	880	880	10.0 U	**2.7 J**	10.0 U	**9.4 J**	**277**	10.0 U	**85.0**
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
Nickel	µg/L	NS	730	730	10.0 U	10.0 U	10.0 U	**5.4 J**	**2.6 J**	10.0 U	**39.8**
Potassium	µg/L	NS	NS	NS	**4120**	**591 J**	**541 J**	**1120**	**1460**	**1030**	**1110**
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
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
Sodium	µg/L	NS	NS	NS	**13600**	**1710**	**8530**	**1940**	**12200**	**2350**	**4420**
Thallium	µg/L	2	2.4	NS	1.0 U	0.18 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.18 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
Zinc	µg/L	5000	11000	11000	**5.2 JB**	**7.3 J**	**3.0 JB**	**6.8 J**	10.0 U	**10.9**	**3.5 J**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed - Insufficent water volume in well - sample for cy

Table 3-3. FWGWMP April 2011 Inorganics Analytical Results

Station ID					LL1mw-081	LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-081C-1716-GF	FWGLL1mw-082C-1718-GF	FWGLL1mw-084C-1719-GF	FWGLL1mw-085C-1720-GF	FWGLL2mw-266C-1721-GF	FWGLL2mw-267C-1722-GF	FWGLL2mw-269C-1723-GF
Date Collected					4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/7/2011	4/7/2011	4/7/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	37000	50.0 U	50.0 U	**246**	50.0 U	50.0 U	**33.0 J**	50.0 U
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
Arsenic	µg/L	10	0.045	0.045	5.0 U	**3.6 J**	5.0 U	**5.7**	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	7300	**21.4**	**10.9**	**16.7**	**22.0**	**13.9**	**11.7**	**218**
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
Cadmium	µg/L	5	18	18	0.50 U	**0.17 J**	**1.5**	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**66300**	**38400**	**49100**	**85400**	**20900**	**37800**	**30900**
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
Cobalt	µg/L	NS	730	11	**5.7**	**14.3**	**14.6**	**5.3**	**8.2**	**1.5 J**	5.0 U
Copper	µg/L	1300	1500	1500	5.0 U	5.0 U	**9.9**	**11.1**	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 UJ	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	26000	**4630**	**5210**	50.0 U	**423**	**2470**	**432**	**6800**
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
Magnesium	µg/L	NS	NS	NS	**13400**	**14200**	**2900**	**22400**	**9950**	**19000**	**15400**
Manganese	µg/L	50	880	880	**2170**	**1640**	**192**	**1180**	**761 J**	**564 J**	**1590 J**
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
Nickel	µg/L	NS	730	730	**9.4 J**	**27.3**	24.6	**21.6**	12.9	**2.8 J**	10.0 U
Potassium	µg/L	NS	NS	NS	**2500**	**1460**	**2420**	**2070**	**1210**	**581 J**	**3080**
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
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
Sodium	µg/L	NS	NS	NS	**2350**	**1250**	**2920**	**1900**	**9850**	**17900**	**6250**
Thallium	µg/L	2	2.4	NS	1.0 U	1.0 U	0.32 UJ	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
Zinc	µg/L	5000	11000	11000	47.7	**70.4**	**49.3**	**2.5 JB**	**5.6 J**	10.0 U	**4.7 J**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed - Insufficent water volume in well - sample for cy

Table 3-3. FWGWMP April 2011 Inorganics Analytical Results

Station ID					L3mw-236	LL3mw-239	LL4mw-193	LL4mw-195	LL4mw-196	LL4mw-197	LL4mw-198
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-236C-1724-GF	FWGLL3mw-239C-1725-GF	FWGLL4mw-193C-1726-GF	FWGLL4mw-195C-1727-GF	FWGLL4mw-196C-1728-GF	FWGLL4mw-197C-1729-GF	FWGLL4mw-198C-1730-GF
Date Collected					4/7/2011	4/7/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011
Sample Type					Grab	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	50.0 U
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
Arsenic	µg/L	10	0.045	0.045	5.0 U	**3.6 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	7300	10.0 U	**11.1**	**23.8**	**26.9**	**45.2**	**13.1**	**8.7 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
Cadmium	µg/L	5	18	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**21400**	**11300**	**104000**	**198000**	**63700**	**104000**	**27300**
Chromium	µg/L	100	110	55000*	5.0 U	**1.5 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	µg/L	NS	730	11	**2.7 J**	5.0 U	5.0 U	**3.3 J**	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	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.010 U	0.010 U	0.010 UJ	0.010 UJ	0.010 UJ	**0.0076 J**	0.010 UJ
Iron	µg/L	300	11000	26000	**388**	50.0 U	50.0 U	**7320**	**311**	50.0 U	**4720**
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
Magnesium	µg/L	NS	NS	NS	**13500**	**5930**	**34600**	**53000**	**17800**	**17500**	**14100**
Manganese	µg/L	50	880	880	**344 J**	**101 J**	**181**	**3490**	**59.0**	10.0 U	**1010**
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
Nickel	µg/L	NS	730	730	**9.0 J**	**7.0 J**	10.0 U	**3.8 J**	10.0 U	10.0 U	**25.3**
Potassium	µg/L	NS	NS	NS	**1170**	**1280**	**891 J**	**987 J**	**664 J**	**1020**	**591 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
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
Sodium	µg/L	NS	NS	NS	**3920**	**18600**	**10400**	**9210**	**2260**	**1340**	**5630**
Thallium	µg/L	2	2.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	0.18 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
Zinc	µg/L	5000	11000	11000	**15.4**	10.0 U	**9.3 J**	**7.5 J**	10.0 U	10.0 U	**61.6**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed - Insufficent water volume in well - sample for cy

Table 3-3. FWGWMP April 2011 Inorganics Analytical Results

Station ID					LL4mw-199	LL4mw-200	RQLmw-007	RQLmw-008	RQLmw-009	RQLmw-014	RQLmw-016
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL4mw-199C-1731-GF	FWGLL4mw-200C-1732-GF	FWGRQLmw-007C-1733-GF	FWGRQLmw-008C-1734-GF	FWGRQLmw-009C-1735-GF	FWGRQLmw-014C-1736-GF	FWGRQLmw-016C-1737-GF
Date Collected					4/4/2011	4/4/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	37000	50.0 U	50.0 U	**154**	50.0 U	**402**	50.0 U	50.0 U
Antimony	µg/L	6	15	15	**0.52 J**	2.0 U	**0.27 J**	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	0.045	**11.4**	5.0 U	5.0 U	**11.3**	4.3 UJ	5.0 U	5.0 U
Barium	µg/L	2000	2600	7300	**105**	**10.1**	**23.7**	**35.7**	**21.1**	**22.4**	**9.9 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
Cadmium	µg/L	5	18	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**92100**	**168000**	**64400**	**33300**	**14600**	**10500**	**376000**
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
Cobalt	µg/L	NS	730	11	5.0 U	5.0 U	5.0 U	**1.5 J**	5.0 U	**11.8**	5.0 U
Copper	µg/L	1300	1500	1500	5.0 U	5.0 U	5.0 U	5.0 U	**4.9 J**	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.010 UJ	0.010 UJ	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	26000	**5830**	50.0 U	**594**	**18200**	**886**	**15100**	**11600**
Lead	µg/L	15	NS	NS	3.0 U	3.0 U	3.0 U	3.0 U	**2.4 J**	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	NS	**22200**	**51500**	**33500**	**92000**	**10700**	**7300**	**57700**
Manganese	µg/L	50	880	880	**836**	**2.1 J**	**19.1**	**296**	**113**	**2800**	**6830**
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
Nickel	µg/L	NS	730	730	10.0 U	10.0 U	**12.2**	**2.8 J**	**2.9 UJ**	**21.6**	**4.8 J**
Potassium	µg/L	NS	NS	NS	**1320**	**519 J**	**2510**	**2130**	**3070**	**1740**	**2910**
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
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
Sodium	µg/L	NS	NS	NS	**8480**	**8430**	**2440**	**2180**	**1880**	**3850**	**7820**
Thallium	µg/L	2	2.4	NS	1.0 U	1.0 U	0.22 UJ	1.0 U	1.0 U	0.18 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
Zinc	µg/L	5000	11000	11000	**2.9 J**	**2.5 J**	**21.0 B**	**5.5 JB**	**8.2 JB**	**20.4 B**	**6.5 JB**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed - Insufficent water volume in well - sample for cy

Table 3-3. FWGWMP April 2011 Inorganics Analytical Results

Station ID					RQLmw-017	SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGRQLmw-017C-1738-GF	FWGSCFmw-001-1741-GF	FWGSCFmw-002-1742-GF	FWGSCFmw-003-1743-GF	FWGSCFmw-004-1744-GF	FWGSCFmw-005-1745-GF	FWGSCFmw-006-1746-GF
Date Collected					4/5-6/2011	4/6/2011	4/6/2011	4/6/2011	4/5/2011	4/5/2011	4/5/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	37000	**36.6 J**	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	**0.95 J**	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	3.4 UJ	**14.2**	5.0 U	5.0 U	**4.9 J**	**13.5**
Barium	µg/L	2000	2600	7300	10.0 U	**3.3 J**	**41.3**	**76.4**	**99.1**	**35.8**	**118**
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
Cadmium	µg/L	5	18	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**75400**	**60900**	**85600**	**73600**	**151000**	**94200**	**63500**
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
Cobalt	µg/L	NS	730	11	**4.9 J**	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	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Iron	µg/L	300	11000	26000	**160**	**99.6**	**397**	**599**	50.0 U	**3950**	**502**
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
Magnesium	µg/L	NS	NS	NS	**30100**	**18100**	**27700**	**30000**	**60800**	**42600**	**17800**
Manganese	µg/L	50	880	880	**4820**	**528**	**77.8**	**258**	**734**	**1620**	**177**
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
Nickel	µg/L	NS	730	730	**17.4**	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Potassium	µg/L	NS	NS	NS	**1690**	**10200**	**2010**	**1370**	**2310**	**2180**	**6740**
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
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
Sodium	µg/L	NS	NS	NS	**5120**	**15900**	**22200**	**7180**	**12900**	**10000**	**12900**
Thallium	µg/L	2	2.4	NS	0.19 UJ	0.18 UJ	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
Zinc	µg/L	5000	11000	11000	**20.4 B**	**3.4 JB**	10.0 U	**8.0 JB**	10.0 U	**2.4 JB**	10.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed - Insufficent water volume in well - sample for c

Table 3-3. FWGWMP April 2011 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. 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 3-4. 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

3.2.3 Volatile Organic Compounds (VOCs)

VOC analytical results are summarized in Table 3-5. The following VOCs were detected above the MDL for this sampling event.

- Acetone – LL4mw-199 (2.7 µg/L J B). There is no MCL for Acetone. The Region 9 PRG is 5500 µg/L.

- Carbon Disulfide – SCFmw-001 (0.44 µg/L J), SCFmw-002 (0.28 µg/L J), and SCFmw-005 (1.5 µg/L J). There is no MCL for Carbon Disulfide. The Region 9 PRG is 1000 µg/L.

- Carbon Tetrachloride – LL3mw-239 (0.33 µg/L J). The MCL for Carbon tetrachloride is 5 µg/L. The Region 9 PRG is 0.17 µg/L.

- Chloroform – LL3mw-239 (0.43 µg/L J B). There is no MCL for Chloroform. The Region 9 PRG is 0.17 µg/L.

- Methylene Chloride – BKGmw- 010 (0.39 µg/L J B), LL2mw-269 (0.41 µg/L J B), SCFmw-004 (0.34 µg/L J B), SCFmw-006 (0.36 J B). There is no MCL for Methylene Chloride is. The Region 9 PRG is 4.3.

Note that method blanks associated with many of these samples had contamination for methylene chloride 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 3-5, the following VOCs were detected at levels above the MCLs or Region 9 PRGs during the April 2011 sampling event:

- Carbon Tetrachloride at a concentration exceeding the Region 9 PRG of 0.17 µg/L at LL3mw-239 (0.33 µg/L J).

- Chloroform at a concentration exceeding the Region 9 PRG of 0.17 µg/L at LL3mw-239 (0.43 µg/L J B).

3.2.4 Semivolatile Organic Compounds (SVOCs)

SVOC analytical results are summarized in Table 3-6. 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 – B12mw-012 (2.7 µg/L J B), BKGmw-008 (1.1 µg/L J B), BKGmw-015 (1.2 µg/L J B), BKGmw-021 (1.1 µg/L J B), DETmw-004 (0.84 µg/L J B), LL1mw-082 (1.7 µg/L J), LL1mw-084 (1.4 µg/L J), LL2mw-267 (0.97 µg/L J B), LL3mw-236 (1.2 µg/L J B), LL4mw-196 (0.82µg/L J), LL4mw-198 (2.2 µg/L J), LL4mw-199 (1.8 µg/L J), RQLmw-007 (1.4 µg/L J B), RQLmw-008 (1.2 µg/L J B), RQLmw-009 (1.3 µg/L J B), RQLmw-014 (1.9 µg/L J B), RQLmw-016 (1.1 µg/L J B), RQLmw-017 (2.8 µg/L J), SCFmw-001 (1.4 µg/L J B), SCFmw-002 (1.2 µg/L J B), and SCFmw-006 (1.2 µg/L J B). There is no MCL for Bis(2-Ethylhexyl)phthalate. The Region 9 PRG is 4.8 µg/L.

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 3-6 no SVOCs were detected at levels exceeding either the MCLs or the Region 9 PRGs.

3.2.5 Pesticides and Polychlorinated Biphenyls (PCBs)

Pesticides and PCBs analytical results are summarized in Table 3-7. Note that during the sampling event there was <1.6 feet of water in well RQLmw-017. Due to insufficient recharge a sample for pesticides/PCBs was not collected from this well. The following pesticides and PCBs were detected above the MDL for this sampling event.

- alpha-BHC – SCFmw-002 (0.022 µg/L J) and LL3mw-239 (0.011 µg/L J). There is no MCL for alpha-BHC. The Region 9 PRG is 0.011 µg/L.

- Endrin – SCFmw-001 (0.012 µg/L J). The MCL for Endrin is 2 µg/L. The Region 9 PRG is 11 µg/L.

- Heptachlor – LL1mw-084 (0.029 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 3-7 the only pesticides detected at a levels exceeding either the MCL or the Region 9 PRG were:

- alpha-BHC at a concentration of 0.022 µg/L J at SCFmw-002 (the Region 9 PRG is 0.011 µg/L).
- Heptachlor at a concentration of 0.029 µg/L J at LL1mw-084 (the Region 9 PRG is 015 µg/L).

3.2.6 Perchlorates

The perchlorate analytical results are summarized in Table 3-8. The following wells had perchlorate detected above the MDL for this sampling event.

LL4mw-196 (0.042 µg/L J) LL4mw-197 (0.067 µg/L)

None of the detected perchlorate concentrations exceeded the Region 9 PRG of 3.6 µg/L for the January 2011 event. There is no MCL for perchlorate. On February 18, 2005, the USEPA established a Drinking Water Equivalent Level (DWEL) for perchlorate which is set at 24.5 µg/L.

Table 3-5. FWGWMP April 2011 VOCs Analytical Results

Station ID					ASYmw-003	B12mw-010	B12mw-012	BKGmw-005	BKGmw-006	BKGmw-008	BKGmw-010
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGASYmw-003C-1704-GW	FWGB12mw-010C-1712-GW	FWGB12mw-012C-1713-GW	FWGBKGmw-005C-1705-GW	FWGBKGmw-006C-1706-GW	FWGBKGmw-008C-1707-GW	FWGBKGmw-010C-1708-GW
Date Collected					4/7/2011	4/5/2011	4/5/2011	4/7/2011	4/6/2011	4/6/2011	4/6/2011
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 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	**0.39 JB**
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: Lab data sheets list sample FWGRQLmw-017C-1738-GW as FWGRQLmw-017C-1638-GW in error.

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP April 2011 VOCs Analytical Results

Station ID					BKGmw-015	BKGmw-018	BKGmw-021	CBLmw-004	DETmw-003	DETmw-004	LL1mw-067
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGBKGmw-015C-1709-GW	FWGBKGmw-018C-1710-GW	FWGBKGmw-021C-1711-GW	FWGCBLmw-004C-1714-GW	FWGDETmw-003C-1739-GW	FWGDETmw-004C-1740-GW	FWGLL1mw-067C-1715-GW
Date Collected					4/6/2011	4/7/2011	4/6/2011	4/7/2011	4/5/2011	4/4-5/2011	4/5/2011
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 UJ	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: Lab data sheets list sample FWGRQLmw-017C-1738-GW as FWGRQLmw-017C-1(

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP April 2011 VOCs Analytical Results

Station ID					LL1mw-081	LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-081C-1716-GW	FWGLL1mw-082C-1718-GW	FWGLL1mw-084C-1719-GW	FWGLL1mw-085C-1720-GW	FWGLL2mw-266C-1721-GW	FWGLL2mw-267C-1722-GW	FWGLL2mw-269C-1723-GW
Date Collected					4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/7/2011	4/7/2011	4/7/2011
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 UJ	2.0 UJ	2.0 U	2.0 U	**0.41 JB**
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: Lab data sheets list sample FWGRQLmw-017C-1738-GW as FWGRQLmw-017C-1(

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP April 2011 VOCs Analytical Results

Station ID					L3mw-236	LL3mw-239	LL4mw-193	LL4mw-195	LL4mw-196	LL4mw-197	LL4mw-198
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-236C-1724-GW	FWGLL3mw-239C-1725-GW	FWGLL4mw-193C-1726-GW	FWGLL4mw-195C-1727-GW	FWGLL4mw-196C-1728-GW	FWGLL4mw-197C-1729-GW	FWGLL4mw-198C-1730-GW
Date Collected					4/7/2011	4/7/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011
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	**0.33 J**	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	**0.43 JB**	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: Lab data sheets list sample FWGRQLmw-017C-1738-GW as FWGRQLmw-017C-1(

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP April 2011 VOCs Analytical Results

Station ID					LL4mw-199	LL4mw-200	RQLmw-007	RQLmw-008	RQlmw-009	RQLmw-014	RQLmw-016
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL4mw-199C-1731-GW	FWGLL4mw-200C-1732-GW	FWGRQLmw-007C-1733-GW	FWGRQLmw-008C-1734-GW	FWGRQLmw-009C-1735-GW	FWGRQLmw-014C-1736-GW	FWGRQLmw-016C-1737-GW
Date Collected					4/4/2011	4/4/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011
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	**2.7 JB**	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: Lab data sheets list sample FWGRQLmw-017C-1738-GW as FWGRQLmw-017C-1(

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP April 2011 VOCs Analytical Results

Station ID					RQLmw-017	SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGRQLmw-017C-1738-GW	FWGSCFmw-001-1741-GW	FWGSCFmw-002-1742-GW	FWGSCFmw-003-1743-GW	FWGSCFmw-004-1744-GW	FWGSCFmw-005-1745-GW	FWGSCFmw-006-1746-GW
Date Collected					4/5/2011	4/6/2011	4/6/2011	4/6/2011	4/5/2011	4/5/2011	4/5/2011
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	**0.44 J**	**0.28 J**	1.0 U	1.0 U	**1.5 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	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	**0.34 JB**	**0.36 JB**	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: Lab data sheets list sample FWGRQLmw-017C-1738-GW as FWGRQLmw-017C-1(

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP April 2011 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. 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 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					ASYmw-003	B12mw-010	B12mw-012	BKGmw-005	BKGmw-006	BKGmw-008	BKGmw-010
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGASYmw-003C-1704-GW	FWGB12mw-010C-1712-GW	FWGB12mw-012C-1713-GW	FWGBKGmw-005C-1705-GW	FWGBKGmw-006C-1706-GW	FWGBKGmw-008C-1707-GW	FWGBKGmw-010C-1708-GW
Date Collected					4/7/2011	4/5/2011	4/5/2011	4/7/2011	4/6/2011	4/6/2011	4/6/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,2,4-Trichlorobenzene	µg/L	NS	7.2	2.3	1.0 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
3-Nitroaniline	µg/L	NS	3.2	NS	2.0 UJ	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 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 UJ	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 UJ	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 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ
4-Chlorophenyl phenyl ether	µg/L	NS	NS	NS	2.0 UJ	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 UJ	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 UJ	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 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	2200	0.20 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Table 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					ASYmw-003	B12mw-010	B12mw-012	BKGmw-005	BKGmw-006	BKGmw-008	BKGmw-010
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGASYmw-003C-1704-GW	FWGB12mw-010C-1712-GW	FWGB12mw-012C-1713-GW	FWGBKGmw-005C-1705-GW	FWGBKGmw-006C-1706-GW	FWGBKGmw-008C-1707-GW	FWGBKGmw-010C-1708-GW
Date Collected					4/7/2011	4/5/2011	4/5/2011	4/7/2011	4/6/2011	4/6/2011	4/6/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Benzo(k)fluoranthene	µg/L	NS	0.92	0.029	0.20 UJ	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 U	10 U	10 U	10 U	10 U	10 U
Benzyl alcohol	µg/L	NS	11000	3700	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	µg/L	NS	NS	110	1.0 UJ	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 UJ	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	1.1 UJB	10 U	**2.7 JB**	10 U	10 U	**1.1 JB**	10 U
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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	10 UJ
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Phenanthrene	µg/L	NS	NS	NS	0.20 UJ	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 UJ	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 UJ	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 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					BKGmw-015	BKGmw-018	BKGmw-021	CBLmw-004	DETmw-003	DETmw-004	LL1mw-067
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGBKGmw-015C-1709-GW	FWGBKGmw-018C-1710-GW	FWGBKGmw-021C-1711-GW	FWGCBLmw-004C-1714-GW	FWGDETmw-003C-1739-GW	FWGDETmw-004C-1740-GW	FWGLL1mw-067C-1715-GW
Date Collected					4/6/2011	4/7/2011	4/6/2011	4/7/2011	4/5/2011	4/4-5/2011	4/5/2011
Sample Type					Grab	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	1.0 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	1.0 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	1.0 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	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	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	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	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	2.0 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	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
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	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	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	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	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	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	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	2.0 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	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	5.0 UJ
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	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	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	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	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	2.0 UJ
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	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	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	2.0 U
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 UJ	5.0 U	5.0 UJ	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	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	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	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	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	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	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	0.20 U

Table 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					BKGmw-015	BKGmw-018	BKGmw-021	CBLmw-004	DETmw-003	DETmw-004	LL1mw-067
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGBKGmw-015C-1709-GW	FWGBKGmw-018C-1710-GW	FWGBKGmw-021C-1711-GW	FWGCBLmw-004C-1714-GW	FWGDETmw-003C-1739-GW	FWGDETmw-004C-1740-GW	FWGLL1mw-067C-1715-GW
Date Collected					4/6/2011	4/7/2011	4/6/2011	4/7/2011	4/5/2011	4/4-5/2011	4/5/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
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	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 U	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	5.0 U
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	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	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**1.2 JB**	10 U	**1.1 JB**	10 U	10 U	**0.84 JB**	10 U
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	0.82 J	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	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	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	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	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	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	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	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	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	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	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	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	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ
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	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	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	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	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	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	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	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ
Phenanthrene	µg/L	NS	NS	NS	0.20 U	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	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	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					LL1mw-081	LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-081C-1716-GW	FWGLL1mw-082C-1718-GW	FWGLL1mw-084C-1719-GW	FWGLL1mw-085C-1720-GW	FWGLL2mw-266C-1721-GW	FWGLL2mw-267C-1722-GW	FWGLL2mw-269C-1723-GW
Date Collected					4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/7/2011	4/7/2011	4/7/2011
Sample Type					Grab	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	1.0 UJ
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	1.0 UJ
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	1.0 UJ
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	1.0 UJ
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	1.0 UJ
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	5.0 UJ
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	5.0 UJ
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	2.0 UJ
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	2.0 UJ
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 UJ
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	0.66 J	5.0 U	5.0 U	5.0 U	5.0 UJ
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	5.0 UJ
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	1.0 UJ
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	1.0 UJ
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	0.20 UJ
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	1.0 UJ
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	2.0 UJ
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	2.0 UJ
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	5.0 UJ
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	2.0 UJ
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ
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	2.0 UJ
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	2.0 UJ
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	2.0 UJ
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	2.0 UJ
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	1.0 UJ
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	2.0 UJ
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Acenaphthene	µg/L	NS	370	2200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Acenaphthylene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Anthracene	µg/L	NS	1800	11000	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
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	0.20 UJ
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	0.20 UJ
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	0.20 UJ
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	0.20 UJ

Table 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					LL1mw-081	LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-081C-1716-GW	FWGLL1mw-082C-1718-GW	FWGLL1mw-084C-1719-GW	FWGLL1mw-085C-1720-GW	FWGLL2mw-266C-1721-GW	FWGLL2mw-267C-1722-GW	FWGLL2mw-269C-1723-GW
Date Collected					4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/7/2011	4/7/2011	4/7/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
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	0.20 UJ
Benzoic acid	µg/L	NS	150000	150000	10 U	10 U	10 U	10 U	10 U	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	5.0 UJ
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	1.0 UJ
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	1.0 UJ
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	10 U	**1.7 JB**	**1.4 JB**	10 U	10 U	**0.97 JB**	10 UJ
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	1.0 UJ
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	1.0 UJ
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	0.20 UJ
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	0.20 UJ
Dibenzofuran	µg/L	NS	12	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
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	1.0 UJ
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	1.0 UJ
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	1.0 UJ
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	1.0 UJ
Fluoranthene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Fluorene	µg/L	NS	NS	1500	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
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	0.20 UJ
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	1.0 UJ
Hexachlorocyclopentadiene	µg/L	50	220	220	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ
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	1.0 UJ
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	0.20 UJ
Isophorone	µg/L	NS	71	71	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
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	0.20 UJ
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	1.0 UJ
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	1.0 UJ
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	1.0 UJ
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Phenol	µg/L	NS	11000	11000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Pyrene	µg/L	NS	NS	1100	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					L3mw-236	LL3mw-239	LL4mw-193	LL4mw-195	LL4mw-196	LL4mw-197	LL4mw-198
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-236C-1724-GW	FWGLL3mw-239C-1725-GW	FWGLL4mw-193C-1726-GW	FWGLL4mw-195C-1727-GW	FWGLL4mw-196C-1728-GW	FWGLL4mw-197C-1729-GW	FWGLL4mw-198C-1730-GW
Date Collected					4/7/2011	4/7/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,2,4-Trichlorobenzene	µg/L	NS	7.2	2.3	1.0 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Acenaphthene	µg/L	NS	370	2200	0.20 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Table 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					L3mw-236	LL3mw-239	LL4mw-193	LL4mw-195	LL4mw-196	LL4mw-197	LL4mw-198
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-236C-1724-GW	FWGLL3mw-239C-1725-GW	FWGLL4mw-193C-1726-GW	FWGLL4mw-195C-1727-GW	FWGLL4mw-196C-1728-GW	FWGLL4mw-197C-1729-GW	FWGLL4mw-198C-1730-GW
Date Collected					4/7/2011	4/7/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Benzo(k)fluoranthene	µg/L	NS	0.92	0.029	0.20 UJ	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 U	10 U	10 U	10 U	10 U	10 U
Benzyl alcohol	µg/L	NS	11000	3700	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	µg/L	NS	NS	110	1.0 UJ	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 UJ	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	**1.2 JB**	10 U	10 U	10 U	**0.82 J**	10 U	**2.2 J**
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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	10 U
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 UJ	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 UJ	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 UJ	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 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					LL4mw-199	LL4mw-200	RQLmw-007	RQLmw-008	RQlmw-009	RQLmw-014	RQLmw-016
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL4mw-199C-1731-GW	FWGLL4mw-200C-1732-GW	FWGRQLmw-007C-1733-GW	FWGRQLmw-008C-1734-GW	FWGRQLmw-009C-1735-GW	FWGRQLmw-014C-1736-GW	FWGRQLmw-016C-1737-GW
Date Collected					4/4/2011	4/4/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011
Sample Type					Grab	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	1.0 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	1.0 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	1.0 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	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	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	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	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	2.0 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	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
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	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	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	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	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	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	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	2.0 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	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	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	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
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	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	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	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	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	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	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	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	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	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	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	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	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	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	0.20 U

Table 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					LL4mw-199	LL4mw-200	RQLmw-007	RQLmw-008	RQlmw-009	RQLmw-014	RQLmw-016
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL4mw-199C-1731-GW	FWGLL4mw-200C-1732-GW	FWGRQLmw-007C-1733-GW	FWGRQLmw-008C-1734-GW	FWGRQLmw-009C-1735-GW	FWGRQLmw-014C-1736-GW	FWGRQLmw-016C-1737-GW
Date Collected					4/4/2011	4/4/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
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	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 U	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	5.0 U
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	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	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**1.8 J**	10 U	**1.4 JB**	**1.2 JB**	**1.3 JB**	**1.9 JB**	**1.1 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	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	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	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	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	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	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	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	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	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	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	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	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	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 U	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	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	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	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	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	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	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	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Phenanthrene	µg/L	NS	NS	NS	0.20 U	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	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	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					RQLmw-017	SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGRQLmw-017C-1638-GW	FWGSCFmw-001-1741-GW	FWGSCFmw-002-1742-GW	FWGSCFmw-003-1743-GW	FWGSCFmw-004-1744-GW	FWGSCFmw-005-1745-GW	FWGSCFmw-006-1746-GW
Date Collected					4/5/2011	4/6/2011	4/6/2011	4/6/2011	4/5/2011	4/5/2011	4/5/2011
Sample Type					Grab	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 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	1.2 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	1.2 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	1.2 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	1.2 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	6.0 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	6.0 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 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 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	6.0 UJ
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	6.0 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	6.0 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	1.2 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	1.2 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	0.24 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	1.2 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	2.4 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	2.4 U
3,3'-Dichlorobenzidine	µg/L	NS	0.15	0.15	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.0 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	2.4 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 U	6.0 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	2.4 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	2.4 U
4-Chloroaniline	µg/L	NS	150	0.34	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.4 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	2.4 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	1.2 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	2.4 U
4-Nitrophenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	6.0 UJ
Acenaphthene	µg/L	NS	370	2200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.24 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	0.24 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	0.24 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	0.24 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	0.24 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	0.24 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	0.24 U

Table 3-6. FWGWMP April 2011 SVOCs Analytical Results

Station ID					RQLmw-017	SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGRQLmw-017C-1638-GW	FWGSCFmw-001-1741-GW	FWGSCFmw-002-1742-GW	FWGSCFmw-003-1743-GW	FWGSCFmw-004-1744-GW	FWGSCFmw-005-1745-GW	FWGSCFmw-006-1746-GW
Date Collected					4/5/2011	4/6/2011	4/6/2011	4/6/2011	4/5/2011	4/5/2011	4/5/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
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	0.24 U
Benzoic acid	µg/L	NS	150000	150000	10 U	10 U	10 U	10 U	10 U	10 U	12 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	6.0 U
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	1.2 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	1.2 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	**2.8 J**	**1.4 JB**	**1.2 JB**	10 U	10 U	10 U	**2.2 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	1.2 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	1.2 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	0.24 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	0.24 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	1.2 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	1.2 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	1.2 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	1.2 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	1.2 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	0.24 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	0.24 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	0.24 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	1.2 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 UJ	10 U	10 U	10 U	10 U	10 U	12 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	1.2 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	0.24 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	1.2 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	0.24 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	1.2 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	1.2 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	1.2 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 U	6.0 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	0.24 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	1.2 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	0.24 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-6. FWGWMP April 2011 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. 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 April 2011 Pesticides and PCBs Analytical Results

Station ID					ASYmw-003	B12mw-010	B12mw-012	BKGmw-005	BKGmw-006	BKGmw-008	BKGmw-010
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGASYmw-003C-1704-GW	FWGB12mw-010C-1712-GW	FWGB12mw-012C-1713-GW	FWGBKGmw-005C-1705-GW	FWGBKGmw-006C-1706-GW	FWGBKGmw-008C-1707-GW	FWGBKGmw-010C-1708-GW
Date Collected					4/7/2011	4/5/2011	4/5/2011	4/7/2011	4/6/2011	4/6/2011	4/6/2011
Sample Type					Grab	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 UJ	0.030 U	0.030 U
4,4'-DDE	µg/L	NS	0.2	0.2	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
4,4'-DDT	µg/L	NS	0.2	0.2	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Aldrin	µg/L	NS	0.004	0.004	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
alpha-BHC	µg/L	NS	0.011	0.011	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
beta-BHC	µg/L	NS	0.037	0.037	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
delta-BHC	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endosulfan I	µg/L	NS	0.022	0.022	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 U	0.025 U
Endosulfan II	µg/L	NS	0.022	0.022	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 U	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endrin	µg/L	2	11	11	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endrin ketone	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Gamma-BHC	µg/L	0.2	0.052	0.061	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Heptachlor	µg/L	0.4	0.015	0.015	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Methoxychlor	µg/L	40	180	180	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ	0.10 U	0.10 U
Toxaphene	µg/L	3	0.061	0.061	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 U
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	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 UJ	0.50 UJ	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 UJ	0.50 UJ	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 UJ	0.50 UJ	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 UJ	0.50 UJ	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 UJ	0.50 UJ	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 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed - Insufficent water volume in well - sample for pesticides and PCBs not collected.

Table 3-7. FWGWMP April 2011 Pesticides and PCBs Analytical Results

Station ID					BKGmw-015	BKGmw-018	BKGmw-021	CBLmw-004	DETmw-003	DETmw-004	LL1mw-067
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGBKGmw-015C-1709-GW	FWGBKGmw-018C-1710-GW	FWGBKGmw-021C-1711-GW	FWGCBLmw-004C-1714-GW	FWGDETmw-003C-1739-GW	FWGDETmw-004C-1740-GW	FWGLL1mw-067C-1715-GW
Date Collected					4/6/2011	4/7/2011	4/6/2011	4/7/2011	4/5/2011	4/4-5/2011	4/5/2011
Sample Type					Grab	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	0.030 U	0.030 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	0.030 U	0.030 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	0.030 U	0.030 U	0.030 U
Aldrin	µg/L	NS	0.004	0.004	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 U	0.030 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	0.030 U	0.030 U	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 U	0.030 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	0.030 U	0.030 U	0.030 U
delta-BHC	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 U	0.030 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	0.025 U	0.025 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	0.025 U	0.025 U	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 U
Endrin	µg/L	2	11	11	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 U
Endrin ketone	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 U	0.030 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	0.030 U	0.030 U	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 U	0.030 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	0.030 U	0.030 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	0.030 U	0.030 U	0.030 U
Methoxychlor	µg/L	40	180	180	0.10 U	0.10 UJ	0.10 U	0.10 UJ	0.10 U	0.10 U	0.10 U
Toxaphene	µg/L	3	0.061	0.061	2.0 U	2.0 UJ	2.0 U	2.0 UJ	2.0 U	2.0 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 UJ	0.50 UJ	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 UJ	0.50 UJ	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 UJ	0.50 UJ	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 UJ	0.50 UJ	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 UJ	0.50 UJ	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 UJ	0.50 UJ	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 UJ	0.50 UJ	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed - Insufficent water volume in well - sample for pesticides

Table 3-7. FWGWMP April 2011 Pesticides and PCBs Analytical Results

Station ID					LL1mw-081	LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-081C-1716-GW	FWGLL1mw-082C-1718-GW	FWGLL1mw-084C-1719-GW	FWGLL1mw-085C-1720-GW	FWGLL2mw-266C-1721-GW	FWGLL2mw-267C-1722-GW	FWGLL2mw-269C-1723-GW
Date Collected					4/5/2011	4/5/2011	4/5/2011	4/5/2011	4/7/2011	4/7/2011	4/7/2011
Sample Type					Grab	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 U	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 U	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 U	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 U	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 U	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 U	0.030 UJ	0.030 UJ	0.030 UJ
beta-BHC	µg/L	NS	0.037	0.037	0.030 UJ	0.030 U	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ
delta-BHC	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 U	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 U	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 U	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 U	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 U	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 U	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 U	0.030 UJ	0.030 UJ	0.030 UJ
Endrin ketone	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 U	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 U	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 U	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor	µg/L	0.4	0.015	0.015	0.030 UJ	0.030 U	**0.029 J**	0.030 U	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 U	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 U	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 U	2.0 UJ	2.0 UJ	2.0 UJ
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 UJ	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 - Insufficent water volume in well - sample for pesticides

Table 3-7. FWGWMP April 2011 Pesticides and PCBs Analytical Results

Station ID					L3mw-236	LL3mw-239	LL4mw-193	LL4mw-195	LL4mw-196	LL4mw-197	LL4mw-198
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-236C-1724-GW	FWGLL3mw-239C-1725-GW	FWGLL4mw-193C-1726-GW	FWGLL4mw-195C-1727-GW	FWGLL4mw-196C-1728-GW	FWGLL4mw-197C-1729-GW	FWGLL4mw-198C-1730-GW
Date Collected					4/7/2011	4/7/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011	4/4/2011
Sample Type					Grab	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 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 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 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 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 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 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	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
delta-BHC	µg/L	NS	NS	NS	0.030 UJ	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 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 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 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 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 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 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Endrin ketone	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	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 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 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 UJ	0.030 U	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 UJ	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 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 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 UJ	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed - Insufficent water volume in well - sample for pesticides

Table 3-7. FWGWMP April 2011 Pesticides and PCBs Analytical Results

Station ID					LL4mw-199	LL4mw-200	RQLmw-007	RQLmw-008	RQlmw-009	RQLmw-014	RQLmw-016
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL4mw-199C-1731-GW	FWGLL4mw-200C-1732-GW	FWGRQLmw-007C-1733-GW	FWGRQLmw-008C-1734-GW	FWGRQLmw-009C-1735-GW	FWGRQLmw-014C-1736-GW	FWGRQLmw-016C-1737-GW
Date Collected					4/4/2011	4/4/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011	4/6/2011
Sample Type					Grab	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 U	0.030 U	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 U	0.030 U	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 U	0.030 U	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 U	0.030 U	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 U	0.030 U	0.030 UJ
alpha-Chordane	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 UJ
beta-BHC	µg/L	NS	0.037	0.037	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 UJ
delta-BHC	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 U	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 U	0.030 U	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 U	0.025 U	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 U	0.025 U	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 UJ
Endrin	µg/L	2	11	11	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 UJ
Endrin aldehyde	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 UJ
Endrin ketone	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 U	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 U	0.030 U	0.030 UJ
gamma-Chlordane	µg/L	NS	NS	NS	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 U	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 U	0.030 U	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 U	0.030 U	0.030 UJ
Methoxychlor	µg/L	40	180	180	0.10 U	0.10 U	0.10 U	0.10 UJ	0.10 U	0.10 U	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 U	2.0 U	2.0 UJ
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 U	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 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 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 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 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 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 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 - Insufficent water volume in well - sample for pesticides

Table 3-7. FWGWMP April 2011 Pesticides and PCBs Analytical Results

Station ID					RQLmw-017	SCFmw-001	SCFmw-002	SCFmw-003	SCFmw-004	SCFmw-005	SCFmw-006
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGRQLmw-017C-1738-GW	FWGSCFmw-001-1741-GW	FWGSCFmw-002-1742-GW	FWGSCFmw-003-1743-GF	FWGSCFmw-004-1744-GW	FWGSCFmw-005-1745-GW	FWGSCFmw-006-1746-GW
Date Collected					4/5-6/2011	4/6/2011	4/6/2011	4/6/2011	4/5/2011	4/5/2011	4/5/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
4,4'-DDD	µg/L	NS	0.28	0.28	N/A	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	N/A	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	N/A	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	N/A	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	N/A	3.0 U	**0.022 J**	0.030 U	0.030 U	0.030 UJ	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	N/A	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	N/A	3.0 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
delta-BHC	µg/L	NS	NS	NS	N/A	3.0 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	N/A	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	N/A	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	N/A	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	N/A	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Endrin	µg/L	2	11	11	N/A	**0.012 J**	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	N/A	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	N/A	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	N/A	3.0 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	N/A	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	N/A	3.0 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	N/A	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Methoxychlor	µg/L	40	180	180	N/A	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	N/A	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 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 U	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 U	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 U	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 U	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 U	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 U	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 - Insufficent water volume in well - sample for pesticides

Table 3-7. FWGWMP April 2011 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. 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 April 2011 Perchlorate Analytical Results

Station ID	Sample ID	Date Collected	Perchlorate (ug/L)
LL4mw-196	FWGLL4mw-196C-1728-GW	4/4/2011	**0.042 J**
LL4mw-197	FWGLL4mw-197C-1729-GW	4/4/2011	**0.067**

Notes:

All samples were collected as a grab sample.

Region 9 PRG for Perchlorate is 3.6 µg/L.

On February 18, 2005, the USEPA established a Drinking Water Equivalent Level (DWEL) for Perchlorate which is set at 24.5 ug/L.

USEPA RSL for Perchlorate is 26 µg/L.
Bold = detected compound above the MDL

Table 3-8. FWGWMP April 2011 Perchlorate 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. 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 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 April 2011 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 3-2, 3-3, 3-5, 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.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.

- 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 CLP) "B" designation when used by the laboratory as an estimated value for inorganics.

Forty-two wells were sampled during a four-day quarterly sampling event from April 4-7, 2011. During the quarterly event, 12 trip blanks were submitted for volatile organic analysis to TestAmerica.

Five 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 April 2011 sampling event the following laboratory or field contamination at detections greater than ½ MRL was reported for the field QA/QC samples.

Samples Collected 4/4/11- SDG A1D050458, A1D050444 and A1D050436

Method Blanks

- Methylene chloride was detected at 0.99ug/L. The methylene chloride results for samples FWGEQUIPRinse1-1757-GW, FWGTEAM2-Trip, FWGTEAM1-Trip and FWGTEAM3-Trip were qualified "B".

Trip Blanks

- FWGTEAM1-Trip had chloroform detected at 0.21ug/L and methylene chloride detected at 0.35ug/L.
- FWGTEAM3-Trip had chloroform detected at 0.25ug/L and methylene chloride detected at 0.42ug/L.
- FWGTEAM2-Trip had chloroform detected at 0.24ug/L and methylene chloride detected at 0.35ug/L.
- The methylene chloride and chloroform results for FWGEQUIPRinse1-1757-GW were qualified, "B".

Equipment Rinse FWGEQUIPRinse1-1757-GW

- 2-butanone was detected at 1.2ug/L, acetone at 4.6ug/L, chloroform at 0.76ug/L, and methylene chloride at 1.9ug/L. The acetone results for FWGLL4mw-199c-1731-GW and FWGLL4mw-DUP4-1749-GW were qualified, "B".
- 2,4,6-trinitrotoluene was detected at 0.053ug/L and 2,6-dinitrotoluene at 0.086 ug/L. The 2,6-dinitrotoluene result for sample FWGLL4-193c-1726-GW was quailed, "U" as the detected 2,6-dinitrotoluene result was less than 5x the equipment rinse contamination.

Samples Collected 4/5/11- SDG A1D060402 and A1D060428

Method Blanks

- Methylene chloride was detected in the method blanks at 0.99ug/L (4/13/11) and at 1.3ug/L (4/14/11). The methylene chloride results for FWGTEAM1-Trip, FWGTEAM3-Trip, FWGEQUIPRinse2-1758-GW, FWGSCFmw-004-1744-GW, FWGSCFmw-005-1745-GW, FWGSCFmw-DUP1-1751-GW and FWGBKGmw-010c-1708-GW were qualified "B".
- The method blank analyzed 4/13/11 @ 1217 had bis2-ethylhexylphthalate detected at 0.87ug/L. The bis(2-ethylhexyl) phthalate results for samples FWGB12mw-012c-1713-GW, FWGDETmw-004c-1740-GW, FWGLL1mw-082c-1718-GW, FWGLL1mw-084c-1719-GW, FWGLL1mw-DUP2-1747-GW and FWGSCFmw-006-1747-GW were qualified, "B" as the detected results were <10x method blank contamination.
- Mercury was detected in the method blank at 0.18ug/L, but no qualifications were made as there were no reported mercury concentrations in the associated field samples.
- Sodium was detected in the method blank at 74.1ug/L and zinc at 19ug/L. The zinc results for samples FWGB12mw-012c-1713-GF, FWGLL1mw-085c-1720-GF, FWGSCFmw-005-1745-GF, FWGBKGmw-010c-1708-GF and the sodium result for FWGEQUIPRinse2-1758-GF were qualified "B" as the detected concentrations were <5x the method blank contamination.

Trip Blanks

- FWGTEAM1-Trip had chloroform detected at 0.22ug/L and methylene chloride detected at 0.35ug/L.
- FWGTEAM3-Trip had chloroform detected at 0.27ug/L and methylene chloride detected at 0.35ug/L.

- FWGTEAM2-Trip had chloroform detected at 0.22ug/L.
- The chloroform result for FWGEQUIPRinse2-1758-GW was qualified, "B". The methylene chloride results for FWGSCFmw-004-1744-GW, FWGSCFmw-005-1745-GW, FWGSCFmw-DUP1-1751-GW and FWGBKGmw-010c-1708-GW, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.

Equipment Rinse FWGEQUIPRinse2-1758-GW

- 2-butanone was detected at 2.3ug/L, acetone at 4.7ug/L, chloroform at 0.84ug/L, toluene at 0.2ug/L, and methylene chloride at 2.2ug/L. The methylene chloride results for FWGSCFmw-004-1744-GW, FWGSCFmw-005-1745-GW, FWGSCFmw-DUP1-1751-GW and FWGBKGmw-010c-1708-GW, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.
- Sodium was detected at 8.7ug/L. No qualifications were made as the detected sodium results in the associated field samples were >5x contamination.

Samples Collected 4/6/11- SDG A1D070402 and A1D070414

Method Blanks

- Methylene chloride was detected in the method blanks analyzed on April 14th and 15th at 1.3ug/L and 1.0ug/L, respectively. The methylene chloride results for samples FWGEQUIPRinse3-1759-GW and FWGTEAM1-Trip were qualified "B".
- bis(2-ethylhexyl) phthalate was detected at 4.0ug/L. The bis(2-ethylhexyl) phthalate results for samples FWGBKGmw-015c-1709-GW, FWGBKGmw-008c-1707-GW, FWGBKGmw-021c-1711-GW, FWGRQLmw-009c-1735-GW, FWGRQLmw-007c-1733-GW, FWGRQLmw-008c-1734-GW, FWGRQLmw-014c-1736-GW, FWGRQLmw-016c-1737-GW, FWGRQLmw-DUP5-1750-GW, FWGSCFmw-001-1741-GW and FWGSCFmw-002-1742-GW were qualified, "B" as the detected concentrations were less than 5x contamination.
- Zinc was detected at 5.9ug/L. All zinc sample results from SDG A1D070402 with the exception of FWGSCFmw-002-1742-GF were qualified, "B", due to sample results <5x blank contamination.

Trip Blanks

- FWGTEAM1-Trip had chloroform detected at 0.23ug/L and methylene chloride detected at 0.33ug/L. The chloroform and methylene chloride results for sample FWGEQUIPRinse3-1759-GW were qualified, "B".

Equipment Rinse FWGEQUIPRinse3-1759-GW

- 2-butanone was detected at 18ug/L, acetone at 11.0ug/L, carbon disulfide at 0.45ug/L, chloroform at 0.83ug/L, methylene chloride at 2.2ug/L and toluene at 0.45ug/L. The carbon disulfide results for samples FWGSCFmw-001-1741 and FWGSCFmw-002-1742 were qualified, "B". No additional qualifications were

made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.

- Zinc was detected at 5.4ug/L. All zinc sample results from SDG A1D070402 with the exception of FWGSCFmw-002-1742-GF were qualified, "B", due to sample results <5x blank contamination.

Samples Collected 4/7/11- SDG A1D080405 and A1D080404

Method Blanks

- Methylene chloride was detected in the method blanks analyzed on April 15^{h} and 19th at 1.0ug/L and 0.86ug/L, respectively. The methylene chloride results for samples FWGEQUIPRinse4-1760-GW, FWGLL2mw-269c-1723-GW, FWGLL2mw-DUP3-1748-GW, FWGTEAM1-Trip and FWGTEAM3-Trip were qualified "B".

Trip Blanks

- FWGTEAM1-Trip had chloroform detected at 0.23ug/L and methylene chloride detected at 0.36ug/L.
- FWGTEAM3-Trip had chloroform detected at 0.25ug/L and methylene chloride detected at 0.39ug/L.
- FWGTEAM2-Trip had chloroform detected at 0.22ug/L.
- The methylene chloride result for samples FWGLL2mw-269c-1723-GW and FWGLL2mw-DUP3-1748-GW were qualified, "B". The chloroform result for sample FWGLL3mw-239c-1725-GW and FWGEQUIPRinse4-1760-GW were qualified, "B".

Equipment Rinse FWGEQUIPRinse4-1760-GW

- 2-butanone was detected at 1.9ug/L, acetone at 4.2ug/L, chloroform at 0.79ug/L, methylene chloride at 2ug/L and toluene at 0.23ug/L. The methylene chloride result for samples FWGLL2mw-269c-1723-GW and FWGLL2mw-DUP3-1748-GW were qualified, "B". The chloroform result for sample FWGLL3mw-239c-1725-GW was qualified, "B".
- bis(2-ethylhexyl) phthalate was detected at 3.0ug/L. The bis(2-ethylhexyl) phthalate results for samples FWGASYmw-003c-1704-GW, FWGLL2mw-267c-1722-GW, FWGLL2mw-DUP3-1748-GW and FWGLL3mw-236c-1724-GW were qualified, "B" as the detected concentrations were less than 5x contamination.

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. No data was rejected for this sampling event.

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.

Table 3-9. Percent of Acceptable Data

Analytical Method	Total Number of Analytes	Number of Rejects	Percent Completeness
353.2 Modified	8	0	100
6010B	714	0	100
6020	408	0	100
6860	3	0	100
7470A	51	0	100
8081A	1050	0	100
8082	357	0	100
8260B	2457	0	100
8270C	3366	0	100
8330	814	0	100
9012A	51	0	100
8330 Modified	51	0	100
WS-WC-0050	51	0	100
TOTAL	**9383**	**0**	**100**

SECTION 4

SUMMARY OF RESULTS

Explosive and Propellant Compounds

As shown in Table 3-2, the following explosives or propellants were detected at levels above the MCL or Region 9 PRGs during the April 2011 sampling:

- 2,4,6-Trinitotoluene at a concentration exceeding the Region 9 PRG of 2.2 μg/L at LL1mw-084 (8.4 μg/L J).

- 2-Nitrotoluene at a concentration exceeding the Region 9 PRG of 0.049 μg/L at RQLmw-014 (0.32 μg/L J).

- RDX at a concentration exceeding the Region 9 PRG of 0.61 μg/L at DETmw-004 (5.4 μg/), LL1mw-081 (1.6 μg/L J), LL2mw-267 (1.3 μg/L J), LL3mw-239 (1.7 μg/L J).

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 except Load Line 4 where there were no exceedances. 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 3-5, the following VOCs were detected at levels above the MCLs or Region 9 PRGs during the January 2011 sampling event:

- Carbon Tetrachloride at a concentration exceeding the Region 9 PRG of 0.17 μg/L at LL3mw-239 (0.33 μg/L J).

- Chloroform at a concentration exceeding the Region 9 PRG of 0.17 μg/L at LL3mw-239 (0.43 μg/L J B).

Semivolatile Organic Compounds

As shown in Table 3-6 no SVOCs were detected at levels exceeding either the MCLs or the Region 9 PRGs.

Pesticides and Polychlorinated Biphenyls (PCBs)

As shown in Table 3-7 the only pesticides detected at a levels exceeding either the MCL or the Region 9 PRG were

- alpha-BHC at a concentration of 0.022 μg/L J at SCFmw-002 (the Region 9 PRG is 0.011 μg/L).
- Heptachlor at a concentration of 0.029 μg/L J at LL1mw-084 (the Region 9 PRG is 015 μg/L).

Perchlorates

As shown in Table 3-8 none of the detected perchlorate concentrations exceeded the Region 9 PRG of 3.6 μg/L for the January 2011 event. There is no MCL for perchlorate. On February 18, 2005, the USEPA established a Drinking Water Equivalent Level (DWEL) for perchlorate which is set at 24.5 μg/L.

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

Area	Well Number	Compound or Element Detected	Jan-11 Level (ug/L)		MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background Criteria (ug/L)
Sharon Conglomerate	SCFmw-001	Manganese	**528**		50	880	1,340
	SCFmw-002	Arsenic	**14.2**		10	0.045	0
		Iron	**397**		300	11,000	1,430
		Manganese	**77.8**		50	880	1,340
	SCFmw-003	Iron	**599**		300	11,000	1,430
		Manganese	**258**		50	880	1,340
	SCFmw-004	Manganese	**734**		50	880	1,340
	SCFmw-005	Arsenic	**4.9**	**J**	10	0.045	0
		Iron	**3950**		300	11,000	1,430
		Manganese	**1620**		50	880	1,340
	SCFmw-006	Arsenic	**13.5**		10	0.045	0
		Iron	**502**		300	11,000	1,430
		Manganese	**177**		50	880	1,340
Atlas Scrap Yard	Asymw-003	Manganese	**189**	**J**	50	880	1,340
Background Wells	BKGmw-006	Manganese	**216**		50	880	1,340
	BKGmw-010	Manganese	**602**		50	880	1,340
Open Demolition Area 2	DETmw-003	Arsenic	**11**		10	0.045	0
Ramsdell Quarry	RQLmw-007	Iron	**594**		300	11000	1,430
	RQLmw-008	Arsenic	**11.3**		10	0.045	0
		Iron	**18200**		300	11000	1,430
		Manganese	**296**		50	880	1,340
	RQLmw-009	Aluminum	**402**		200	36000.000	0
		Iron	**886**		300	11000	1,430
		Manganese	**113**		50	880	1,340
	RQLmw-014	Iron	**15100**		300	11000	1,430
		Manganese	**2800**		50	880	1,340
	RQLmw-016	Iron	**11600**		300	11000	1,430
		Manganese	**6830**		50	880	1,340
	RQLmw-017	Manganese	**4820**		50	880	1,340
Load Line 1	LL1mw-067	Manganese	**85**		50	880	1,340
	LL1mw-081	Iron	**4630**		300	11000	1,430
		Manganese	**2170**		50	880	1,340
	LL1mw-082	Arsenic	**3.6**	**J**	10	0.045	0
		Iron	**5210**		300	11000	1,430
		Manganese	**1640**		50	880	1,340
	LL1mw-084	Aluminum	**246**		200	36,000	0
		Manganese	**192**		50	880	1,340
	LL1mw-085	Arsenic	**5.7**		10	0.045	0
		Iron	**423**		300	11000	1,430
		Manganese	**1180**		50	880	1,340
Load Line 2	LL2mw-266	Manganese	**761**	**J**	50	880	1,340
		Iron	**2470**		300	11,000	1,430
	LL2mw-267	Iron	**432**		300	11,000	1,430
		Manganese	**564**	**J**	50	880	1,340
	LL2mw-269	Iron	**6800**		300	11,000	1,430
		Manganese	**1590**	**J**	50	880	1,340
Load Line 3	LL3mw-236	Iron	**388**		300	11,000	1,430
		Manganese	**344**	**J**	50	880	1,340
	LL3mw-239	Arsenic	**3.6**	**J**	10	0.045	0
		Manganese	**101**	**J**	50	880	1,020

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

Area	Well Number	Compound or Element Detected	Jan-11 Level (ug/L)		MCL (ug/L)	Region 9 PRG (ug/L)	Facility-Wide Background Criteria (ug/L)
Building 1200	B12mw-010	Arsenic	**3.7**	**J**	10	0.045	0
		Iron	**296**		300	11,000	279
		Manganese	**52.6**		50	880	1,340
Load Line 4	LL4mw-193	Manganese	**181**		50	880	1,020
	LL4mw-195	Iron	**7320**		300	11,000	279
		Manganese	**3490**		50	880	1,020
	LL4mw-196	Iron	**311**		300	11,000	279
		Manganese	**59**		50	880	1,020
	LL4mw-198	Manganese	**1010**		50	880	1,020
	LL4mw-199	Arsenic	**11.4**		10	0.045	0
		Iron	**5830**		300	11,000	279
		Manganese	**836**		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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	Content-Encoding:	base64

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				

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				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.

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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					
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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				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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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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				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 detected 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 detected 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 detected 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-182	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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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				

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				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 dectected 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 APRIL 2011 EVENT

April 2011 Well Sampling Locations

Well #	Location
ASYmw-003	Atlas
BKGmw005	facility wide
BKGmw006	facility wide
BKGmw008	facility wide
BKGmw010	facility wide
BKGmw015	facility wide
BKGmw018	facility wide
BKGmw021	facility wide
B12mw-010	BLDG 1200
B12mw-012	BLDG 1200
CBLmw-004	C Block
LL1mw-067	Load Line 1
LL1mw-081	Load Line 1
LL1mw-082	Load Line 1
LL1mw-084	Load Line 1
LL1mw-085	Load Line 1
LL2mw-266	Load Line 2
LL2mw-267	Load Line 2
LL2mw-269	Load Line 2
LL3mw-236	Load Line 3
LL3mw-239	Load Line 3
LL4mw-193	Load Line 4
LL4mw-195	Load Line 4
LL4mw-196	Load Line 4
LL4mw-197	Load Line 4
LL4mw-198	Load Line 4
LL4mw-199	Load Line 4
LL4mw-200	Load Line 4
RQLmw-007	Ramsdell
RQLmw-008	Ramsdell
RQLmw-009	Ramsdell
RQLmw-014	Ramsdell
RQLmw-016	Ramsdell
RQLmw-017	Ramsdell
DETmw-003	Demo 2
DETmw-004	Demo 2
SCFmw-001	facility wide
SCFmw-002	facility wide
SCFmw-003	facility wide
SCFmw-004	facility wide
SCFmw-005	facility wide
SCFmw-006	facility wide

APPENDIX C

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

Signature Page

April 2011 FWGMP Monitoring Well Event
Field Personnel Abbreviations and Signatures Page

Field Personnel

Name	Affiliation	Initials
Angye Dragotta	EQM	AD
Colleen A. Lear	EQM	CAL
Erik Corbin	EQM	EC
John Miller	EQM	JM
Stephen Stuergon	EQM	SS
Maria Leiter	EQM	ML
Brian Ruff	EQM	BR

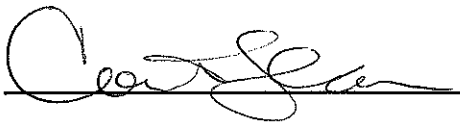
Project and Field Leads

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 Level Measurements

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM APRIL 2011

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
ASYmw 003	Atlas Scrap Yard	4/4/2011	1645	12.05	23.42	Hard	1267
B12mw 010	Building 1200	4/4/2011	1540	16.62	22.85	Hard	1267
B12mw 012	Building 1200	4/4/2011	1535	23.00	24.80	Hard	1267
BKGmw 005	Background	4/5/2011	1040	10.78	20.85	Hard	1267
BKGmw 006	Background	4/5/2011	1130	22.85	37.49	Hard	1267
BKGmw 008	Background	4/5/2011	845	17.34	27.36	Hard	1267
BKGmw 010	Background	4/4/2011	1545	14.60	21.95	Hard	1267
BKGmw 015	Background	4/5/2011	0910	48.56	53.01	Hard	1267
BKGmw 021	Background	4/5/2011	900	13.85	21.45	Hard	1267
BKGmw 018	Background	4/5/2011	1055	15.99	27.51	Hard	1267
CBLmw 004	C Block Quarry	4/4/2011	1700	35.45	47.01	Hard	1267
DETmw 003	Demo.Area 2	4/4/2011	1715	9.00	16.00	Hard	1267
DETmw 004	Demo.Area 2	4/4/2011	1520	10.22	13.88	Hard	1267
LL1mw 67	Loadline 1	4/4/2011	1355	21.00	25.70	Hard	1267
LL1mw 81	Loadline 1	4/4/2011	1400	30.29	41.96	Hard	1267
LL1mw 82	Loadline 1	4/4/2011	1410	28.35	41.50	Hard	1267
LL1mw 84	Loadline 1	4/4/2011	1415	28.30	39.10	Medium	1267
LL1mw 85	Loadline 1	4/4/2011	1420	36.71	45.15	Hard	1267
LL2mw 266	Loadline 2	4/4/2011	1440	10.53	22.65	Hard	1267
LL2mw 267	Loadline 2	4/4/2011	1445	8.79	22.00	Hard	1267
LL2mw 269	Loadline 2	4/4/2011	1455	16.25	36.29	Hard	1267
LL3mw 236	Loadline 3	4/4/2011	1510	16.22	26.65	Hard	1267
LL3mw 239	Loadline 3	4/4/2011	1520	23.62	36.92	Hard	1267
LL4mw 193	Loadline 4	4/4/2011	1210	6.12	24.30	Hard	1267
LL4mw 195	Loadline 4	4/4/2011	1225	10.12	22.80	Medium	1267

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM APRIL 2011

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL4mw 196	Loadline 4	4/4/2011	1145	13.25	21.74	Hard	1267
LL4mw 197	Loadline 4	4/4/2011	1140	14.59	23.59	Hard	1267
LL4mw 198	Loadline 4	4/4/2011	1150	6.59	21.65	Hard	1267
LL4mw 199	Loadline 4	4/4/2011	1200	7.05	23.15	Hard	1267
LL4mw 200	Loadline 4	4/4/2011	1130	17.61	25.12	Hard	1267
RQLmw 007	Ramsdell Quarry	4/4/2011	1615	5.62	18.59	Hard	1267
RQLmw 008	Ramsdell Quarry	4/4/2011	1620	6.28	18.61	Hard	1267
RQLmw 009	Ramsdell Quarry	4/4/2011	1625	4.35	18.72	Hard	1267
RQLmw 014	Ramsdell Quarry	4/4/2011	1630	20.00	31.49	Hard	1267
RQLmw 016	Ramsdell Quarry	4/4/2011	1550	37.35	41.59	Hard	1267
RQLmw 017	Ramsdell Quarry	4/4/2011	1610	31.10	32.70	Hard	1267
SCFmw 001	Sharon Conglomerate	4/6/2011	1205	89.71	214.52	Hard	Keck
SCFmw 002	Sharon Conglomerate	4/6/2011	846	18.72	149.79	Hard	Keck
SCFmw 003	Sharon Conglomerate	4/6/2011	1521	8.46	139.60	Hard	Keck
SCFmw 004	Sharon Conglomerate	4/5/2011	0904	0.00	113.20	Hard	Keck
SCFmw 005	Sharon Conglomerate	4/5/2011	1407	10.56	158.50	Hard	Keck
SCFmw 006	Sharon Conglomerate	4/5/2011	1600	18.58	88.35	Hard	Keck

*All measurements from top of casing

Logbook

"Rite in the Rain"
ALL-WEATHER WRITING PAPER

ALL-WEATHER
ENVIRONMENTAL FIELD BOOK

Name EQM
1800 CARILLON BLVD
Address Cincinnati Oh 45240
Phone 1-800 229 7495
Project RVAAP - USACE

This book is printed on "Rite in the Rain" A[illegible]er Writing Paper - A unique paper created to shed water and enhanc[illegible]en image. It is widely used throughout the world for recording critical field data in all kinds of weather. For best results, use a pencil or an all-weather pen.

Specifications for this book:

Page Pattern		Cover Options	
Left Page	Right Page	Polydura Cover	Fabrikoid Cover
Columnar	1/4" Grid	Item No. 550	Item No. 550F

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RVAAP BOOK #2

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151 PVC Pipe casing tables
152 Soil Classification
153 Soil Classification
154 Conversions (Length, Weight, Volume, Temp, etc...)
155 Conversions (Concentrations, Volume/Flow or Time, Velocity, Acceleration)
156 Maximum Concentration of Contaminants for the Toxicity Characteristic

Location _____ Date _____

Project / Client _____

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Location RVAAP Date 4/8/11 4/8

Project / Client USACE

Drum Log

Drum ID	Contents
EQM 2011-5	Decon/Rinse Water
EQM 2011-6	Purge Water*
EQM 2011-7	Purge Water*
~~EQM 2011-8~~	~~Purge Water~~

JM 4/8/11

* LLs 1, 2, 3, 4, ASY RQL C-Block Building 1200 Background Wells OD2

Location RVAAP Date 4-~~5~~ 4 Cal -11

Project / Client USACE Rain, Overcast

JM, CL, SS, BR, AD, EC, ML (USGS) 40-50

1000 EQM / USGS onsite (USGS Brian Rod Denise)
EQM unloaded for the
week. Setup for purge/sample
1120 H+S Calibrations
1130 Break to teams for
sampling event + water level event
Begin W4.
1445/1500 Thunderstorms (approximate time)
partial H+S shutdown for 30
minutes
1700 partial crews 1036
prepare for fedex and lab
pickup. Organize for next
day. start DET mw004 then Dry
1800 Lab Pickup + fedexp
1810 Off site

Cal

Location RVAAP Date 4-~~6~~ 5 Cal -11

Project / Client USACE Flurries

JM, CL, SS, BR, AD, EC, ML (USGS) 30s-40

0730 Onsite EQM (w USGS)
0745 prepare for day
0800 H+S Calibration
Continue with sites
W1, B12, SCF, BKG wells
RQL.
1545 RQLmw17 started partial
submittal will finish
tomorrow.
B12mw12 partial min vol
submittal.
1730 partial return to 1036
for prep of samples
for lab pick up +
fed exp.
1810 fed exp.
1845 Lab pickup. / Offsite

6

Location RVAAP Date 4-6-11

Project / Client Ravenna Ohio USACE Burries

JM, CL, SS, ML, BR, AD, EC w/ USGS 30-50

0730 Onsite EDM / USGS

0800 H+S Calibration daily prep
Continue with RQL, BR6, SCF, B12

1000 Finding, RQL mw17 from 7-6 yesterday and B12mw12

1500 Partial Crews return to 1036
Prepare samples for fedex and lab pickup.

1800 FedEx

1830 LAB PICKUP.

1845 OFFSITE

7

Location RVAAP Date 4-7-11

Project / Client USACE 35-55

CL, SS, ML, BR, AD, EC (USGS) FOG forecast

0730 ONsite EDM /USGS

0800 H+S Calibration
Daily prep.
Setup for BR6, U2, U3
ASY
finalize all event wells.

1330 partial crews 1036.
prepare samples for
fedex / lab pickup.

1600 prepare IDW, pack
+ load equipment.

1630 partial crews leave

1720 LAB Pickup

1800 FLOOR CLEARED 1036-OK
OFFSITE

Static Water Level

Measurements

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/4/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL4mw-197	Loadline 4		1266	EC	12:00	14.42		0
	Cmt:Good, perchlorate sampled							
LL4mw-196	Loadline 4		1266	EC	13:40	13.15		0
	Cmt:Good, Additional Turb: 14:00- 543ntu; 14:03 497ntu, perchlorate sampled							
LL4mw-195	Loadline 4		1266	EC	15:15	9.69		0
	Cmt:Good, extra minutes of purge to check turbidity							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/4/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
DET-004	Demo.Area	13.88	6000	CAL	17:00	10.22		0
	Cmt:Good, Bailed Dry Returned for Sample							
LL4mw-193	Loadline 4		6000	CAL	12:10	6.12		0
	Cmt:Good,							
LL4mw-198	Loadline 4		6000	CAL	14:21	6.39		0
	Cmt:Good, GREY							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/4/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL4mw-199	Loadline 4		2911	AD	12:32	7.7		0
	Cmt:Good, purge to try and decrease turb, still 999							
LL4mw-200	Loadline 4		2911	AD	16:40	17.55		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/5/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
B12mw-012	Building 120		1266	EC	8:56	22.24		0
	Cmt:Good,							
B12mw-010	Building 120		1266	EC	15:40	15.92		0
	Cmt:Good,							
DET-003	Demo.Area		1266	EC	17:20	8.58		0
	Cmt:Good,							
LL1mw-085	Loadline 1	45.25	1266	EC	10:00	36.93		0
	Cmt:Good,							
LL1mw-084	Loadline 1		1266	EC	12:55	28.25		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/5/2011

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	113.2	6000	CAL	9:04			0
	Cmt:Good, WL at TOC thus with pump water over flowed							
SCFmw-005	Sharon Cong	158.5	6000	CAL	14:07	10.56		0
	Cmt:Good, lost nitrogen into well through leak							
SCFmw-006	Sharon Cong	88.35	6000	CAL	16:00	15.51		0
	Cmt:Good, double check pH as OK							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/5/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
BKGmw-010	Background		2911	AD	16:34	15.1		0
	Cmt:Good,							
LL1mw-082	Loadline 1		2911	AD	9:00	27.9		0
	Cmt:Good,							
LL1mw-081	Loadline 1		2911	AD	11:04	30		0
	Cmt:Good, purged extra to lower turb staying around 10% drop							
LL1mw-067	Loadline 1		2911	AD	13:51	21.28		0
	Cmt:Good,							
RQLmw-017	Ramsdell Qu		2911	AD	15:31	31.3		0
	Cmt:Good, purged dry, sampled dry, returned to sample							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/6/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
BKGmw-006	Background		1266	EC	8:41	22.81		0
	Cmt:Good, extra minutes of purge to double check turbidty (w/in 10%)							
BKGmw-015	Background		1266	EC	10:27	48.46		0
	Cmt:Good, Slow Producer							
BKGmw-021	Background		1266	EC	12:31	13.5		0
	Cmt:Good,							
BKGmw-008	Background		1266	EC	13:44	17.52		0
	Cmt:Good, Well was making a rushing water sound when opened							
RQLmw-009	Ramsdell Qu		1266	EC	15:09	4.48		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/6/2011

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-003	Sharon Cong	139.65	6000	CAL	8:41	8.46		0
	Cmt:Good,							
SCFmw-001	Sharon Cong	214.5	6000	CAL	12:05	88.71		0
	Cmt:Good,							
SCFmw-002	Sharon Cong	149.76	6000	CAL	15:21	18.72		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/6/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
RQLmw-014	Ramsdell Qu		2911	AD	8:57	20.5		0
	Cmt:Good,							
RQLmw-016	Ramsdell Qu		2911	AD	10:41	37.8		0
	Cmt:Good,							
RQLmw-008	Ramsdell Qu		2911	AD	12:40	6.55		0
	Cmt:Good, Orange sediment on initial draw, some clearing after few mins.							
RQLmw-007	Ramsdell Qu		2911	AD	15:02	5.68		0
	Cmt:Good, try to lower turb @ 1516 999ntu; 1519 900ntu; 1522 889ntu							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/7/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
BKGmw-018	Background		1266	EC	8:25	15.81		0
	Cmt:Good,							
BKGmw-005	Background		1266	EC	10:55	10.76		0
	Cmt:Good,							
CBLmw-004	C-Block Qua		1266	EC	12:56	35.55		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/7/2011

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-267	Loadline 2		6000	CAL	8:31	8.65		0
	Cmt:Good, orange							
LL2mw-266	Loadline 2		6000	CAL	10:40	10.8		0
	Cmt:Good,							
LL3mw-239	Loadline 3		6000	CAL	12:20	23.74		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 2 DATE: 4/7/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
ASYmw-003	Atlas Scrap		2911	AD	12:57	12.37		0
	Cmt:Good, try to lower turb @ 13:29 999 ntu; 13:32 999 ntu							
LL2mw-269	Loadline 2		2911	AD	8:31	16.64		0
	Cmt:Good,							
LL3mw-236	Loadline 3		2911	AD	11:45	16.52		0
	Cmt:Good,							

Purge / Sample Records

MONITOR WELL PURGING FORM

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

LOCATION: ATLAS SCRAP DATE: 4/7/2011 START TIME: 12:57

WELL ID: ASYmw-003

WELL DEPTH: INITIAL WATER LEVEL: 12.37

WELL DIAMETER SCREEN INTERVAL: 11 - 21

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 16.0

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

COMMENTS try to lower turb @ 13:29 999 ntu; 13:32 999 ntu cloudy 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)
13:06	12.57	0.2	0.6	10.21	1.22	1.04	6.7	999
13:09	12.53	0.2	0.6	10.21	1.22	0.66	6.82	999
13:20	12.65	0.2	1.2	10.24	1.24	2.09	7.01	999
13:23	12.65	0.2	0.6	10.21	1.25	1.14	6.99	999
13:26	12.62	0.2	0.6	10.31	1.26	0.58	6.99	999

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

Field Personnel: AD

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **ATLAS SCRAP** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: ASYmw-003 SampleID: FWGASYmw-003C-1704-GW/GF DuplID:

SplitID: RinseID: FWGEQUIPRinse4-1760-GW

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

GRAB: Y COMPOSITE: N DATE: 4/7/2011 TIME: 13:33

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 999	Color:	cloudy
		Odor:	None

pH: 7 Temperature (°C): 10.31 DO (mg/L): 0.46 Specific Conductivity (mS/cm): 1.27

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 50

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt: extra purged to try & lower turb

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

MONITOR WELL PURGING FORM

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

LOCATION: BACKGROUND DATE: 4/7/2011 START TIME: 10:55

WELL ID: BKGmw-005

WELL DEPTH: INITIAL WATER LEVEL: 10.76

WELL DIAMETER SCREEN INTERVAL: 8.2 - 18.2

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 13.2

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)
11:18	10.88	0.15	0.5	7.99	0.594	9.21	6.63	107
11:21	10.88	0.15	0.45	7.81	0.594	9.06	6.71	134
11:24	10.88	0.15	0.45	7.76	0.593	9.04	6.73	112

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **BACKGROUN** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: BKGmw-005 SampleID: FWGBKGmw-005C-1705-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/7/2011 TIME: 11:31

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 102	Color:	Clear
		Odor:	None

pH: 6.73 Temperature (°C): 7.74 DO (mg/L): 9.01 Specific Conductivity (mS/cm): 0.594

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 45

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8081	Pest
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
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

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

LOCATION: BACKGROUND DATE: 4/6/2011 START TIME: 8:41

WELL ID: BKGmw-006

WELL DEPTH: INITIAL WATER LEVEL: 22.81

WELL DIAMETER SCREEN INTERVAL: 24.7 - 34.7

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 29.7

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

COMMENTS extra minutes of purge to double check turbidty (w/in 10%) Cloudy 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	23.01	0.15	2	8.63	0.909	2.93	6.41	999
9:03	23.01	0.15	0.45	8.58	0.949	2.52	6.5	999
9:06	23.09	0.15	0.45	8.6	0.93	1.77	6.59	999
9:09	23.14	0.15	0.45	8.93	0.913	2.87	6.65	640
9:12	23.14	0.15	0.45	8.94	0.944	2.3	6.65	639

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **BACKGROUN** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: BKGmw-006 SampleID: FWGBKGmw-006C-1706-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: **Y** COMPOSITE: **N** DATE: 4/6/2011 TIME: 9:21

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 415	Color:	Cloudy
		Odor:	None

pH: 6.65 Temperature (°C): 9.01 DO (mg/L): 1.56 Specific Conductivity (mS/cm): 0.938

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: SW AMBIENT TEMP (°F): 40

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
250ml/Poly	1	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC
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: BACKGROUND DATE: 4/6/2011 START TIME: 13:44

WELL ID: BKGmw-008

WELL DEPTH: _____ INITIAL WATER LEVEL: 17.52

WELL DIAMETER _____ SCREEN INTERVAL: 14.7 - 24.7

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 19.7

PUMP READINGS: Throttle: 40 Recharge: 11.5 Discharge: 3.5

COMMENTS Well was making a rushing water sound when opened 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)
13:45	17.72	0.2	1	8.27	0.29	10.43	6.96	23.2
13:48	17.72	0.2	0.6	8.19	0.287	10.43	6.7	20.6
13:51	17.72	0.2	0.6	8.15	0.285	10.24	6.54	57.8
13:54	17.72	0.2	0.6	8.23	0.286	10.09	6.46	80.8
13:57	17.72	0.2	0.6	8.19	0.285	10.05	6.44	95.1

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **BACKGROUN** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: BKGmw-008 SampleID: FWGBKGmw-008C-1707GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/6/2011 TIME: 14:01

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 101.8	Color:	Clear
		Odor:	None

pH: 6.44 Temperature (°C): 8.17 DO (mg/L): 10.02 Specific Conductivity (mS/cm): 0.286

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 50

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
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	353.2/8330	Propellants

MONITOR WELL PURGING FORM

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

LOCATION: BACKGROUND DATE: 4/5/2011 START TIME: 16:34

WELL ID: BKGmw-010

WELL DEPTH: INITIAL WATER LEVEL: 15.1

WELL DIAMETER SCREEN INTERVAL: 8.9 - 18.9

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 13.9

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)
16:48	15.40	0.2	0.25	7.26	0.219	4.92	5.19	119
16:51	15.40	0.2	0.6	7.1	0.22	3.56	4.95	117
16:54	15.41	0.2	0.6	7.02	0.22	3.39	4.87	119
16:57	15.45	0.2	0.6	6.94	0.219	3.06	4.81	66.1
17:00	15.45	0.2	0.6	6.87	0.218	2.96	4.79	71

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

Field Personnel: AD

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **BACKGROUN** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: BKGmw-010 SampleID: FWGBKGmw-010C-1708-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/5/2011 TIME: 17:03

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 74.9	Color:	Clear
		Odor:	None

pH: 4.76 Temperature (°C): 6.84 DO (mg/L): 2.96 Specific Conductivity (mS/cm): 0.217

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 35

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD 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	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

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

LOCATION: BACKGROUND DATE: 4/6/2011 START TIME: 10:27

WELL ID: BKGmw-015

WELL DEPTH: _____ INITIAL WATER LEVEL: 48.46

WELL DIAMETER _____ SCREEN INTERVAL: 30.1 - 50.1

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 40.1

PUMP READINGS: Throttle: 80 Recharge: 11.5 Discharge: 3.5

COMMENTS Slow Producer 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)
10:19	48.88	0.1	0.25	8.83	0.373	3.97	7.07	62.9
10:22	48.92	0.1	0.3	8.95	0.371	3.88	7.06	55.7
10:25	49.00	0.1	0.3	8.99	0.371	4.05	7.07	49.3

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **BACKGROUN** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: BKGmw-015 SampleID: FWGBKGmw-015C-1709-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/6/2011 TIME: 10:35

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 52	Color:	Clear
		Odor:	None

pH: 7.11 Temperature (°C): 9.09 DO (mg/L): 5.21 Specific Conductivity (mS/cm): 0.369

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 45

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	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

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

LOCATION: BACKGROUND DATE: 4/7/2011 START TIME: 8:25

WELL ID: BKGmw-018

WELL DEPTH: _____ INITIAL WATER LEVEL: 15.81

WELL DIAMETER _____ SCREEN INTERVAL: 14.5 - 24.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 19.5

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)
8:45	15.93	0.15	0.5	7.51	0.228	11.06	6.13	21.8
8:48	16.01	0.15	0.45	7.52	0.215	10.29	6.31	13.8
8:51	16.09	0.15	0.45	7.58	0.209	10.42	6.37	14.7
8:54	16.12	0.15	0.45	7.61	0.207	10.32	6.41	20.6

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **BACKGROUN** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: BKGmw-018 SampleID: FWGBKGmw-018C-1710-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: **Y** COMPOSITE: **N** DATE: 4/7/2011 TIME: 9:01

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 9	Color:	Clear
		Odor:	None

pH: 6.42 Temperature (°C): 7.63 DO (mg/L): 10.34 Specific Conductivity (mS/cm): 0.204

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 45

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: BACKGROUND DATE: 4/6/2011 START TIME: 12:31

WELL ID: BKGmw-021

WELL DEPTH: INITIAL WATER LEVEL: 13.5

WELL DIAMETER SCREEN INTERVAL: 7.7 - 17.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 12.8

PUMP READINGS: Throttle: 50 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)
12:34	13.58	0.15	0.5	8.15	0.71	8.27	7.22	16.9
12:37	13.92	0.15	0.45	8.15	0.712	8.03	7.18	18.8
12:40	13.90	0.15	0.45	8.13	0.717	7.98	7.15	20.1

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **BACKGROUN** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: BKGmw-021 SampleID: FWGBKGmw-021C-1711-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/6/2011 TIME: 12:45

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 24.8	Color:	Clear
		Odor:	None

pH: 7.14 Temperature (°C): 8.15 DO (mg/L): 8 Specific Conductivity (mS/cm): 0.717

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 45

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/Amber	1	4C	8330	Explo
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB

MONITOR WELL PURGING FORM

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

LOCATION: BUILDING 120 DATE: 4/5/2011 START TIME: 15:40

WELL ID: B12mw-010

WELL DEPTH: INITIAL WATER LEVEL: 15.92

WELL DIAMETER SCREEN INTERVAL: 10 - 20

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.0

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)
15:43	16.38	0.15	0.5	8.04	0.123	7.6	5.7	79.2
15:46	16.59	0.15	0.45	8	0.122	7.45	5.62	70.3
15:49	16.65	0.15	0.45	7.89	0.12	7.43	5.58	67
15:52	16.76	0.15	0.45	7.71	0.118	7.4	5.55	67.1

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **BUILDING 120** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: B12mw-010 SampleID: FWGB12mw-010-1712-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/5/2011 TIME: 16:00

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 54.7	Color:	Clear
		Odor:	None

pH: 5.54 Temperature (°C): 7.42 DO (mg/L): 7.41 Specific Conductivity (mS/cm): 0.118

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 35

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC 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	8082	PCB
1L/Amber	1	4C	8330	Explo
250ml/Poly	1	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC
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: BUILDING 120 DATE: 4/5/2011 START TIME: 8:56

WELL ID: B12mw-012

WELL DEPTH: INITIAL WATER LEVEL: 22.24

WELL DIAMETER SCREEN INTERVAL: 12 - 22

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 17.0

PUMP READINGS: Throttle: 35 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)
8:59	22.79	0.1	0.5	8.32	0.671	9.33	6.39	67.5
9:02	22.96	0.1	0.3	8.26	0.675	9.41	6.4	59.2
9:05	23.07	0.1	0.3	8.17	0.675	9.38	6.41	46.5

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **BUILDING 120** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: B12mw-012 SampleID: FWGB12mw-012C-1713-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/5/2011 TIME: 9:11

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 34.6	Color:	Clear
		Odor:	None

pH: 6.41 Temperature (°C): 8.16 DO (mg/L): 9.33 Specific Conductivity (mS/cm): 0.675

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: S AMBIENT TEMP (°F): 35

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: VOCs, metals, and Cyanide taken using Pump. Other aliquots taken throughout the day using a bailer.

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8270	SVOC
1L/Amber	1	4C	8081	Pest
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	353.2/8330	Propellants
1L/Amber	1	4C	8082	PCB
40ml/Vial	3	HCl	8260	VOC
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: C-BLOCK QUA DATE: 4/7/2011 START TIME: 12:56

WELL ID: CBLmw-004

WELL DEPTH: _____ INITIAL WATER LEVEL: 35.55

WELL DIAMETER _____ SCREEN INTERVAL: 34 - 44

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 39.0

PUMP READINGS: Throttle: 80 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)
12:59	35.65	0.15	0.5	10.31	0.091	8.07	6.27	143
13:02	35.65	0.15	0.45	10.11	0.091	7.82	5.93	109
13:05	35.65	0.15	0.45	10.11	0.09	7.65	5.78	148
13:08	35.65	0.15	0.45	10.31	0.088	7.59	5.74	128
13:11	35.65	0.15	0.45	10.1	0.089	7.62	5.68	109

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **C-BLOCK QU** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: CBLmw-004 SampleID: FWGCBLmw-004C-1714-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/7/2011 TIME: 13:21

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 97	Color:	Clear
		Odor:	None

pH: 5.66 Temperature (°C): 10.1 DO (mg/L): 7.67 Specific Conductivity (mS/cm): 0.088

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 55

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	8081	Pest
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8082	PCB
1L/Poly	1	HNO3	6010/6020/7470	Metals
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

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

LOCATION: DEMO.AREA 2 DATE: 4/5/2011 START TIME: 17:20

WELL ID: DET-003

WELL DEPTH: _____ INITIAL WATER LEVEL: 8.58

WELL DIAMETER _____ SCREEN INTERVAL: 7 - 12

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 9.5

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)
17:28	8.65	0.15	0.25	7.89	0.729	2.55	6.68	999
17:31	8.65	0.15	0.45	7.92	0.729	1.72	6.96	911
17:34	8.65	0.15	0.45	7.99	0.741	1.07	7	808
17:37	8.65	0.15	0.45	8.15	0.978	0.51	7.12	443
17:40	8.65	0.15	0.45	8.13	0.979	0.43	7.15	101
17:43	8.65	0.15	0.45	8.16	0.979	0.47	7.13	85.6

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **DEMO.AREA** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: DET-003 SampleID: FWGDETmw-003C-1739GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/5/2011 TIME: 17:55

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 68.4	Color:	Clear
		Odor:	None

pH: 8.65 Temperature (°C): 8.17 DO (mg/L): 0.23 Specific Conductivity (mS/cm): 0.979

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 40

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	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
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: DEMO.AREA 2 DATE: 4/4/2011 START TIME: 17:00

WELL ID: DET-004

WELL DEPTH: 13.88 INITIAL WATER LEVEL: 10.22

WELL DIAMETER SCREEN INTERVAL: 6 - 11

PUMP/PURGING DEVICE: B - BAILER PUMP INTAKE DEPTH: 8.5

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

COMMENTS Bailed Dry Returned for Sample 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)
17:11	10.22	1	0.5	10.17	0.782	13.77	6.41	70.5

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

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **DEMO.AREA** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: DET-004 SampleID: FWGDET-004C-1740-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/4/2011 TIME: 18:00

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 150	Color:	tint
		Odor:	None

pH: 6.4 Temperature (°C): 10.01 DO (mg/L): 15.77 Specific Conductivity (mS/cm): 0.788

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: NE AMBIENT TEMP (°F): 55

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: multiple alliquot times due to bailing dry multiple times

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC
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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 1 DATE: 4/5/2011 START TIME: 13:51

WELL ID: LL1mw-067

WELL DEPTH: INITIAL WATER LEVEL: 21.28

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 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)
13:54	21.28	0.2	1	8.49	0.296	10.98	6.1	203
13:57	22.40	0.3	0.9	8.51	0.275	11.06	5.97	999
14:00	22.92	0.3	0.9	8.42	0.306	10.66	5.75	999
14:03	22.34	0.3	0.9	8.59	0.38	10.48	5.64	861
14:06	22.33	0.3	0.9	8.51	0.403	10.23	5.6	805
14:17	21.40	0.3	3.3	8.06	0.378	10.79	5.65	612

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

Field Personnel: AD

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL1mw-067 SampleID: FWGLL1mw-067C-1715-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/5/2011 TIME: 14:23

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 511	Color:	tint
		Odor:	None

pH: 5.68 Temperature (°C): 8.19 DO (mg/L): 10.75 Specific Conductivity (mS/cm): 0.513

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 35

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 1 DATE: 4/5/2011 START TIME: 11:04

WELL ID: LL1mw-081

WELL DEPTH: _____ INITIAL WATER LEVEL: 30

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 purged extra to lower turb staying around 10% drop cloudy 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)
11:05	30.80	0.2	0.6	9.01	0.471	2.34	6.16	999
11:08	31.20	0.2	0.6	8.97	0.471	2.96	6.2	999
11:11	31.50	0.2	0.6	9.03	0.471	3.28	6.25	999

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

Field Personnel: AD

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL1mw-081 SampleID: FWGLL1mw-081C-1716-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: **Y** COMPOSITE: **N** DATE: 4/5/2011 TIME: 11:23

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 805	Color:	cloudy
		Odor:	None

pH: 6.33 Temperature (°C): 9.16 DO (mg/L): 4.29 Specific Conductivity (mS/cm): 0.471

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 35

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt: turbidity at 11:14 919, 11:17 840

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE I DATE: 4/5/2011 START TIME: 9:00

WELL ID: LL1mw-082

WELL DEPTH: _____ INITIAL WATER LEVEL: 27.9

WELL DIAMETER _____ SCREEN INTERVAL: 28.9 - 38.5

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

PUMP READINGS: Throttle: 35 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)
9:06	28.15	0.2	0.6	8.14	0.359	1.72	5.67	544
9:09	28.40	0.2	0.6	8.24	0.345	0.94	5.82	411
9:12	28.20	0.2	0.6	8.01	0.351	0.85	5.95	439
9:15	28.23	0.2	0.6	8.22	0.336	0.8	5.97	387
9:18	28.75	0.2	0.6	8.83	0.337	0.6	6.05	264

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

Field Personnel: AD

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL1mw-082 SampleID: FWGLL1mw-082C-1718-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/5/2011 TIME: 9:23

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 247	Color:	Clear
		Odor:	None

pH: 6.1 Temperature (°C): 8.81 DO (mg/L): 0.55 Specific Conductivity (mS/cm): 0.355

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 35

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 1 DATE: 4/5/2011 START TIME: 12:55

WELL ID: LL1mw-084

WELL DEPTH: INITIAL WATER LEVEL: 28.25

WELL DIAMETER SCREEN INTERVAL: 26.7 - 36.3

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

PUMP READINGS: Throttle: 65 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)
13:08	29.32	0.15	1	8.01	0.357	9.35	6.13	11.4
13:11	29.41	0.15	0.45	8.47	0.357	9.187	5.92	19.2
13:14	29.52	0.15	0.45	8.76	0.357	9.19	5.77	41.7
13:17	29.57	0.15	0.45	9.09	0.357	9.27	5.73	72.1
13:20	29.59	0.15	0.45	9.13	0.357	9.31	5.7	101

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-084 SampleID: FWGLL1mw-084C-1719-GW/GF DuplID: FWGLL1mw-DUP2-1747-GW/GF

SplitID: FWGLL1mw-084C-1752s-GW/GF RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/5/2011 TIME: 13:25

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 147	Color:	Clear
		Odor:	None

pH: 5.72 Temperature (°C): 9.47 DO (mg/L): 8.81 Specific Conductivity (mS/cm): 0.358

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 35

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: EC Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 1 DATE: 4/5/2011 START TIME: 10:00

WELL ID: LL1mw-085

WELL DEPTH: 45.25 INITIAL WATER LEVEL: 36.93

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 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)
10:18	37.39	1	1	8.15	0.584	9.37	6.63	47.8
10:24	38.51	1	6	7.12	0.583	9.64	6.87	266
10:30	38.32	1	6	7.95	0.582	9.19	6.78	98.3
10:34	38.38	1	4	8.01	0.581	9.29	6.78	69.7

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-1720-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: **Y** COMPOSITE: **N** DATE: 4/5/2011 TIME: 10:51

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 58.7	Color:	Clear
		Odor:	None

pH: 6.81 Temperature (°C): 8.63 DO (mg/L): 9 Specific Conductivity (mS/cm): 0.577

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: N AMBIENT TEMP (°F): 35

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
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	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 2 DATE: 4/7/2011 START TIME: 10:40

WELL ID: LL2mw-266

WELL DEPTH: _____ INITIAL WATER LEVEL: 10.8

WELL DIAMETER _____ SCREEN INTERVAL: 9.8 - 19.8

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

PUMP READINGS: Throttle: 60 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)
10:45	11.01	0.21	0.25	9.06	0.158	8.16	5.98	25.6
10:48	11.40	0.18	0.54	9.7	0.155	7.67	5.87	21.9
10:51	11.67	0.175	0.525	9.8	0.154	8.08	5.79	28.1
10:54	11.75	0.175	0.525	9.87	0.153	8.26	5.74	30
10:57	11.80	0.175	0.525	9.81	0.157	8.43	5.7	28.6

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-1721-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/7/2011 TIME: 11:04

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 28.9	Color:	TINT
		Odor:	None

pH: 5.71 Temperature (°C): 9.84 DO (mg/L): 8.47 Specific Conductivity (mS/cm): 0.158

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 50

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
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
1L/Poly	1	HNO3	6010/6020/7470	Metals
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 2 DATE: 4/7/2011 START TIME: 8:31

WELL ID: LL2mw-267

WELL DEPTH: _____ INITIAL WATER LEVEL: 8.65

WELL DIAMETER _____ SCREEN INTERVAL: 9.8 - 19.8

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

PUMP READINGS: Throttle: 75 Recharge: 12.5 Discharge: 2.5

COMMENTS orange ORANGE 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)
8:35	8.70	0.25	0.25	8.41	0.609	6.64	5.69	999
8:38	8.85	0.25	0.75	8.35	0.596	5.43	5.76	999
8:41	8.91	0.25	0.75	8.27	0.592	4.92	5.89	877
8:44	8.94	0.25	0.75	8.27	0.577	4.96	5.93	600
8:47	8.99	0.25	0.75	8.28	0.573	4.93	5.95	446

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-1722-GW/GF DupliID: FWGLL2mw-DUP3-1748-GW/GF

SplitID: FWGLL2mw-267C-1753S-GW/GF RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/7/2011 TIME: 8:52

FIELD READINGS / OBSERVATIONS

	Turb (NTU):	400	Color: ORANGE CLDY
			Odor: None

pH: 5.97 Temperature (°C): 8.24 DO (mg/L): 5.1 Specific Conductivity (mS/cm): 0.564

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 40

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 2 DATE: 4/7/2011 START TIME: 8:31

WELL ID: LL2mw-269

WELL DEPTH: INITIAL WATER LEVEL: 16.64

WELL DIAMETER SCREEN INTERVAL: 17.1 - 27.1

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

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)
8:48	17.03	0.2	0.5	9.31	0.348	1.41	5.73	522
8:51	17.18	0.2	0.6	9.42	0.347	1.09	5.79	417
8:54	17.24	0.2	0.6	9.52	0.347	1.05	5.82	363

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

Field Personnel: AD

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL2mw-269 SampleID: FWGLL2mw-269C-1723-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/7/2011 TIME: 8:59

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 298	Color:	Clear
		Odor:	None

pH: 5.88 Temperature (°C): 9.58 DO (mg/L): 1.01 Specific Conductivity (mS/cm): 0.347

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 40

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 3 DATE: 4/7/2011 START TIME: 11:45

WELL ID: LL3mw-236

WELL DEPTH: _____ INITIAL WATER LEVEL: 16.52

WELL DIAMETER _____ SCREEN INTERVAL: 13.8 - 23.8

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

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)
11:51	17.02	0.2	0.25	9.91	0.199	2.62	6.05	292
11:54	17.14	0.2	0.6	9.7	0.196	2.19	5.99	305
11:57	17.32	0.1	0.3	9.49	0.194	2.1	5.95	265

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

Field Personnel: AD

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL3mw-236 SampleID: FWGLL3mw-236C-1724-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/7/2011 TIME: 11:59

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 262	Color:	Clear
		Odor:	None

pH: 5.96 Temperature (°C): 9.47 DO (mg/L): 2.14 Specific Conductivity (mS/cm): 0.193

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 48

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 3 DATE: 4/7/2011 START TIME: 12:20

WELL ID: LL3mw-239

WELL DEPTH: _____ INITIAL WATER LEVEL: 23.74

WELL DIAMETER _____ SCREEN INTERVAL: 24.9 - 34.9

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

PUMP READINGS: Throttle: 60 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)
12:23	23.90	0.13	0.13	10.18	0.261	7.69	5.92	75.2
12:26	24.10	0.13	1.69	9.67	0.263	5.24	5.87	64
12:29	24.24	0.13	0.39	9.54	0.264	4.6	5.84	65.1

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-1725-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/7/2011 TIME: 12:32

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 58.7	Color:	Clear
		Odor:	None

pH: 5.84 Temperature (°C): 9.54 DO (mg/L): 4.54 Specific Conductivity (mS/cm): 0.265

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 45

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8081	Pest
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/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 4 DATE: 4/4/2011 START TIME: 12:10

WELL ID: LL4mw-193

WELL DEPTH: _____ INITIAL WATER LEVEL: 6.12

WELL DIAMETER _____ SCREEN INTERVAL: 11.3 - 21.3

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 16.3

PUMP READINGS: Throttle: 60 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)
12:25	6.49	0.125	0.25	11.5	0.9	4.89	6.36	98
12:28	6.95	0.125	0.375	11.4	0.9	4.45	6.32	98
12:31	7.70	0.125	0.375	11.1	0.98	4.21	6.45	95
12:34	8.00	0.125	0.375	11.1	0.98	4.04	6.59	93
12:37	8.25	0.125	0.375	11.1	0.9	4.02	6.59	82
12:40	8.56	0.125	0.375	11	0.98	3.79	6.63	71

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-193 SampleID: FWGLL4mw-193C-1726-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: **Y** COMPOSITE: **N** DATE: 4/4/2011 TIME: 12:48

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 53.9	Color:	Clear
		Odor:	None

pH: 6.69 Temperature (°C): 10.9 DO (mg/L): 3.75 Specific Conductivity (mS/cm): 0.9

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 55

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER *SIZE/TYPE*	CONTAINER *NUMBER*	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
1L/Amber	2	4C	8081	Pest
40ml/Vial	3	HCl	8260	VOC
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
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 4 DATE: 4/4/2011 START TIME: 15:15

WELL ID: LL4mw-195

WELL DEPTH: _____ INITIAL WATER LEVEL: 9.69

WELL DIAMETER _____ SCREEN INTERVAL: 10.3 - 20.3

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.3

PUMP READINGS: Throttle: 20 Recharge: 12.5 Discharge: 2.5

COMMENTS extra minutes of purge to check turbidity Cloudy 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)
15:41	10.15	0.15	0.15	9.61	1.35	2.08	6.81	999
15:44	10.15	0.15	0.45	9.47	1.42	0.74	6.7	999
15:47	10.15	0.15	0.45	9.43	1.42	0.61	6.69	999
15:50	10.15	0.15	0.45	9.33	1.44	0.58	6.68	999
15:53	10.15	0.15	0.45	9.02	1.51	0.55	6.67	999
15:56	10.19	0.2	0.6	8.88	1.41	3.59	6.68	999
15:59	10.28	0.2	0.6	8.7	1.42	1.43	6.65	999

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-195 SampleID: FWGLL4mw-195C-1727-GW/GF DuplID:

SplitID: RinseID: FWGEQUIPRinse1-1757-GW

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

GRAB: Y COMPOSITE: N DATE: 4/4/2011 TIME: 16:05

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 621	Color:	Cloudy
		Odor:	None

pH: 6.64 Temperature (°C): 8.65 DO (mg/L): 1.75 Specific Conductivity (mS/cm): 1.47

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: S AMBIENT TEMP (°F): 65

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: Monitored turbidity until 1612

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
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
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 4 DATE: 4/4/2011 START TIME: 13:40

WELL ID: LL4mw-196

WELL DEPTH: _____ INITIAL WATER LEVEL: 13.15

WELL DIAMETER _____ SCREEN INTERVAL: 9.2 - 19.2

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

PUMP READINGS: Throttle: 15 Recharge: 12 Discharge: 3

COMMENTS Additional Turb: 14:00- 543ntu; 14:03 497ntu; 14:06 491ntu, perchlorate sampled 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)
13:51	13.34	0.15	1	10.36	0.542	1.56	7.26	632
13:54	13.34	0.15	0.45	10.51	0.542	1.76	7.22	607
13:57	13.34	0.15	0.45	10.16	0.545	2	7.2	584

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-196 SampleID: FWGLL4mw-196C-1728-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/4/2011 TIME: 14:11

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 405	Color:	Clear
		Odor:	None

pH: 7.13 Temperature (°C): 10.01 DO (mg/L): 3.13 Specific Conductivity (mS/cm): 0.543

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: S AMBIENT TEMP (°F): 65

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: perchlorate sampled

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8082	PCB
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo
40ml/Vial	3	HCl	8260	VOC
1L/Poly	1	HNO3	6010/6020/7470	Metals
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: LOADLINE 4 DATE: 4/4/2011 START TIME: 12:00

WELL ID: LL4mw-197

WELL DEPTH: INITIAL WATER LEVEL: 14.42

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 perchlorate sampled 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)
12:16	14.54	0.15	1.5	9.8	0.711	7.85	6.88	264
12:19	14.56	0.15	0.45	9.83	0.705	8.06	6.97	222
12:22	14.56	0.15	0.45	9.75	0.705	8.08	7.03	216
12:25	14.56	0.15	0.45	9.74	0.705	8.28	7.07	182

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-1729-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/4/2011 TIME: 12:35

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 133	Color:	Clear
		Odor:	None

pH: 7.11 Temperature (°C): 9.72 DO (mg/L): 8.29 Specific Conductivity (mS/cm): 0.706

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: S AMBIENT TEMP (°F): 65

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt: perchlorate sampled

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
40ml/Vial	3	HCl	8260	VOC
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 4 DATE: 4/4/2011 START TIME: 14:21

WELL ID: LL4mw-198

WELL DEPTH: _____ INITIAL WATER LEVEL: 6.39

WELL DIAMETER _____ SCREEN INTERVAL: 10.3 - 20.3

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.3

PUMP READINGS: Throttle: 60 Recharge: 12 Discharge: 3

COMMENTS GREY TINT/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)
15:04	6.35	0.125	0.25	8.6	0.383	8.35	6.61	904
15:07	6.37	0.125	0.375	8.42	0.38	8.15	6.31	713
15:10	6.46	0.125	0.375	8.18	0.38	8.49	6.18	609
15:13	6.61	0.125	0.375	8.2	0.383	8.85	6.12	519
15:16	6.63	0.125	0.375	8.24	0.381	9.08	6.12	459

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-198 SampleID: FWGLL4mw-198C-1730-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/4/2011 TIME: 15:22

FIELD READINGS / OBSERVATIONS

	Turb (NTU):	431	Color: TINT/CLDY
			Odor: None

pH: 6.12 Temperature (°C): 8.21 DO (mg/L): 9.01 Specific Conductivity (mS/cm): 0.38

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: NE AMBIENT TEMP (°F): 55

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

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	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/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 4 DATE: 4/4/2011 START TIME: 12:32

WELL ID: LL4mw-199

WELL DEPTH: _____ INITIAL WATER LEVEL: 7.7

WELL DIAMETER _____ SCREEN INTERVAL: 10.3 - 20.3

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.3

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

COMMENTS purge to try and decrease turb, still 999 cloudy 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)
13:00	7.44	0.2	0.8	12.73	0.698	6.47	6.49	999
13:03	7.38	0.2	0.6	13.05	0.697	6.45	6.54	999
13:22	7.20	0.2	3.8	13	0.684	7.9	6.85	999
13:25	7.20	0.2	0.6	12.61	0.688	8.23	6.87	999
13:28	7.25	0.2	0.6	12.28	0.685	8.25	6.88	999

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

Field Personnel: AD

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL4mw-199 SampleID: FWGLL4mw-199C-1731-GW/GF DuplID: FWGLL4mw-DUP4-1749-GW/GF

SplitID: FWGLL4MW-199C-1754S-GW/GF RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/4/2011 TIME: 13:33

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 999	Color:	cloudy
		Odor:	None

pH: 6.86 Temperature (°C): 11.72 DO (mg/L): 6.55 Specific Conductivity (mS/cm): 0.675

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: NE AMBIENT TEMP (°F): 58

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: AD Cmt: Turbidity at 13:30 999; 13:40 999

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	3	HNO3	6010/6020/7470	Metals
40ml/Vial	9	HCl	8260	VOC
1L/Amber	6	4C	8081	Pest
1L/Amber	6	4C	8270	SVOC
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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 4 DATE: 4/4/2011 START TIME: 16:40

WELL ID: LL4mw-200

WELL DEPTH: INITIAL WATER LEVEL: 17.55

WELL DIAMETER SCREEN INTERVAL: 12.6 - 22.6

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 17.6

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)
16:42	17.60	0.2	0.5	10.69	1.14	5.84	6.89	227
16:45	17.70	0.2	0.6	10.4	1.15	5.6	6.85	192
16:48	17.60	0.2	0.6	10.33	1.14	5.64	6.83	172

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

Field Personnel: AD

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL4mw-200 SampleID: FWGLL4mw-200C-1732-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/4/2011 TIME: 16:49

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 154	Color:	Clear
		Odor:	None

pH: 6.82 Temperature (°C): 10.28 DO (mg/L): 5.67 Specific Conductivity (mS/cm): 1.14

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: NE AMBIENT TEMP (°F): 58

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: RAMSDELL QU DATE: 4/6/2011 START TIME: 15:02

WELL ID: RQLmw-007

WELL DEPTH: INITIAL WATER LEVEL: 5.68

WELL DIAMETER SCREEN INTERVAL: 6 - 16

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 11.0

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

COMMENTS try to lower turb @ 1516 999ntu; 1519 900ntu; 1522 889ntu cloudy 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)
15:06	5.80	0.2	0.5	8.5	0.427	3.26	6.65	999
15:09	5.70	0.2	0.6	8.36	0.43	2.83	6.57	999
15:12	5.71	0.2	0.6	8.51	0.429	2.63	6.56	999

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

Field Personnel: AD

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **RAMSDELL Q** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: RQLmw-007 SampleID: FWGRQLmw-007C-1733-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/6/2011 TIME: 15:19

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 835	Color:	cloudy
		Odor:	None

pH: 6.56 Temperature (°C): 9.04 DO (mg/L): 3.37 Specific Conductivity (mS/cm): 0.42

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 45

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt: extra purged to try & lower turb stayed w/in 10%

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	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	8082	PCB

MONITOR WELL PURGING FORM

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

LOCATION: RAMSDELL QU DATE: 4/6/2011 START TIME: 12:40

WELL ID: RQLmw-008

WELL DEPTH: INITIAL WATER LEVEL: 6.55

WELL DIAMETER SCREEN INTERVAL: 6 - 16

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 11.0

PUMP READINGS: Throttle: 35 Recharge: 10 Discharge: 5

COMMENTS Orange sediment on initial draw, some clearing after few mins. 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)
12:52	6.81	0.2	1	7.08	0.752	1.62	6.82	999
12:55	6.81	0.2	0.6	7	0.752	0.88	6.85	999
12:58	6.82	0.2	0.6	7.21	0.745	0.63	6.87	661

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

Field Personnel: AD

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **RAMSDELL Q** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: RQLmw-008 SampleID: FWGRQLmw-008C-1634-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: **Y** COMPOSITE: **N** DATE: 4/6/2011 TIME: 13:09

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 478	Color:	tint
		Odor:	None

pH: 6.88 Temperature (°C): 7.33 DO (mg/L): 0.55 Specific Conductivity (mS/cm): 0.742

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 40

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt: Turb @ 13:01 572 NTU, 13:04 581

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

MONITOR WELL PURGING FORM

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

LOCATION: RAMSDELL QU DATE: 4/6/2011 START TIME: 15:09

WELL ID: RQLmw-009

WELL DEPTH: INITIAL WATER LEVEL: 4.48

WELL DIAMETER SCREEN INTERVAL: 5.9 - 15.9

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 10.9

PUMP READINGS: Throttle: 35 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)
15:11	4.83	0.15	0.5	7.05	0.26	0.9	6.78	999
15:14	4.91	0.15	0.45	6.73	0.225	1.91	6.8	355
15:17	4.97	0.15	0.45	6.79	0.236	1.5	6.74	223
15:20	4.99	0.15	0.45	6.54	0.241	1.57	6.6	186
15:23	4.99	0.15	0.45	6.45	0.227	1.78	6.56	152
15:26	4.99	0.15	0.45	6.49	0.221	1.94	6.54	138

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **RAMSDELL Q** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: RQLmw-009 SampleID: FWGRQLmw-009C-1635-GW/GF DupIID: FWGRQLmw-DUP5-1750-GW/GF

SplitID: FWGRQLmw-009C-1755s-GW/GF RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/6/2011 TIME: 15:31

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 109	Color:	Clear
		Odor:	None

pH: 6.52 Temperature (°C): 6.43 DO (mg/L): 2.5 Specific Conductivity (mS/cm): 0.219

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 55

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	9	HCl	8260	VOC
1L/Amber	5	4C	8082	PCB
1L/Amber	5	4C	8270	SVOC
1L/Amber	5	4C	8081	Pest
1L/Amber	4	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: RAMSDELL QU DATE: 4/6/2011 START TIME: 8:57

WELL ID: RQLmw-014

WELL DEPTH: INITIAL WATER LEVEL: 20.5

WELL DIAMETER SCREEN INTERVAL: 18.6 - 28.6

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 23.6

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)
9:02	20.58	0.2	0.25	8.92	0.221	1.34	5.5	243
9:05	20.61	0.2	0.6	8.86	0.214	0.85	5.57	197
9:08	20.59	0.2	0.6	8.82	0.212	0.74	5.6	168

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

Field Personnel: AD

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **RAMSDELL Q** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: RQLmw-014 SampleID: FWGRQLmw-014C-1736-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/6/2011 TIME: 9:16

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 156	Color:	Clear
		Odor:	None

pH: 5.64 Temperature (°C): 8.8 DO (mg/L): 0.69 Specific Conductivity (mS/cm): 0.21

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: NE AMBIENT TEMP (°F): 40

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
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
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

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

LOCATION: RAMSDELL QU DATE: 4/6/2011 START TIME: 10:41

WELL ID: RQLmw-016

WELL DEPTH: INITIAL WATER LEVEL: 37.8

WELL DIAMETER SCREEN INTERVAL: 28.5 - 38.5

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

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)
10:46	38.15	0.1	1	8.82	2.1	5.37	6.29	251
10:49	38.25	0.1	0.3	8.98	2.09	6.17	6.39	245
10:52	38.27	0.1	0.3	9.02	2.1	6.27	6.42	223
10:55	38.38	0.1	0.3	9	2.1	6.14	6.46	172

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

Field Personnel: AD

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **RAMSDELL Q** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: RQLmw-016 SampleID: FWGRQLmw-016C-1637-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/6/2011 TIME: 11:03

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 133	Color:	Clear
		Odor:	None

pH: 6.47 Temperature (°C): 9.03 DO (mg/L): 5.98 Specific Conductivity (mS/cm): 2.1

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 40

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
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
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

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

LOCATION: RAMSDELL QU DATE: 4/5/2011 START TIME: 15:31

WELL ID: RQLmw-017

WELL DEPTH: INITIAL WATER LEVEL: 31.3

WELL DIAMETER SCREEN INTERVAL: 19.8 - 29.8

PUMP/PURGING DEVICE: B - BAILER PUMP INTAKE DEPTH: 24.8

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

COMMENTS purged dry, sampled dry, returned to 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)
15:32	31.30	0.3	0.25	8.36	0.604	10.41	5.92	176
15:35	31.94	0.3	0.9	8.64	0.605	10.21	5.94	171
15:38	32.70	0.3	0.9	9.04	0.598	10.06	5.97	316

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

Field Personnel: AD

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **RAMSDELL Q** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: RQLmw-017 SampleID: FWGRQLmw-017C-1738-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/5/2011 TIME: 15:53

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 316	Color:	Clear
		Odor:	None

pH: 5.97 Temperature (°C): 9.04 DO (mg/L): 10.06 Specific Conductivity (mS/cm): 0.598

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 35

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: AD Cmt: purged dry mutiple sampling after recharge, insufficeint volume

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

MONITOR WELL PURGING FORM

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

LOCATION: SHARON CON DATE: 4/6/2011 START TIME: 12:05

WELL ID: SCFmw-001

WELL DEPTH: _____ INITIAL WATER LEVEL: 88.71

WELL DIAMETER _____ SCREEN INTERVAL: _____ - _____

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 100 Recharge: 50 Discharge: 30

COMMENTS Clear Odor:sulfer

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:36	88.72	0.2	0.2	7.82	0.582	8.16	7.34	4.5
12:39	88.72	0.2	0.6	8.48	0.598	6.36	7.46	5.2
12:42	88.73	0.2	0.6	8.78	0.6	5.58	7.43	2.5
12:45	88.73	0.2	0.6	8.9	0.604	5.28	7.39	2.6

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-003-1741-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: **Y** COMPOSITE: **N** DATE: 4/6/2011 TIME: 12:52

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 1.8	Color:	Clear
		Odor:	sulfer

pH: 7.36 Temperature (°C): 8.95 DO (mg/L): 4.98 Specific Conductivity (mS/cm): 0.676

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: SE AMBIENT TEMP (°F): 45

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: issues w/ the pump not pulling enough water slowed to 100ml/min

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	2	4C	8270	SVOC
1L/Amber	1	4C	8082	PCB
1L/Amber	1	4C	8081	Pest
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

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

LOCATION: SHARON CON DATE: 4/6/2011 START TIME: 15:21

WELL ID: SCFmw-002

WELL DEPTH: 149.76 INITIAL WATER LEVEL: 18.72

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 75 Recharge: 40 Discharge: 45

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)
13:34	18.73	0.3	0.25	12.22	0.778	9.07	7.47	1.7
13:37	18.75	0.3	0.9	12.37	0.7981	6.69	7.46	3.8
13:40	18.76	0.3	0.9	12.33	0.811	4.9	7.44	4.5

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-002-1742-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/6/2011 TIME: 15:48

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 6.5	Color:	Clear
		Odor:	None

pH: 7.45 Temperature (°C): 12.32 DO (mg/L): 4.44 Specific Conductivity (mS/cm): 0.814

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 45

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

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
250ml/Poly	1	NaOH	9012	Cyanide
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
250ml/Poly	1	H2SO4	353.2	NO3/NO2

MONITOR WELL PURGING FORM

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

LOCATION: SHARON CON DATE: 4/6/2011 START TIME: 8:41

WELL ID: SCFmw-003

WELL DEPTH: 139.65 INITIAL WATER LEVEL: 8.46

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 75 Recharge: 40 Discharge: 40

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	8.50	0.3	0.25	8.26	0.727	8.42	6.17	25
9:02	8.67	0.3	0.9	8.5	0.731	5.62	6.36	25.3
9:05	8.70	0.3	0.9	8.71	0.721	4.56	6.53	25.4
9:08	8.70	0.3	0.9	8.83	0.721	4.22	6.59	25.3
9:11	8.70	0.3	0.9	9.09	0.711	3.89	6.71	25.5
9:14	8.70	0.3	0.9	9.11	0.709	3.8	6.77	25.7
9:17	8.70	0.3	0.9	9.1	0.71	3.63	6.81	25.7

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-003-1743-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/6/2011 TIME: 9:22

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 26.1	Color:	Clear
		Odor:	None

pH: 6.82 Temperature (°C): 8.96 DO (mg/L): 3.57 Specific Conductivity (mS/cm): 0.71

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 40

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: SHARON CON DATE: 4/5/2011 START TIME: 9:04

WELL ID: SCFmw-004

WELL DEPTH: 113.2 INITIAL WATER LEVEL: 0

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 60 Recharge: 40 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)
9:40	0.00	0.15	0.5	9.14	1.13	4.01	6.41	0
9:43	0.00	0.15	0.45	9.13	1.12	3.86	6.54	0
9:46	0.00	0.15	0.45	9.24	1.13	3.62	6.63	0
9:49	0.00	0.15	0.45	9.23	1.12	3.64	6.72	0
9:52	0.00	0.15	0.45	8.88	1.11	3.49	6.78	0
9:55	0.00	0.15	0.45	9.35	1.11	3.26	6.84	0
9:58	0.00	0.15	0.45	9.45	1.11	3.21	6.88	0

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-004-1744-GW/GF DupIID: FWGSCFmw-DUP1-1751-GW/GF

SplitID: FWGSCFmw-004-1756S-GW/GF RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/5/2011 TIME: 10:02

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 0	Color:	Clear
		Odor:	None

pH: 6.89 Temperature (°C): 8.89 DO (mg/L): 3.39 Specific Conductivity (mS/cm): 1.11

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 40

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	3	NaOH	9012	Cyanide
250ml/Poly	3	H2SO4	353.2	NO3/NO2
1L/Amber	6	4C	8330	Explo
1L/Amber	5	4C	8082	PCB
1L/Amber	5	4C	8081	Pest
1L/Amber	5	4C	8270	SVOC
40ml/Vial	9	HCl	8260	VOC
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: SHARON CON DATE: 4/5/2011 START TIME: 14:07

WELL ID: SCFmw-005

WELL DEPTH: 158.5 INITIAL WATER LEVEL: 10.56

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 75 Recharge: 40 Discharge: 40

COMMENTS lost nitrogen into well through leak 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)
14:45	10.60	0.25	0.25	9.72	0.9	6.28	6.88	0
14:48	10.69	0.25	0.75	9.68	0.9	4.81	6.81	0
14:51	10.63	0.25	0.75	9.53	0.783	4.5	6.78	0.5
14:54	10.60	0.25	0.75	9.44	0.9	3.9	6.75	1.1
14:57	10.64	0.25	0.75	9.7	0.9	3.68	6.75	1.7
15:00	10.62	0.25	0.75	9.57	0.9	3.65	6.75	2.8

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-005 SampleID: FWGSCFmw-005-1745-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 4/5/2011 TIME: 15:08

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 3.2	Color:	Clear
		Odor:	None

pH: 6.74 Temperature (°C): 9.62 DO (mg/L): 3.82 Specific Conductivity (mS/cm): 0.9

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 40

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8082	PCB
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC
1L/Amber	1	4C	8330	Explo

MONITOR WELL PURGING FORM

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

LOCATION: SHARON CON DATE: 4/5/2011 START TIME: 16:00

WELL ID: SCFmw-006

WELL DEPTH: 88.35 INITIAL WATER LEVEL: 15.51

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 0.0

PUMP READINGS: Throttle: 70 Recharge: 40 Discharge: 40

COMMENTS double check pH as OK Odor:

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	15.52	0.25	0.25	8.14	0.736	8.187	9.78	1.1
16:25	15.68	0.375	1.125	8.85	0.733	5.79	9.88	0.2
16:28	15.52	0.375	1.125	9.17	0.73	4.71	9.9	0
16:31	15.55	0.375	1.125	9.19	0.728	4.12	9.95	4.3

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-006-1746-GW/GF DupID:

SplitID: RinseID: FWGEQUIPRinse2-1758-GW

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

GRAB: **Y** COMPOSITE: **N** DATE: 4/5/2011 TIME: 16:38

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 0.725	Color:	Clear
		Odor:	None

pH: 9.83 Temperature (°C): 9.08 DO (mg/L): 4.2 Specific Conductivity (mS/cm): 0.73

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SE AMBIENT TEMP (°F): 40

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: double checked pH

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
1L/Poly	1	HNO3	6010/6020/7470	Metals
40ml/Vial	3	HCl	8260	VOC

Daily QC Records

Date: 4-Apr

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. 30240.0006

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			
Wind	Still	Moder	High	Report No.	
	x				
Humidity	Dry	Moder	Humid	040411	
		x	x		

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc. / USGS

EQUIPMENT ON SITE:

Four 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 and 1 high pressure bladder pump set up.

WORK PERFORMED (INCLUDING SAMPLING):

Arrive at Building 1036, unload/load and organize equipment.
Water level collection, Purge and sample work completed at the wells. Samples were collected at the following LL4mw-193, LL4mw-195, LL4mw-196, LL4mw-197, LL4mw-198, LL4mw-199, LL4mw-200, and DETmw-004 partial.

Field duplicate and QA split samples were collected from LL4-199. Additionally, a field rinsate was collected by Team # 1.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	040411
Job No.	30240.0006	Date:	4/4/2011

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:

H&S briefing conducted prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, & nitrile gloves). First Aid kits were included in each vehicle, & personnel were made aware of eyewash station locations.

Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat/cold stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

Bailed DETmw-004 with insufficient water for completion will return tomorrow to finish.

SPECIAL NOTES:

USGS onsite for split sampling, results for separate project.

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect samples from a minimum of 9 wells.

Date: 5-Apr

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. 30240.0006

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	4-5-11	
		x			

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Four 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 and 1 high pressure bladder pump set up.

WORK PERFORMED (INCLUDING SAMPLING):

Arrive at Building 1036, unload/load and organize equipment.
Purge and sample work completed at the wells. Samples were collected at the following locations: BKGmw-010, B12mw-010, B12mw-012 partial, RQLmw-017 partial, LL1mw-67, LL1mw-085, LL1mw-084, LL1mw-082, LL1mw-081, SCFmw-004, SCFmw-005, SCFmw-006, DETmw-003, and finalized DETmw-004.

Field duplicate and QA split samples were collected from LL1mw-084 and SCFmw-004. Extra volume was collected from LL1mw-081 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.	4-5-11
Job No.	30240.0006	Date:	4/5/2011

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:

H&S briefing conducted prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, & nitrile gloves). First Aid kits were included in each vehicle, & personnel were made aware of eyewash station locations.

Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat/cold stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

Insuficient volumes or slow recharges thus bailed wells LL1mw-067, LL1-085, and RQLmw-017. B12mw-012 and RQLmw-017 started but insufficient for completion.

SPECIAL NOTES:

USGS onsite for split sampling, results for separate project.

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect samples from a minimum of 9 wells.

Date: 6-Apr

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. 30240.0006

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	4-6-11	
		X			

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Four 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 and 1 high pressure bladder pump set up.

WORK PERFORMED (INCLUDING SAMPLING):

Arrive at Building 1036, unload/load and organize equipment.
Purge and sample work completed at the wells. Samples were collected at the following locations: SCFmw-001, SCFmw-002, SCFmw-003, BKGmw-006, BKGmw-008, BKGmw-015, BKGmw-021, finalized B12mw-012, RQLmw-007, RQLmw-008, RQLmw-009, RQLmw-014, RQLmw-016, and finalized RQLmw-017

Field duplicate and QA split samples were collected from RQLmw-009. Extra volume was collected from RQLmw-008 & SCFmw-003 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.	4-6-11
Job No.	30240.0006	Date:	4/6/2011

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:

H&S briefing conducted prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, & nitrile gloves). First Aid kits were included in each vehicle, & personnel were made aware of eyewash station locations.

Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat/cold stress. Personnel were also instructed to be alert for storms, stinging insect, ticks, and roaming deer.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION (S) TAKEN:

Continued wells from yesterday: B12mw-012 finalized with bailer and RQLmw-07 finalized.

SPECIAL NOTES:

USGS onsite for split sampling, results for separate project.

TOMORROWS EXPECTATIONS:

Expectations for tomorrow are to safely and correctly collect samples from a minimum of 9 wells.

Date: 7-Apr

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. 30240.0006

Contract No. W912QR-04-D-0036

Weather	Bright Sun	Clear	Over-Cast	Rain	Snow
			x		
Temp	To 32	32-50	50-70	70-85	85 up
		x			
Wind	Still	Moder	High	Report No.	
	X				
Humidity	Dry	Moder	Humid	4-7-11	
			x		

SUB-CONTRACTORS ON SITE:

Environmental Quality Management, Inc.

EQUIPMENT ON SITE:

Four 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 and 1 high pressure bladder pump set up.

WORK PERFORMED (INCLUDING SAMPLING):

Arrive at Building 1036, unload/load and organize equipment.
Purge and sample work completed at the wells. Samples were collected at the following locations: ASYmw-003, BKGmw-005, BKGmw-018, CBLmw-004, LL2mw-266, LL2mw-267, LL2mw-269, LL3mw-236, LL3mw-239, and the IDW samples (MWPURGE and MWDECON). Field duplicate and QA split samples were collected from LL2mw-267. Extra volume was collected from BKGmw-018 and LL2mw-269 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory.

Additionally, a field rinseate was collected by Team #3. Packed equipment for return back to Cincinnati, and cleaned Building 1036 while waiting for lab to arrive. Demobilization.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	4-7-11
Job No.	30240.0006	Date:	4/7/2011

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:

H&S briefing conducted prior to mobilizing to the field. All personnel to don modified Level 4 PPE (i.e. steel-toed shoes, safety glasses, & nitrile gloves). First Aid kits were included in each vehicle, & personnel were made aware of eyewash station locations.

Each team was equipped with a cellular phone. Personnel were instructed to hydrate frequently and watch for signs of heat/cold 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:

USGS onsite for split sampling, results for separate project.

TOMORROWS EXPECTATIONS:

NA

APPENDIX D

DATA VERIFICATION REPORTS/ LABORATORY DATA SHEETS

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 5, 2011
STL Sample Delivery Group: A1D050436 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On April 4, 2011, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1D050436.

Field Sample ID	Analytes	Method
FWGLL4mw-197c-1729-GW	Perchlorate	SW846 6860
FWGLL4mw-196c-1728-GW		
FWGEQUIPRINSE1-1757-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 coolers were received at temperatures between 1.3 – 3.9 °C. Upon receipt, it was documented by the laboratory, that the samples were not frozen and in good condition. Therefore, no qualifications were made to sample results based on temperatures less than 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.

Perchlorate - 6860
The following QC criteria were reviewed with acceptable results, unless noted below:

- Holding times, preservation, sample handling
- Tuning criteria
- Initial Calibration Criteria
- Internal standard area and retention time criteria
- ICV and CCV criteria
- Limit of Detection Verification criteria
- Interference Check Sample criteria
- MRL verification criteria
- Method blank was free from contamination
- Equipment rinse was free from contamination
- Laboratory Reagent Blanks were free from contamination
- LCS recovery criteria
- MS/MSD recovery and RPD criteria
- Field duplicate RPD

No QC outliers were noted.

SAMPLE SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 280-14285-1
Sdg Number: A1D050436

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-14285-1	FWGLL4MW-197C-1729-GF	Water	04/04/2011 1235	04/06/2011 0900
280-14285-2	FWGLL4MW-196C-1728-GF	Water	04/04/2011 1411	04/06/2011 0900
280-14285-3EB	FWGEQUIPRINSE1-1757-GW	Water	04/04/2011 1720	04/06/2011 0900

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	4/4/11	000489
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
1800 Carillon Blvd	513 825 7500		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Cincinnati / OH / 45240	E Corbin	M. Loeb	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP	Lab Pick-up		
Contract/Purchase Order/Quote No.			
030240.0006 PO# 16726			

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	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/7470	Perch Water	Special Instructions/ Conditions of Receipt: Cooler ID
FWGLL4mw-197C-1729-GW	4/4/11	12:35		X			9			3	1		X	X	X	X	X	X	X			404
FWGLL4mw-197C-1729-GF	4/4/11	12:35		X			1		1		1	EC 4/4/11								X	X	464
FWGTeam1-Trip	4/4/11	11:00		X						2			X									C99
FWGLL4mw-196C-1728-GW	4/4/11	14:11		X			9			3	1		X	X	X	X	X	X	X			C99
FWGLL4mw-196C-1728-GF	4/4/11	14:11		X			1		1											X	X	C99
FWGLL4mw-195C-1727-GW	4/4/11	16:05		X			9			3	1		X	X	X	X	X	X	X			179
FWGLL4mw-195C-1727-GF	4/4/11	16:05		X					1											X		179
FWGEQUIPRinse#1-1757-GW	4/4/11	17:20		X			10		1	3	1		X	X	X	X	X	X	X	X	X	Cletus - Metals ClO4 not field filtered this sample on.

EC 4/4/11

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 and ClO4 field filtered

	Date	Time		Date	Time
1. Relinquished By: EQM	4/4/11	1800	1. Received By: EQM	4/4/11	1800
2. Relinquished By: EQM	4/4/11	1900	2. Received By:	4/5/11	0830
3. Relinquished By			3. Received By		

Comments
if sample collection is close to lab pick up time
Temps may not meet requirements
All VOCs in C99

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica Laboratory location: 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: E Corbin	Lab Contact:	COC No: 019328
Address: 1600 CARILLON	Telephone: 513 825 7500	Telephone: Same	Telephone:	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com	TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	Analyses	For lab use only: Walk-in client: Lab sampling: Job / SDG No.:
Phone: 5138257500				
Project Name: RVAAP	Method of Shipment/Carrier: Lab Pickup			
Project Number: 30240.0004.37	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	VOC	SVOC	8330 PCB's	Lipids	Explosives	Nitrates	Cyanide	Sample Specific Notes / Special Instructions:
FWG Team2-Trip	4-4-11	1130		X						2					N	G	X							C119
FWGLL4MW193E1726-GW		1248		X						3	1		9		N	G	X	X	X	X	X	X		X	C119
FWGLL4MW193E1726-GF				X					1						X	G							X	C119
FWGLL4MW198C-1730-GW		1522		X						3	1		9		N	G	X	X	X	X	X	X		X	12
FWGLL4MW198C-1730-GF				X					1						X	G							X	12

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 were field filtered. Temp May not meet Requirements if close to Sample time. Add VOA for C119

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Lauren Draper	EQM	4/4/11 1800		TAL-NC	4/4/11 1800
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL-NC	4/4/11 1908			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL NC	4/5/11 0730

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North Canton

Chain of Custody Record

TestAmerica 9
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: E. Corbin	Lab Contact: Mark Loeb	COC No: AD001
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	Email: jmiller@eqm.com			
Phone: 513-825-7500				
Project Name: RVAAP	Method of Shipment/Carrier: Lab Pickup			
Project Number: 30240.0006	Shipping/Tracking No: Lab Pickup N/A			
PO# 16726				

Analysis Turnaround Time (Business Days): TAT if different from below: Sow
☒ 3 weeks
☒ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Analyses

Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Sample Type	Vac EPA 8260	SVOC 8270	Pest 8081	PCB 8082	Explosive 8330	Propellants	Cyanide 9012	Metals 6010 6020 7470			Sample Specific Notes / Special Instructions: Cooler ID
FWG Team 3-Trip	4/4/11			X																							
~~FWGLL6mw-005C-1427-GW~~																											~~AD 4/4/11~~
FWGLL4MW-199C-1731-GW		1333		X						3	1		8		N	G	X	X	X	X	X	X	X				T137
FWGLL4mw-199c-1731-GF		↓		X					1						Y	G								X			T137
FWGLL4mw-Dup4-1749-GW		1433		X						3	1		9		N	G	X	X	X	X	X	X	X				L105
FWGLL4mw-Dup4-1749-GF		↓		X					1						Y	G								X			L105
FWGLL4mw-200C-1732-GW		1649		X						3	1		9		N	G	X	X	X	X	X	X	X				H112
FWGLL4mw-200C-1732-GF		↓		X					1						Y	G								X			H112
																											MA 4/4/11
																											MA 4/4/11

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 (GF) were field filtered
Jumps may not meet requirements if sample collection time is close to lab pickup time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	EQM	4/4/11 1800	[signature]	TAL-NC	4/4/11 1800
[signature]	TAL-NC	4/4/11 1900			
			Received in Laboratory by: [signature]	TA NC	4/5/11 0730

All VOAs in cooler T137

North Canton

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TAL-0018 (1008)

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 410050436
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 4/5/11 Opened on 4/5/11
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 9 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#* 100110-HNO_3; *Sulfuric Acid Lot#* 110410-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
197C	<2 >12	4/5/11	9
196C	<2 >12		
195C	<2 >12		
Equipblank	<2 >12		
193C	<2 >12		
198C	<2 >12		
199C	<2 >12		
DUP4	<2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
200C	<2 7/2	4/5/11	9

METHOD SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 280-14285-1
Sdg Number: A1D050436

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Perchlorate by IC/MS or IC/MS/MS	TAL DEN	EPA 6860	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

EPA = US Environmental Protection Agency

North Canton

CASE NARRATIVE

A1D050436

The following report contains the analytical results for three water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006.37. The samples were received according to documented sample acceptance procedures.

The Perchlorate analysis was performed at the TestAmerica Denver Laboratory. Refer to the TestAmerica Denver 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 April 06, 2011. 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. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

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 1.3 to 3.9° C.

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, a Matrix Spike/Matrix Spike Duplicate (MS/MSD) pair or a Matrix Spike/Sample Duplicate (MS/DU) pair.
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. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch, with the exception of poor performing analytes. A list of these analytes is listed below. No corrective action is taken if these analytes do not meet criteria.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.

Poor performers

Method 8270 Water and Solid:	
4-Nitrophenol	3,3' – Dichlorobenzidine
Benzoic Acid	2,4,6 - Tribromophenol
Phenol	2,4-Dinitrophenol
Phenol-d5	Pentachlorophenol
4,6-Dinitro-2-methylphenol	Hexachlorocyclopentadiene (LCG only)
Benzyl Alcohol	4-Chloroaniline
Method 8151 Solid	
Dinoseb	
Method 8260 Water and Solid	
Dichlorodifluoromethane	Hexachlorobutadiene
Trichlorofluoromethane	Naphthalene
Chloroethane	1,2,3-Trichlorobenzene
Acetone	1,2,4-Trichlorobenzene
Bromomethane	2,2-Dichloropropane
Bromoform	Chloromethane

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 ten fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

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 do 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 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 or Matrix Spike/Sample Duplicate.

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, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, 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), DoD ELAP (ADE-1437) USDA Soil Permit (P33-08-00123)

CASE NARRATIVE

Client: TestAmerica Laboratories, Inc.

Project: EQM - RVAAP

Report Number: 280-14285-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

Three samples were received at the TestAmerica Denver Laboratory on April 6, 2011. The samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.8 degrees Celsius.

PERCHLORATE

Samples FWGLL4MW-197C-1729-GF (280-14285-1), FWGLL4MW-196C-1728-GF (280-14285-2) and FWGEQUIPRINSE1-1757-GW (280-14285-3) were analyzed for Perchlorate in accordance with SW846 6860. The samples were analyzed on 04/07/2011.

The percent recovery for Perchlorate exceeded upper control limits in the MS associated with batch 280-62075. The associated LCS was in control and demonstrates that operating procedures were in control. No further action was required.

No other difficulties were encountered during the perchlorate analyses.

All other quality control parameters were within the acceptance limits.

Method 6860

Perchlorate (IC/MS) by Method 6860

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/May 5, 2011

SDG: A1D050436 R0
Analysis: SW846 6860/ Perchlorate

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 between1.3-3.9°C.	
3. Were holding times met (28 days)?	✓				UJ/J/R
4. Were sample storage requirements met?	✓				
5. Was the DOD specified PQLs of 0.5ug/L achieved?	✓				
6. Were all QAPP-specified target analytes reported?	✓				
7. Was the LC/MS/MS system mass calibration checked?	✓				R
8. Were the masses within 0.3 amu of ions 99, 101, and 107?	✓				R
9. Was the instrument tuned daily?	✓				
10. Was the tune within criteria? (per laboratory SOP)	✓				R
11. Did the initial calibration curve consist of 5 concentration levels?	✓			LC_LCMS1 3/15/11 Standards(ng/L): 20, 50, 100, 200, 500, 1000	R
12. Was the correlation coefficient r≥0.995?	✓				R<0.995 =-J/R
13. Was a second source verification (SSCV) analyzed after the ICAL? Were results 90-110%?	✓				LCG Table 1 >120%=J; 60-80%=J/UJ; <60%=J/R
14. Was an ICV analyzed after the ICAL and daily before sample analysis?	✓			3/15/11 @1855	R
15. Was the %Difference ≤ 15%?	✓				R
16. Was a CCV analyzed after every 10 samples?	✓				
17. Was the %Difference ≤ 15%?	✓				%D > 15% = UJ/J
18. Was a Limit of Detection Verification LODV) analyzed before and after every batch?	✓				
19. Was the LODV recovery within 70-130%?	✓				>130%=J; 70-60%=J/UJ; <60%=J/R
20. Was an Interference Check Sample extracted and analyzed with every batch?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/May 5, 2011

SDG: A1D050436 R0
Analysis: SW846 6860/ Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
21.Was the ICS recovery within 70 to 130%?	✓				>120%=J; 50-79%=J/UJ; <50%=Pj/R
22. Was a method blank prepared and analyzed with each batch?	✓				
23. Were target analytes detected in the method blank at >1/2 the MRL?		✓		Checked by ADR.	<5X =B
24. Was a field blank (equipment) collected and analyzed?		✓			
25. Were target analytes detected in the field blank analyses >1/2 the MRL?			✓	Checked by ADR.	<5X =B
26. Was a LCS prepared and analyzed with each batch?	✓				
27. Were the LCS recoveries within 85-115%?	✓			Checked by ADR.	>115%=J; 50%-85%=J/UJ; <50%=J/R
28. Was a MS/MSD prepared with each batch?	✓				
29. Was the MS/MSD parent sample a Ravenna sample?		✓			
30. Were MS/MSD recoveries 75-125% and RPD values ≤20%?			✓	Checked by ADR. The parent sample was on another client's sample	>125% = J 30% - 75% = J/UJ <30% = J/R
31. Was a Laboratory Reagent Blank (LRB) analyzed prior to calibration and after high concentration samples?	✓				
32. Were target analytes detected in the LRB at >1/2 the MRL?		✓			<5X =B
33. Was a MRL Verification run with every ICAL?	✓				
34. Were the MRL recoveries 70-130%?	✓				R
35. Were the internal standards added to every sample?	✓				
36. Did the IS recover within 50% to150% of the ICAL mid-point standard?	✓				R
37. Was a field duplicate analyzed? Were the RPDs within ±30%?			✓	Field duplicate sample not collected or analyzed.	RPD >30=J
38. Was the Isotope ratio between 101 and 85 monitored and fell between 2.3 and 3.8?	✓				J/UJ

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/May 5, 2011

SDG: A1D050436 R0
Analysis: SW846 6860/ Perchlorate

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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.		✓			

References:

DOD Perchlorate Handbook, March 2006; Section G "Selecting Analytical Methods and Services"

Additional Comments:

Client: TestAmerica Laboratories, Inc.

Job Number: 280-14285-1
Sdg Number: A1D050436

Client Sample ID: **FWGLL4MW-197C-1729-GF**

Lab Sample ID: 280-14285-1
Client Matrix: Water

Date Sampled: 04/04/2011 1235
Date Received: 04/06/2011 0900

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-62075	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11D01025.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/07/2011 1550			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.067		0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-14285-1
Sdg Number: A1D050436

Client Sample ID: **FWGLL4MW-196C-1728-GF**

Lab Sample ID: 280-14285-2
Client Matrix: Water

Date Sampled: 04/04/2011 1411
Date Received: 04/06/2011 0900

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-62075	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11D01026.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/07/2011 1619			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.042	J	0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-14285-1
Sdg Number: A1D050436

Client Sample ID: **FWGEQUIPRINSE1-1757-GW**

Lab Sample ID: 280-14285-3EB
Client Matrix: Water

Date Sampled: 04/04/2011 1720
Date Received: 04/06/2011 0900

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-62075	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11D01027.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/07/2011 1647			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	ND		0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-14285-1
Sdg Number: A1D050436

Method Blank - Batch: 280-62075

Method: 6860
Preparation: N/A

Lab Sample ID:	MB 280-62075/4	Analysis Batch:	280-62075	Instrument ID:	LC_LCMS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	IC11D01018.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/07/2011 1232	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Perchlorate	ND		0.0088	0.050

Lab Control Sample - Batch: 280-62075

Method: 6860
Preparation: N/A

Lab Sample ID:	LCS 280-62075/5	Analysis Batch:	280-62075	Instrument ID:	LC_LCMS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	IC11D01019.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/07/2011 1300	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Perchlorate	0.0500	0.0509	102	80 - 120	

LC Interference Check Standard - Batch: 280-62075

Method: 6860
Preparation: N/A

Lab Sample ID:	INF 280-62075/6	Analysis Batch:	280-62075	Instrument ID:	LC_LCMS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	IC11D01020.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/07/2011 1329	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Perchlorate	0.0500	0.0571	114	70 - 130	

Client: TestAmerica Laboratories, Inc.

Job Number: 280-14285-1
Sdg Number: A1D050436

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-62075

Method: 6860
Preparation: N/A

MS Lab Sample ID:	280-14274-A-2 MS	Analysis Batch:	280-62075	Instrument ID:	LC_LCMS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	IC11D01022.d
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/07/2011 1425			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-14274-A-2 MSD	Analysis Batch:	280-62075	Instrument ID:	LC_LCMS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	IC11D01023.d
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/07/2011 1454			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Perchlorate	130	89	80 - 120	5	15	4	4

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-62075

Method: 6860
Preparation: N/A

MS Lab Sample ID:	280-14274-A-2 MS	Units:	ug/L	MSD Lab Sample ID:	280-14274-A-2 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	10			Dilution:	10
Analysis Date:	04/07/2011 1425			Analysis Date:	04/07/2011 1454
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

	Sample	MS Spike	MSD Spike	MS		MSD	
Analyte	Result/Qual	Amount	Amount	Result/Qual		Result/Qual	
Perchlorate	3.4	0.500	0.500	4.09	4	3.88	4

DATA REPORTING QUALIFIERS

Client: TestAmerica Laboratories, Inc.

Job Number: 280-14285-1
Sdg Number: A1D050436

Lab Section	Qualifier	Description
LCMS		
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Appendix 1

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1D050436										
6860	FWGLL4MW-196C-1728-GF	AQ	N							
				PERCHLORATE	0.050	0.042J		J	ug/L	RI

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Data Qualifier Summary

Lab Reporting Batch ID: A1D050436 **Laboratory: TA DEN**

EDD Filename: A1D050436 **eQAPP Name: Ravenna 111810**

Method Category: GENCHEM

Method: 6860 *Matrix:* AQ

Sample ID: FWGLL4MW-196C-1728-GF *Collected:* 4/4/2011 2:11:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	0.042	J	0.0088	MDL	0.050	MRL	ug/L	J	RI

Data Qualifier Summary

Lab Reporting Batch ID: A1D050436 **Laboratory: TA DEN**

EDD Filename: A1D050436 **eQAPP Name: Ravenna 111810**

Reason Code Legend

Reason Code	*Description*
Cb	Calibration Blank Contamination
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
Ccv	Continuing Calibration Verification Percent Difference Lower Rejection
Ccv	Continuing Calibration Verification Percent Difference Upper Estimation
Ccv	Continuing Calibration Verification Percent Difference Upper Rejection
Ccv	Continuing Calibration Verification Percent Recovery Lower Estimation
Ccv	Continuing Calibration Verification Percent Recovery Lower Rejection
Ccv	Continuing Calibration Verification Percent Recovery Upper Estimation
Ccv	Continuing Calibration Verification Percent Recovery Upper Rejection
CcvCC	Continuing Calibration Verification Correlation Coefficient
CcvRrf	Continuing Calibration Verification Relative Response Factor
ContTune	Continuing Tune
Dup=0	Duplicate Sample Count = 0
Dup>1	Duplicate Sample Count > 1
Eb	Equipment Blank Contamination
EtoA	Extraction to Analysis Estimation
EtoA	Extraction to Analysis Rejection
Fb	Field Blank Contamination
Fd	Field Duplicate Precision
IcCC	Initial Calibration Correlation Coefficient
IcRrf	Initial Calibration Relative Response Factor
IcRsd	Initial Calibration Percent Relative Standard Deviation
Icv	Initial Calibration Verification Percent Difference Lower Estimation
Icv	Initial Calibration Verification Percent Difference Lower Rejection
Icv	Initial Calibration Verification Percent Difference Upper Estimation
Icv	Initial Calibration Verification Percent Difference Upper Rejection
Icv	Initial Calibration Verification Percent Recovery Lower Estimation
Icv	Initial Calibration Verification Percent Recovery Lower Rejection
Icv	Initial Calibration Verification Percent Recovery Upper Estimation

Data Qualifier Summary

Lab Reporting Batch ID: A1D050436 **Laboratory: TA DEN**

EDD Filename: A1D050436 **eQAPP Name: Ravenna 111810**

Icv	Initial Calibration Verification Percent Recovery Upper Rejection
IcvCC	Initial Calibration Verification Correlation Coefficient
IcvRrf	Initial Calibration Verification Relative Response Factor
IllogicalFraction	Illogical Fraction
InitTune	Initial Tune
Is	Internal Standard Estimation
Is	Internal Standard Rejection
Lcs	Laboratory Control Precision
Lcs	Laboratory Control Spike Lower Estimation
Lcs	Laboratory Control Spike Lower Rejection
Lcs	Laboratory Control Spike Upper Estimation
Lcs	Laboratory Control Spike Upper Rejection
Lcs=0	Laboratory Control Sample Count = 0
Lcs>1	Laboratory Control Sample Count > 1
Ld	Laboratory Duplicate Precision
Mb	Method Blank Contamination
Mb=0	Method Blank Sample Count = 0
Mb>1	Method Blank Sample Count > 1
Moist	Percent Moisture
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Lower Rejection
Ms	Matrix Spike Precision
Ms	Matrix Spike Upper Estimation
Ms	Matrix Spike Upper Rejection
Ms=0	Matrix Spike Sample Count = 0
Ms>1	Matrix Spike Sample Count > 1
PEM	Performance Evaluation Mixture
Preservation	Preservation
ProfJudg	Professional Judgment
REM	Resolution Check Mixture
RI	Reporting Limit

Data Qualifier Summary

Lab Reporting Batch ID: A1D050436 **Laboratory: TA DEN**

EDD Filename: A1D050436 **eQAPP Name: Ravenna 111810**

RI	Reporting Limit > Project Maximum Contamination Limit
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoA	Sampling to Analysis Rejection
StoE	Sampling to Extraction Estimation
StoE	Sampling to Extraction Rejection
StoL	Sampling to Leaching Estimation
StoL	Sampling to Leaching Rejection
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Lower Rejection
Surr	Surrogate/Tracer Recovery Upper Estimation
Surr	Surrogate/Tracer Recovery Upper Rejection
Tb	Trip Blank Contamination
TempEst	Temperature Estimation
TempRej	Temperature Rejection

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 2, 2011
TA Sample Delivery Group: A1D050444 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On April 4, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1D050444.

Field Sample ID	Analytes	Method
FWGLL4mw-197c-1729-GW	Explosives	SW846 8330
FWGLL4mw-196c-1728-GW	Nitroguanidine	SW846 M8330
FWGLL4mw-195c-1727-GW	Nitrocellulose	TAL- SOP WS-WC-0050
FWGEQUIPRinse1-1757-GW		
FWGLL4mw-193c-1726-GW		
FWGLL4mw-198c-1730-GW		
FWGLL4mw-199c-1731-GW		
FWGLL4mw-DUP4-1749-GW		
FWGLL4mw-200c-1732-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 cooler temperatures were documented as being received from 1.9°C – 3.9°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.

Explosives- 8330
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
- Retention time criteria
- MDL Verification
- Surrogate recovery criteria
- Equipment and method blanks free from contamination
- MS Recovery Criteria
- LCS Recovery Criteria

MRL Recovery

- The MRL analyzed 4/13/11 @1149 recovered above control limits with a %D of 42% for RDX.
- The MRL analyzed 4/13/11 @2051 recovered above control limits with a %D of 31% for 2-nitrotoluene.
- The MRL analyzed 4/14/11 @0553 recovered above control limits with a %D of 31% for 2-nitrotoluene and 46% for 3-nitrotoluene.

No qualifications were made for the MRL outliers as there were no detected concentrations of RDX, 3-nitrotoluene or 2-nitrotoluene in the bracketed field samples.

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 2, 2011
TA Sample Delivery Group: A1D050444 **Revision:** 0

Blanks

- Due to excessive particulates, samples FWGLL4mw-195c-1727-GW, FWGLL4mw-196c-1728-GW, FWGLL4mw-198c-1730-GW, FWGLL4mw-199c-1731-GW and FWGLL4mw-DUP4-1749-GW required filtration. A filter blank was prepared and analyzed.
- FWGEQUIPRinse1-1757-GW had 2,4,6-trinitrotoluene detected at 0.053ug/L and 2,6-dinitrotoluene at 0.086 ug/L. The 2,6-dinitrotoluene result for sample FWGLL4-193c-1726-GW was quailed, "U" as the detected 2,6-dinitrotoluene result was less than 5x the equipment rinse contamination.

Nitroguanidine- 8330M

The following QC criteria were reviewed with acceptable results, except as noted below:

- 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 – WS-WC-0050

The following QC criteria were reviewed with acceptable results, except as noted below:

- 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.

SAMPLE SUMMARY

A1D050444

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MGJ19	001	FWGLL4mw-197C-1729-GW	04/04/11	12:35
MGJ2C	002	FWGLL4mw-196C-1728-GW	04/04/11	14:11
MGJ2D	003	FWGLL4mw-195C-1727-GW	04/04/11	16:05
MGJ2F	004	FWGEQUIPRINSE1-1757-GW	04/04/11	17:20
MGJ2H	005	FWGLL4mw-193C-1726-GW	04/04/11	12:48
MGJ2J	006	FWGLL4mw-198C-1730-GW	04/04/11	15:22
MGJ2L	007	FWGLL4mw-199C-1731-GW	04/04/11	13:33
MGJ2M	008	FWGLL4mw-DUP4-1749-GW	04/04/11	14:33
MGJ2N	009	FWGLL4mw-200C-1732-GW	04/04/11	16:49

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

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/4/11	Chain of Custody Number: 000489
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500	Lab Number:	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	Carrier/Waybill Number: Lab Pick-up		
Contract/Purchase Order/Quote No.: 030240.0006 PO# 16726			

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 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Perchlorate	Special Instructions/ Conditions of Receipt: Cooler ID
FWGLL4mw-197C-1729-GW	4/4/11	12:35		X			9			3	1		X	X	X	X	X	X	X			404
FWGLL4mw-197C-1729-GF	4/4/11	12:35		X			1		1		X	EC 4/4/11								X	X	404
FWG Team 1 - Trip	4/4/11	11:00		X						2			X									C99
FWGLL4mw-196C-1728-GW	4/4/11	14:11		X			9			3	1		X	X	X	X	X	X	X			C99
FWGLL4mw-196C-1728-GF	4/4/11	14:11		X			1		1											X	X	C99
FWGLL4mw-195C-1727-GW	4/4/11	16:05		X			9			3	1		X	X	X	X	X	X	X			179
FWGLL4mw-195C-1727-GF	4/4/11	16:05		X					1											X		179
FWGEQUIPRinse1-1757-GW	4/4/11	17:20		X			10		1	3	1		X	X	X	X	X	X	X	X	X	Cletus - Metals ClO4 not filtered this sample on.

EC 4/4/11

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 and ClO4 field filtered

	Date	Time		Date	Time
1. Relinquished By: [signature] EQM	4/4/11	1800	1. Received By: [signature]	4/4/11	1800
2. Relinquished By: [signature]	4/4/11	1900	2. Received By: [signature]	4/5/11	0730
3. Relinquished By:			3. Received By:		

Comments: if sample collection is close to lab pick up time

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Temps may not meet requirements

All VOCs in C99

North Canton

Chain of Custody Record

TestAmerica Laboratory location: 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: E Corbin	Lab Contact:	COC No: 019328
Address: 600 CARLSON	Telephone: 513 825 7500	Telephone: same	Telephone:	1 of 1 COCs
City/State/Zip: CINCINNATI OH 45240	Email: ecorbin@eqm.com	TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	Analyses	For lab use only: Walk-in client, Lab sampling
Phone: 513 825 7500				
Project Name: RVAAP	Method of Shipment/Carrier: Lab pickup			
Project Number: 30240.0006.37	Shipping/Tracking No:			
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	VOC	SVOC	8330 HE	DRO	Dissolved RSK Methane	Dissolved Metals	Cyanide	Sample Specific Notes / Special Instructions:
FWG Trip Blank-Trip	4-4-11	1130		X						2					N	G	X							C119
FWGLL4MW193E1726-GW		1248		X						3	1		9		N	G	X	X	X	X	X	X	X	C119
FWGLL4MW193E1726-GF				X					1						Y	G						X		C119
FWGLL4MW198C-1730-GW		1522		X						3	1		9		N	G	X	X	X	X	X	X	X	12
FWGLL4MW198C-1730-GF				X					1						Y	G						X		12

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 were field filtered. Trip May not meet Requirements of close to Sample time

Add VOA to C119

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Craig Drager	EQM	4/4/11 1800	TC	TAL-NC	4/4/11 1802
TC	TAL-NC	4/4/11 1906			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL NC	4/5/11 0730

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North Canton

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: E. Corbin	Lab Contact: Mark Loeb	COC No: AD001
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	Email: jmiller@eqm.com			
Phone: 513-825-7500				
Project Name: RVAAP	Method of Shipment/Carrier: Lab Pickup			
Project Number: 30240.0006	Shipping/Tracking No: Lab Pickup N/A			
PO# 16726				

Analysis Turnaround Time: TAT if different from below SOW
☒ 3 weeks
☒ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Analyses: VOC EPA 8260; SVOC 8270; Pest 8081; PCB 8082; Explosives 8330; Propellants; Cyanide 9012; Metals 6010 6020 7470

Sample Identification | Sample Date | Sample Time | Matrix: Air, Aqueous, Sediment, Solid, Other: | Containers & Preservatives: H2SO4, HNO3, HCl, NaOH, ZnAc/NaOH, Unpres, Other: | Filtered Sample (Y/N) | Sample Specific Notes / Special Instructions: Cooler ID

Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Sample Specific Notes / Special Instructions: Cooler ID
FWG Team 3-Trip	4/4/11			X												
~~FWGLL6mw-005C-1427-GW~~																~~AM 4/4/11~~
FWGLL4MW-199C-1731-GW		1333		X						3	1		8		N	G	T137
FWGLL4mw-199c-1731-GF		↓		X					1						Y	G	T137
FWGLL4mw-Dup4-1749-GW		1433		X						3	1		9		N	G	L105
FWGLL4mw-Dup4-1749-GF		↓		X					1						Y	G	L105
FWGLL4mw-200C-1732-GW		1649		X						3	1		9		N	G	H112
FWGLL4mw-200C-1732-GF		↓		X					1						Y	G	H112

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 (GF) were field filtered
Jumps may not meet requirements if sample collection time is close to lab pickup time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	EQM	4/4/11 1800	[signature]	TAL-NC	4/4/11 1800
[signature]	TAL-NC	4/4/11 1900			
			Received in Laboratory by: [signature]	TA NC	4/5/11 0730

All VOAs in cooler T137

TAL-0018 (1008)

North Canton

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TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 410052444
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 4/5/11 Opened on 4/5/11
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 9 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#* 100110-HNO_3; *Sulfuric Acid Lot#* 110410-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
197C	<2 >12	4/5/11	9
196C	<2 >12		
195C	<2 >12		
Equip Blank	<2 >12		
193C	<2 >12		
198C	<2 >12		
199C	<2 >12		
DUP4	<2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
200C	L2 7/2	4/5/11	9

Cooler #	Temp. °C	Method	Coolant
404	1.3	IR	Ice
C99	2.9		
179	3.8		
Clotys	3.4		
C119	2.6		
C12	3.5		
T137	2.3		
L105	2.7		
H112	3.9		

Discrepancies Cont'd:

CASE NARRATIVE

A1D050444

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 030240.0006. The samples were received April 05, 2011, according to documented sample acceptance procedures.

All analyses were performed at the TestAmerica West Sacramento Laboratory. Refer to a copy of their report included 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 April 21, 2011. 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. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

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 1.9 to 3.9° 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, a Matrix Spike/Matrix Spike Duplicate (MS/MSD) pair or a Matrix Spike/Sample Duplicate (MS/DU) pair.
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. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch, with the exception of poor performing analytes. A list of these analytes is listed below. No corrective action is taken if these analytes do not meet criteria.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.

Poor performers

Method 8270 Water and Solid:	
4-Nitrophenol	3,3' – Dichlorobenzidine
Benzoic Acid	2,4,6 - Tribromophenol
Phenol	2,4-Dinitrophenol
Phenol-d5	Pentachlorophenol
4,6-Dinitro-2-methylphenol	Hexachlorocyclopentadiene (LCG only)
Benzyl Alcohol	4-Chloroaniline
Method 8151 Solid	
Dinoseb	
Method 8260 Water and Solid	
Dichlorodifluoromethane	Hexachlorobutadiene
Trichlorofluoromethane	Naphthalene
Chloroethane	1,2,3-Trichlorobenzene
Acetone	1,2,4-Trichlorobenzene
Bromomethane	2,2-Dichloropropane
Bromoform	Chloromethane

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 ten 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 do 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 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 or Matrix Spike/Sample Duplicate.

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, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, 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), DoD ELAP (ADE-1437) USDA Soil Permit (P33-08-00123)

Case Narrative

TestAmerica West Sacramento Project Number A1D050444

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 the 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 integration being performed. The following samples and analytes required manual integration:

LC10
8330 MRL standard (analyzed on 4/13/11 @ 11:49) - Tetryl, 3-Nitrotoluene, & PETN
8330 MRL standard (analyzed on 4/13/11 @ 20:51) - Tetryl
8330 MRL standard (analyzed on 4/14/11 @ 05:53) - Tetryl
8330 laboratory control sample duplicate - Tetryl
Sample 7 - 3,4-Dinitrotoluene
Sample 9 - 4-Nitrotoluene

WATER, 8330, Explosives
Sample(s): 1, 2, 3, 4, 5, 6, 7, 8, 9
There was insufficient sample volume to prepare a matrix spike/matrix spike duplicate (MS/MSD) pair with this batch.

Sample(s): 1, 2, 3, 4, 5, 6, 7, 8, 9
The percent difference values for RDX are above the project specific acceptance limit in the associated MRL standards. For corrective action a standard at approximately 2X the MDL was analyzed and the analyte was detected.

Sample(s): 2, 3, 6, 7, 8
These samples were filtered prior to extraction since they contained excessive sediment/particulates. A filtered blank was included with the batch.

There were no other anomalies associated with this project.

ANALYTICAL METHODS SUMMARY

A1D050444

PARAMETER	ANALYTICAL METHOD
Nitroaromatics and Nitramines by HPLC	SW846 8330
Nitrocellulose as N, WS-WC-0050 (Colorimetric)	TAL-SOP WS-WC-0050
Organics by UV/HPLC	SW846 8330 (Modified)

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

TAL-SOP TESTAMERICA LABORATORIES INC., LABORATORY STANDARD OPERATING PROCEDURE

WATER, 8330, Explosives

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 2, 2011

SDG: A1D050444 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 cooler temperatures were documented as being received from 1.9°C – 3.9°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%?		✓		LC10- the following outliers were noted: • The MRL analyzed 4/13/11 @1149 recovered above control limits with a %D of 42% for RDX. • The MRL analyzed 4/13/11 @2051 recovered above control limits with a %D of 31% for 2-nitrotoluene. • The MRL analyzed 4/14/11 @0553 recovered above control limits with a %D of 31% for 2-nitrotoluene and 46% for 3-nitrotoluene. No qualifications were made for the MRL outliers as there were no detected concentrations of RDX, 3-nitrotoluene or 2-nitrotoluene in the bracketed field samples .	LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			LC10 1/9/11	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 1/9/11@1027	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

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 2, 2011

SDG: A1D050444 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%?	✓				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 FWGLL4mw-195c-1727-GW, FWGLL4mw-196c-1728-GW, FWGLL4mw-198c-1730-GW, FWGLL4mw-199c-1731-GW and FWGLL4mw-DUP4-1749-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. FWGEQUIPRinse1-1757-GW had 2,4,6-trinitrotoluene detected at 0.053ug/L and 2,6-dinitrotoluene at 0.086 ug/L. The 2,6-dinitrotoluene result for sample FWGLL4-193c-1726-GW was quailed, "U" as the detected 2,6-dinitrotoluene result was less than 5x the equipment rinse 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%?			✓	No second column confirmation was required as there were no detected concentrations 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?		✓		Not enough sample to prepare an MS/MSD.	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.		✓			

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 2, 2011

SDG: A1D050444 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
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.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1729-GW

HPLC

Lot-Sample #...: A1D050444-001 Work Order #...: MGJ191AA Matrix.....: WG
Date Sampled...: 04/04/11 12:35 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/13/11
Prep Batch #...: 1098154
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	111	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1728-GW

HPLC

Lot-Sample #...: A1D050444-002 Work Order #...: MGJ2C1AA Matrix.....: WG
Date Sampled...: 04/04/11 14:11 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/13/11
Prep Batch #...: 1098154
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	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	107	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-195C-1727-GW

HPLC

Lot-Sample #...: A1D050444-003 Work Order #...: MGJ2D1AA Matrix.....: WG
Date Sampled...: 04/04/11 16:05 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/13/11
Prep Batch #...: 1098154
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	107	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1757-GW

HPLC

Lot-Sample #...: A1D050444-004 Work Order #...: MGJ2F1AA Matrix.....: WQ
Date Sampled...: 04/04/11 17:20 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/13/11
Prep Batch #...: 1098154
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	**0.053 J**	**0.097**	**ug/L**	**0.048**
2,4-Dinitrotoluene	ND	0.097	ug/L	0.048
2,6-Dinitrotoluene	**0.086 J**	**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	102	(50 - 150)

NOTE(S):

J Estimated result Result is less than RL

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-193C-1726-GW

HPLC

Lot-Sample #...: A1D050444-005 Work Order #...: MGJ2H1AA Matrix.....: WG
Date Sampled...: 04/04/11 12:48 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/13/11
Prep Batch #...: 1098154
Dilution Factor: 1.11 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.033
1,3-Dinitrobenzene	ND	0.11	ug/L	0.056
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.056
2,4-Dinitrotoluene	ND	0.11	ug/L	0.056
2,6-Dinitrotoluene	**0.068 J**	**0.11**	**ug/L**	**0.056**
2-Nitrotoluene	ND	0.56	ug/L	0.098
3-Nitrotoluene	ND	0.56	ug/L	0.063
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.056
4-Nitrotoluene	ND	0.56	ug/L	0.098
HMX	ND	0.11	ug/L	0.040
Nitrobenzene	ND	0.11	ug/L	0.056
Nitroglycerin	ND	0.72	ug/L	0.37
RDX	ND	0.11	ug/L	0.040
PETN	ND	0.72	ug/L	0.33
Tetryl	ND	0.11	ug/L	0.056

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-198C-1730-GW

HPLC

Lot-Sample #...: A1D050444-006 Work Order #...: MGJ2J1AA Matrix.....: WG
Date Sampled...: 04/04/11 15:22 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/13/11
Prep Batch #...: 1098154
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: FWGLL4mw-199C-1731-GW

HPLC

Lot-Sample #...: A1D050444-007 Work Order #...: MGJ2L1AA Matrix.....: WG
Date Sampled...: 04/04/11 13:33 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/13/11
Prep Batch #...: 1098154
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	102	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-DUP4-1749-GW

HPLC

Lot-Sample #...: A1D050444-008 Work Order #...: MGJ2M1AA Matrix.....: WG
Date Sampled...: 04/04/11 14:33 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/13/11
Prep Batch #...: 1098154
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: FWGLL4mw-200C-1732-GW

HPLC

Lot-Sample #...: A1D050444-009 Work Order #...: MGJ2N1AA Matrix.....: WG
Date Sampled...: 04/04/11 16:49 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/13/11
Prep Batch #...: 1098154
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	**0.11 J**	**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	99	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1D050444 Work Order #...: MGQCX1AA Matrix.....: WATER
MB Lot-Sample #: G1D080000-154

Prep Date.....: 04/08/11
Analysis Date..: 04/13/11 Prep Batch #...: 1098154
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	107	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1D050444 Work Order #...: MGQCX1AE Matrix.....: WATER
MB Lot-Sample #: G1D080000-154

Prep Date.....: 04/08/11
Analysis Date..: 04/13/11 Prep Batch #...: 1098154
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	105	(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 #...: A1D050444 Work Order #...: MGQCX1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G1D080000-154 MGQCX1AD-LCSD
Prep Date.....: 04/08/11 Analysis Date..: 04/13/11
Prep Batch #...: 1098154
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	114	(53 - 135)			SW846 8330
	114	(53 - 135)	0.0	(0-30)	SW846 8330
1,3-Dinitrobenzene	118	(54 - 120)			SW846 8330
	118	(54 - 120)	0.67	(0-30)	SW846 8330
2-Amino-4,6-dinitrotoluene	110	(53 - 120)			SW846 8330
	111	(53 - 120)	1.4	(0-30)	SW846 8330
2,4,6-Trinitrotoluene	90	(37 - 120)			SW846 8330
	90	(37 - 120)	0.66	(0-30)	SW846 8330
2,4-Dinitrotoluene	113	(58 - 136)			SW846 8330
	114	(58 - 136)	0.70	(0-30)	SW846 8330
2,6-Dinitrotoluene	114	(52 - 144)			SW846 8330
	114	(52 - 144)	0.43	(0-30)	SW846 8330
2-Nitrotoluene	114	(52 - 120)			SW846 8330
	113	(52 - 120)	0.79	(0-30)	SW846 8330
3-Nitrotoluene	112	(48 - 136)			SW846 8330
	112	(48 - 136)	0.44	(0-30)	SW846 8330
4-Amino-2,6-dinitrotoluene	109	(58 - 159)			SW846 8330
	110	(58 - 159)	1.5	(0-30)	SW846 8330
4-Nitrotoluene	114	(46 - 136)			SW846 8330
	114	(46 - 136)	0.17	(0-30)	SW846 8330
HMX	111	(45 - 140)			SW846 8330
	108	(45 - 140)	2.2	(0-30)	SW846 8330
Nitrobenzene	114	(49 - 120)			SW846 8330
	116	(49 - 120)	1.3	(0-30)	SW846 8330
Nitroglycerin	106	(60 - 120)			SW846 8330
	104	(60 - 120)	2.2	(0-60)	SW846 8330
RDX	118	(39 - 120)			SW846 8330
	117	(39 - 120)	0.17	(0-30)	SW846 8330
PETN	102	(60 - 120)			SW846 8330
	101	(60 - 120)	1.2	(0-30)	SW846 8330
Tetryl	100	(30 - 120)			SW846 8330
	101	(30 - 120)	0.29	(0-30)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	107	(50 - 150)
	106	(50 - 150)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1D050444 Work Order #...: MGQCX1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G1D080000-154 MGQCX1AD-LCSD

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: 4/13/2011 11:49 Operator: NS
DataFile: LC10.I\04132011 B\A-000003.D Vial Num: 7
Instrument ID: LC10

Sample : **STD_MRL 11GCSV0086 8330 5-20ng/mL**

Method File: LC10.I\04132011.B\8330AB.M
Start Cal Date: 1/9/2011 2:11 End Cal Date: 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE SubList: 1_CAL.SUB SpikeList: 0
Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL,2;
Misc. Info: MRL;9,;;;3;1_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	16.39	1143	20 7000<	20	4%	Acceptable		16.40	2153	20 4300	20	2%	Acceptable		(±15)	
HMX	5.26	772	5.9650<	5	19%	Fails	OK@3σ				5	-100%	Fails		(±15)	45
RDX	7.49	648	7.1150<	5	42%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.51	4559	56.6300	50	13%	Acceptable		8.51	6749	56.8200<	50	14%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.74	898	5.6720<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12 32	886	5.7220<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.30	556	5.9850<	5	20%	Fails	M OK@3σ				5	-100%	Fails		(±15)	45
Nitrobenzene	13.85	402	5.6150<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.36	465	4 9350<	5	-1%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.94	449	5.8980<	5	18%	Fails					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.94	523	6.2340<	5	25%	Fails					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.31	357	6.0540<	5	21%	Fails	OK@3σ				5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	19.06	566	5.9620<	5	19%	Fails					5	-100%	Fails		(±15)	45
2-Nitrotoluene	22.00	267	6.4410<	5	29%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.74	315	6.3090<	5	26%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.54	294	5.9150<	5	18%	Fails	M				5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		14.41	1553	22.5700<	20	13%	Acceptable		(±15)	45
PETN				20	-100%	Fails		27.37	861	22.9800<	20	15%	Acceptable	M	(±15)	45
3,5-Dinitroaniline	13.06	598	5.8970<	5	18%	Fails	M NA				5	-100%	Fails		(±15)	45
EGDN				20	-100%	Fails					20	-100%	Fails		(±15)	

MR 4/20/11

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

MR 4/20/11

Printed: 4/20/2011 5:12 PM

TestAmerica West Sacramento

A-000015.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date:	4/13/2011 20:51	**Operator:**	NS
DataFile:	LC10.I\04132011.B\A-000015.D	**Vial Num:**	7
Instrument ID:	LC10		

Sample : **STD_MRL 11GCSV0086 8330 5-20ng/mL**

Method File: LC10 I\04132011.B\8330AB.M

Start Cal Date: 1/9/2011 2:11 **End Cal Date:** 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** 1_CAL.SUB **SpikeList:** 0

Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;

Misc. Info: MRL;9;;;;3;1_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	16.44	1072	19.4200<	20	-3%	Acceptable		16.44	2114	20.0600	20	0%	Acceptable		(±15)	
HMX	**5.27**	**760**	**5.8720<**	**5**	**17%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
RDX	**7.50**	**550**	**6.0390<**	**5**	**21%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
Picric ACID	8.61	4379	54.4000	50	9%	Acceptable		8.60	6606	55.6200<	50	11%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.74	827	5.2240<	5	4%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
1,3-Dinitrobenzene	12.33	857	5.5340<	5	11%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
TETRYL	13.35	511	5.5000<	5	10%	Acceptable	M				**5**	**-100%**	**Fails**		(±15)	45
Nitrobenzene	13.95	379	5.2940<	5	6%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2,4,6-Trinitrotoluene	15.40	474	5.0310<	5	1%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
4-AM-2,6-DNT	15.98	417	5.4780<	5	10%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2-AM-4,6-DNT	**16.97**	**498**	**5.9360<**	**5**	**19%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
2,6-Dinitrotoluene	18.41	331	5.6130<	5	12%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2,4-Dinitrotoluene	19.06	543	5.7200<	5	14%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2-Nitrotoluene	**22.11**	**272**	**6.5610<**	**5**	**31%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
4-Nitrotoluene	**23.83**	**320**	**6.4100<**	**5**	**28%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
3-Nitrotoluene	**25.55**	**310**	**6.2370<**	**5**	**25%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
Nitroglycerin				**20**	**-100%**	**Fails**		14.48	1543	22.4200<	20	12%	Acceptable		(±15)	45
PETN				**20**	**-100%**	**Fails**		27.40	858	22.9000<	20	15%	Acceptable		(±15)	45
3,5-Dinitroaniline	13.12	565	5.5710<	5	11%	Acceptable	M				**5**	**-100%**	**Fails**		(±15)	45
EGDN				**20**	**-100%**	**Fails**					**20**	**-100%**	**Fails**		(±15)	

OK @ 30%.

OK @ 30%. MB 4/18/11

OK @ 30%.

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 4/18/11

Printed: 4/18/2011 10:08 PM

TestAmerica West Sacramento

A-000027.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 4/14/2011 5:53 Operator: NS
DataFile: LC10 I\04132011.B\A-000027.D Vial Num: 8
Instrument ID: LC10

Sample : **STD_MRL 11GCSV0086 8330 5-20ng/mL**

Method File: LC10 I\04132011.B\8330AB.M
Start Cal Date: 1/9/2011 2:11 End Cal Date: 1/9/2011 7:27

Matrix: NONE SubList: 1_CAL SUB SpikeList: 0
Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;
Misc. Info: MRL;9;;;;3;1_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	16.42	1132	20.5100<	20	3%	Acceptable		16.41	2079	19.7300	20	-1%	Acceptable		(±15)	
HMX	5.26	746	5.7640<	5	15%	Fails					5	-100%	Fails		(±15)	45
RDX	7.50	583	6.4020<	5	28%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.60	4419	54.8900	50	10%	Acceptable		8.60	6535	55.0200<	50	10%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.73	906	5.7230<	5	14%	Acceptable					6	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.33	874	5.6440<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.32	504	5.4250<	5	9%	Acceptable	M				5	-100%	Fails		(±15)	45
Nitrobenzene	13.89	406	5.6710<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.39	486	5.1580<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.94	480	6.3050<	5	26%	Fails					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.94	515	6.1390<	5	23%	Fails					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.34	366	6.2060<	5	24%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	19.06	571	6.0150<	5	20%	Fails					5	-100%	Fails		(±15)	45
2-Nitrotoluene	22.00	272	6.5610<	5	31%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.78	323	6.4700<	5	29%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.50	363	7.3030<	5	46%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		14.42	1578	22.9300<	20	15%	Acceptable		(±15)	45
PETN				20	-100%	Fails		27.43	927	24.7400<	20	24%	Fails		(±15)	45
3,5-Dinitroaniline	13.10	588	5.7980<	5	16%	Fails	M				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%

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

4/18/11

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC10 Batch ID: 04132011
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
13-APR-2011	10:18	NS	PRIMER	A-000001.	1000 mL	20 mL	1	
13-APR-2011	11:04	NS	STD_06 11GCSV0170 8330 200-500	A-000002.	0 g	0 mL	1	
13-APR-2011	11:49	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000003.	0 g	0 mL	1	
13-APR-2011	12:34	NS	MGQCX1AA 1098154 G1D080000-154	A-000004.	1000 mL	20 mL	1	
13-APR-2011	13:19	NS	MGQCX1AE 1098154 G1D080000-154	A-000005.	1000 mL	20 mL	1	
13-APR-2011	14:05	NS	MGQCX1AC 1098154 G1D080000-154	A-000006.	1000 mL	20 mL	1	
13-APR-2011	14:50	NS	MGQCX1AD 1098154 G1D080000-154	A-000007.	1000 mL	20 mL	1	
13-APR-2011	15:35	NS	MGJ191AA 1098154 A1D050444-1 1	A-000008.	1005.12 mL	20 mL	1	
13-APR-2011	16:20	NS	MGJ2C1AA 1098154 A1D050444-2 1	A-000009.	968.96 mL	20 mL	1	
13-APR-2011	17:05	NS	MGJ2D1AA 1098154 A1D050444-3 1	A-000010.	1024.28 mL	20 mL	1	
13-APR-2011	17:51	NS	MGJ2F1AA 1098154 A1D050444-4 1	A-000011.	1028.57 mL	20 mL	1	
13-APR-2011	18:36	NS	MGJ2H1AA 1098154 A1D050444-5 1	A-000012.	897.69 mL	20 mL	1	
13-APR-2011	19:21	NS	MGJ2J1AA 1098154 A1D050444-6 1	A-000013.	1018.9 mL	20 mL	1	
13-APR-2011	20:06	NS	STD_05 10GCSV0524 8330 100-200	A-000014.	0 g	0 mL	1	
13-APR-2011	20:51	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000015.	0 g	0 mL	1	
13-APR-2011	21:36	NS	MGJ2L1AA 1098154 A1D050444-7 1	A-000016.	1002.47 mL	20 mL	1	
13-APR-2011	22:21	NS	MGJ2M1AA 1098154 A1D050444-8 1	A-000017.	1019.86 mL	20 mL	1	
13-APR-2011	23:07	NS	MGJ2N1AA 1098154 A1D050444-9 1	A-000018.	1029.84 mL	20 mL	1	
13-APR-2011	23:52	NS	MGTWF1AA 1101074 G1D110000-74	A-000019.	1000 mL	20 mL	1	
14-APR-2011	00:37	NS	MGTWF1AD 1101074 G1D110000-74	A-000D20.	1000 mL	20 mL	1	
14-APR-2011	01:22	NS	MGTWF1AC 1101074 G1D110000-74	A-000021.	1000 mL	20 mL	1	
14-APR-2011	02:07	NS	MGLG71AA 1101074 A1D060428-1 1	A-000022.	839.4 mL	20 mL	1	
14-APR-2011	02:52	NS	MGLH81AA 1101074 A1D060428-2 1	A-000023.	944.39 mL	20 mL	1	
14-APR-2011	03:37	NS	MGLJC1AA 1101074 A1D060428-3 1	A-000024.	909.33 mL	20 mL	1	
14-APR-2011	04:22	NS	MGLJD1AA 1101074 A1D060428-4 1	A-000025.	863.58 mL	20 mL	1	
14-APR-2011	05:08	NS	STD_05 10GCSV0524 8330 100-200	A-000026.	0 g	0 mL	1	
14-APR-2011	05:53	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000027.	0 g	0 mL	1	
14-APR-2011	06:38	NS	MGLJH1AA 1101074 A1D060428-5 1	A-000028.	942.73 mL	20 mL	1	
14-APR-2011	07:23	NS	MGLJM1AA 1101074 A1D060428-6 1	A-000029.	904.51 mL	20 mL	1	
14-APR-2011	08:08	NS	MGLJP1AC 1101074 A1D060428-7 1	A-000030.	814.65 mL	20 mL	1	
14-APR-2011	08:53	NS	MGLJR1AC 1101074 A1D060428-8 1	A-000031.	944.02 mL	20 mL	1	
14-APR-2011	09:38	NS	MGLJW1AC 1101074 A1D060428-9 1	A-000032.	865.83 mL	20 mL	1	
14-APR-2011	10:24	NS	MGLJX1AC 1101074 A1D060428-10	A-000033.	978.55 mL	20 mL	1	
14-APR-2011	11:09	NS	MGLJ01AC 1101074 A1D060428-11	A-000034.	872.07 mL	20 mL	1	
14-APR-2011	11:54	NS	QC CHECK	A-000035.	1000 mL	20 mL	1	
14-APR-2011	12:39	NS	MGLJ21AA 1101074 A1D060428-12	A-000036.	855.48 mL	20 mL	1	
14-APR-2011	13:24	NS	MGLJ71AA 1101074 A1D060428-13	A-000037.	899.68 mL	20 mL	1	
14-APR-2011	14:09	NS	STD_05 10GCSV0524 8330 100-200	A-000038.	0 g	0 mL	1	
14-APR-2011	14:54	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000039.	0 g	0 mL	1	
14-APR-2011	15:40	NS	MGLKA1AA 1101074 A1D060428-14	A-000040.	1008.87 mL	20 mL	1	
14-APR-2011	16:24	NS	MGLKA1AC 1101074 A1D060428-14	A-000041.	962.7 mL	20 mL	1	
14-APR-2011	17:09	NS	MGLKA1AD 1101074 A1D060428-14	A-000042.	995.11 mL	20 mL	1	
14-APR-2011	17:54	NS	MGLKH1AA 1101074 A1D060428-15	A-000043.	933.6 mL	20 mL	1	
14-APR-2011	18:39	NS	MGLKK1AA 1101074 A1D060428-16	A-000044.	829.6 mL	20 mL	1	
14-APR-2011	19:24	NS	MGV3E1AA 1102080 G1D120000-80	A-000045.	1000 mL	20 mL	1	
14-APR-2011	20:09	NS	MGV3E1AC 1102080 G1D120000-80	A-000046.	1000 mL	20 mL	1	
14-APR-2011	20:54	NS	MGT4M1AA 1102080 G1D110417-1 1	A-000047.	1010.44 mL	20 mL	1	
14-APR-2011	21:40	NS	MGT5C1AA 1102080 G1D110417-2 1	A-000048.	1011.98 mL	20 mL	1	
14-APR-2011	22:25	NS	MGT5D1AA 1102080 G1D110417-3 1	A-000049.	998.33 mL	20 mL	1	
14-APR-2011	23:10	NS	STD_05 10GCSV0524 8330 100-200	A-000050.	0 g	0 mL	1	

Sequence continued on next page

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC10 Batch ID: 01082011
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
08-JAN-2011	13:00	RN	8330 PRIMER	A-000001.	0 g	0 mL	1	
08-JAN-2011	13:34	RN	8330 PRIMER	A-000002.	0 g	0 mL	1	
08-JAN-2011	14:06	RN	8330 PRIMER	A-000003.	0 g	0 mL	1	
08-JAN-2011	14:36	RN	8330 PRIMER	A-000004.	0 g	0 mL	1	
08-JAN-2011	15:20	RN	8330 PRIMER	A-000005.	0 g	0 mL	1	
08-JAN-2011	16:03	RN	8330 PRIMER	A-000006.	0 g	0 mL	1	
08-JAN-2011	16:45	RN	8330 PRIMER	A-000007.	0 g	0 mL	1	
08-JAN-2011	17:28	RN	8330 PRIMER	A-000008.	0 g	0 mL	1	
08-JAN-2011	18:11	RN	8330 PRIMER	A-000009.	0 g	0 mL	1	
08-JAN-2011	18:54	RN	8330 PRIMER	A-000010.	0 g	0 mL	1	
08-JAN-2011	19:37	RN	Nitrobenzene	A-000011.	0 g	0 mL	1	
08-JAN-2011	20:20	RN	8330 PRIMER	A-000012.	0 g	0 mL	1	
08-JAN-2011	21:03	RN	8330 PRIMER	A-000013.	0 g	0 mL	1	
08-JAN-2011	21:47	RN	8330 PRIMER	A-000014.	0 g	0 mL	1	
08-JAN-2011	22:34	RN	8330 PRIMER	A-000015.	0 g	0 mL	1	
08-JAN-2011	23:14	RN	8330 PRIMER	A-000016.	0 g	0 mL	1	
08-JAN-2011	23:59	RN	8330 PRIMER	A-000017.	0 g	0 mL	1	
09-JAN-2011	00:41	RN	Tetryl Std	A-000018.	0 g	0 mL	1	
09-JAN-2011	01:26	RN	BLANK	A-000019.	0 g	0 mL	1	
09-JAN-2011	02:11	RN	ICAL L1 10GCSV0528 8330 5ng/mL	A-000020.	0 g	0 mL	1	
09-JAN-2011	02:56	RN	ICAL L2 10GCSV0527 8330 10ng/m	A-000021.	0 g	0 mL	1	
09-JAN-2011	03:41	RN	ICAL L3 10GCSV0526 8330 20ng/m	A-000022.	0 g	0 mL	1	
09-JAN-2011	04:26	RN	ICAL L4 10GCSV0525 8330 50ng/m	A-000023.	0 g	0 mL	1	
09-JAN-2011	05:11	RN	ICAL L5 10GCSV0524 8330 100ng/	A-000024.	0 g	0 mL	1	
09-JAN-2011	05:56	RN	ICAL L6 10GCSV0523 8330 200ng/	A-000025.	0 g	0 mL	1	
09-JAN-2011	06:42	RN	ICAL L7 10GCSV0522 8330 500ng/	A-000026.	0 g	0 mL	1	
09-JAN-2011	07:27	RN	ICAL L8 10GCSV0521 8330 1000ng	A-000027.	0 g	0 mL	1	
09-JAN-2011	08:12	RN	BLANK	A-000028.	0 g	0 mL	1	
09-JAN-2011	08:57	RN	MRL 10GCSV0529 8330 5ng/mL	A-000029.	0 g	0 mL	1	
09-JAN-2011	09:42	RN	MRL 10GCSV0526 8330 20ng/mL	A-000030.	0 g	0 mL	1	
09-JAN-2011	10:27	RN	ICV 10GCSV0502 8330 200ng/mL	A-000031.	0 g	0 mL	1	

printed before end of sequence.
RDN 1/9/11

WATER, Nitroguanidine

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 2, 2011

SDG: A1D050444 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 cooler temperatures were documented as being received from 1.9°C – 3.9°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?	✓				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: 1/24/11 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%?	✓			1/24/11 @ 1328	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
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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 2, 2011

SDG: A1D050444 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
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%?			✓	No detections above the reporting limit.	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.

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: FWGLL4mw-197C-1729-GW

Dissolved HPLC

Lot-Sample #...: A1D050444-001 Work Order #...: MGJ191AD Matrix.....: WG
Date Sampled...: 04/04/11 12:35 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/18/11
Prep Batch #...: 1098282
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1728-GW

Dissolved HPLC

Lot-Sample #...: A1D050444-002 Work Order #...: MGJ2C1AD Matrix.....: WG
Date Sampled...: 04/04/11 14:11 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/18/11
Prep Batch #...: 1098282
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-195C-1727-GW

Dissolved HPLC

Lot-Sample #...: A1D050444-003 Work Order #...: MGJ2D1AD Matrix.....: WG
Date Sampled...: 04/04/11 16:05 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/18/11
Prep Batch #...: 1098282
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1757-GW

Dissolved HPLC

Lot-Sample #...: A1D050444-004 Work Order #...: MGJ2F1AD Matrix.....: WQ
Date Sampled...: 04/04/11 17:20 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/18/11
Prep Batch #...: 1098282
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-193C-1726-GW

Dissolved HPLC

Lot-Sample #...: A1D050444-005 Work Order #...: MGJ2H1AD Matrix.....: WG
Date Sampled...: 04/04/11 12:48 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/18/11
Prep Batch #...: 1098282
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-198C-1730-GW

Dissolved HPLC

Lot-Sample #...: A1D050444-006 Work Order #...: MGJ2J1AD Matrix.....: WG
Date Sampled...: 04/04/11 15:22 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/18/11
Prep Batch #...: 1098282
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-199C-1731-GW

Dissolved HPLC

Lot-Sample #...: A1D050444-007 Work Order #...: MGJ2L1AD Matrix.....: WG
Date Sampled...: 04/04/11 13:33 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/18/11
Prep Batch #...: 1098282
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-DUP4-1749-GW

Dissolved HPLC

Lot-Sample #...: A1D050444-008 Work Order #...: MGJ2M1AD Matrix.....: WG
Date Sampled...: 04/04/11 14:33 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/18/11
Prep Batch #...: 1098282
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-200C-1732-GW

Dissolved HPLC

Lot-Sample #...: A1D050444-009 Work Order #...: MGJ2N1AD Matrix.....: WG
Date Sampled...: 04/04/11 16:49 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/18/11
Prep Batch #...: 1098282
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

METHOD BLANK REPORT

HPLC

Client Lot #...: A1D050444 Work Order #...: MGQ781AA Matrix.....: WATER
MB Lot-Sample #: G1D080000-282

Prep Date.....: 04/08/11
Analysis Date..: 04/18/11 Prep Batch #...: 1098282
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 #...: A1D050444 Work Order #...: MGQ781AC Matrix.....: WATER
LCS Lot-Sample#: G1D080000-282
Prep Date.....: 04/08/11 Analysis Date..: 04/18/11
Prep Batch #...: 1098282
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	101	(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 #...: A1D050444 Work Order #...: MGJ191AE-MS Matrix.....: WG
MS Lot-Sample #: A1D050444-001 MGJ191AF-MSD
Date Sampled...: 04/04/11 12:35 Date Received..: 04/05/11
Prep Date.....: 04/08/11 Analysis Date..: 04/18/11
Prep Batch #...: 1098282
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	104	(73 - 117)			SW846 8330 (Modified
	105	(73 - 117)	0.92	(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

WATER, Nitrocellulose

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 2, 2011

SDG: A1D050444 Rev 0
Analysis: TAL SOP WS-WC-0050

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 cooler temperatures were documented as being received from 1.9°C – 3.9°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 4/15/11 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
15. Were all CCV calibration analytes within 90-110%?	✓				STL SOP Section 10.4, LCG >110%=J; 85-90%=J/UJ; <85%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 2, 2011

SDG: A1D050444 Rev 0
Analysis: TAL SOP WS-WC-0050

Review Questions:	Yes	No	N/A	Comments	Qualifier
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?	✓				
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

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1729-GW

General Chemistry

Lot-Sample #...: A1D050444-001 Work Order #...: MGJ19 Matrix.....: WG
Date Sampled...: 04/04/11 12:35 Date Received..: 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/14-04/15/11	1104212

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1728-GW

General Chemistry

Lot-Sample #...: A1D050444-002 Work Order #...: MGJ2C Matrix.....: WG
Date Sampled...: 04/04/11 14:11 Date Received..: 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/14-04/15/11	1104212

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-195C-1727-GW

General Chemistry

Lot-Sample #...: A1D050444-003 Work Order #...: MGJ2D Matrix.....: WG
Date Sampled...: 04/04/11 16:05 Date Received..: 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/14-04/15/11	1104212

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1757-GW

General Chemistry

Lot-Sample #...: A1D050444-004 Work Order #...: MGJ2F Matrix.....: WQ
Date Sampled...: 04/04/11 17:20 Date Received..: 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/14-04/15/11	1104212

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-193C-1726-GW

General Chemistry

Lot-Sample #...: A1D050444-005 Work Order #...: MGJ2H Matrix.....: WG
Date Sampled...: 04/04/11 12:48 Date Received..: 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/14-04/15/11	1104212

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-198C-1730-GW

General Chemistry

Lot-Sample #...: A1D050444-006 Work Order #...: MGJ2J Matrix.....: WG
Date Sampled...: 04/04/11 15:22 Date Received..: 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/14-04/15/11	1104212

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-199C-1731-GW

General Chemistry

Lot-Sample #...: A1D050444-007 Work Order #...: MGJ2L Matrix.....: WG
Date Sampled...: 04/04/11 13:33 Date Received..: 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/14-04/15/11	1104212

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-DUP4-1749-GW

General Chemistry

Lot-Sample #...: A1D050444-008 Work Order #...: MGJ2M Matrix.....: WG
Date Sampled...: 04/04/11 14:33 Date Received..: 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/14-04/15/11	1104212

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-200C-1732-GW

General Chemistry

Lot-Sample #...: A1D050444-009 Work Order #...: MGJ2N Matrix.....: WG
Date Sampled...: 04/04/11 16:49 Date Received..: 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/14-04/15/11	1104212

Dilution Factor: 1 MDL.....: 0.48

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1D050444 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MG1471AA		MB Lot-Sample #:	G1D140000-212	
	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/14-04/15/11	1104212
		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 #...: A1D050444 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MG1471AC LCS Lot-Sample#: G1D140000-212			
	74	(26 - 144)	TAL-SOP WS-WC-005	04/14-04/15/11	1104212
		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 #...: A1D050444 Matrix.....: WG
Date Sampled...: 04/04/11 12:35 Date Received..: 04/05/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: MGJ191AJ-MS/MGJ191AK-MSD				MS Lot-Sample #: A1D050444-001	
	80	(26 - 144)			TAL-SOP WS-WC-005	04/14-04/15/11	1104212
	88	(26 - 144)	9.4	(0-45)	TAL-SOP WS-WC-005	04/14-04/15/11	1104212
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix 1

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1D050444										
8330	FWGEQUIPRINSE1-1757-GW	AQ	EB							
				2,4,6-TNT	0.097	0.053J		J	ug/L	RI
				2,6-Dinitrotoluene	0.097	0.086J		J	ug/L	RI
8330	FWGLL4mw-193C-1726-GW	AQ	N							
				2,6-Dinitrotoluene	0.11	0.068J		UJ	ug/L	Eb, RI
8330	FWGLL4mw-200C-1732-GW	AQ	N							
				4-Nitrotoluene	0.48	0.11J		J	ug/L	RI

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Data Qualifier Summary

Lab Reporting Batch ID: A1D050444 **Laboratory: TALCAN**

EDD Filename: A1D050444 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8330 **Matrix:** AQ

Sample ID: FWGEQUIPRINSE1-1757-GW ***Collected:*** 4/4/2011 5:20:00 PM ***Analysis Type:*** DL ***Dilution:*** 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,6-TNT	0.053	J	0.048	MDL	0.097	PQL	ug/L	J	RI
2,6-DINITROTOLUENE	0.086	J	0.048	MDL	0.097	PQL	ug/L	J	RI

Sample ID: FWGLL4mw-193C-1726-GW ***Collected:*** 4/4/2011 12:48:00 ***Analysis Type:*** DL-BASE/NEUTRAL ***Dilution:*** 1.11

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,6-DINITROTOLUENE	0.068	J	0.056	MDL	0.11	PQL	ug/L	UJ	RI, Eb

Sample ID: FWGLL4mw-200C-1732-GW ***Collected:*** 4/4/2011 4:49:00 PM ***Analysis Type:*** DL ***Dilution:*** 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-NITROTOLUENE	0.11	J	0.085	MDL	0.48	PQL	ug/L	J	RI

Data Qualifier Summary

Lab Reporting Batch ID: A1D050444 **Laboratory: TALCAN**

EDD Filename: A1D050444 **eQAPP Name: Ravenna 111810**

Reason Code Legend

Reason Code	*Description*
Cb	Calibration Blank Contamination
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
Ccv	Continuing Calibration Verification Percent Difference Lower Rejection
Ccv	Continuing Calibration Verification Percent Difference Upper Estimation
Ccv	Continuing Calibration Verification Percent Difference Upper Rejection
Ccv	Continuing Calibration Verification Percent Recovery Lower Estimation
Ccv	Continuing Calibration Verification Percent Recovery Lower Rejection
Ccv	Continuing Calibration Verification Percent Recovery Upper Estimation
Ccv	Continuing Calibration Verification Percent Recovery Upper Rejection
CcvCC	Continuing Calibration Verification Correlation Coefficient
CcvRrf	Continuing Calibration Verification Relative Response Factor
ContTune	Continuing Tune
Dup=0	Duplicate Sample Count = 0
Dup>1	Duplicate Sample Count > 1
Eb	Equipment Blank Contamination
EtoA	Extraction to Analysis Estimation
EtoA	Extraction to Analysis Rejection
Fb	Field Blank Contamination
Fd	Field Duplicate Precision
IcCC	Initial Calibration Correlation Coefficient
IcRrf	Initial Calibration Relative Response Factor
IcRsd	Initial Calibration Percent Relative Standard Deviation
Icv	Initial Calibration Verification Percent Difference Lower Estimation
Icv	Initial Calibration Verification Percent Difference Lower Rejection
Icv	Initial Calibration Verification Percent Difference Upper Estimation
Icv	Initial Calibration Verification Percent Difference Upper Rejection
Icv	Initial Calibration Verification Percent Recovery Lower Estimation
Icv	Initial Calibration Verification Percent Recovery Lower Rejection
Icv	Initial Calibration Verification Percent Recovery Upper Estimation
Icv	Initial Calibration Verification Percent Recovery Upper Rejection
IcvCC	Initial Calibration Verification Correlation Coefficient

Data Qualifier Summary

Lab Reporting Batch ID: A1D050444 **Laboratory: TALCAN**

EDD Filename: A1D050444 **eQAPP Name: Ravenna 111810**

IcvRrf	Initial Calibration Verification Relative Response Factor
IllogicalFraction	Illogical Fraction
InitTune	Initial Tune
Is	Internal Standard Estimation
Is	Internal Standard Rejection
Lcs	Laboratory Control Precision
Lcs	Laboratory Control Spike Lower Estimation
Lcs	Laboratory Control Spike Lower Rejection
Lcs	Laboratory Control Spike Upper Estimation
Lcs	Laboratory Control Spike Upper Rejection
Lcs=0	Laboratory Control Sample Count = 0
Lcs>1	Laboratory Control Sample Count > 1
Ld	Laboratory Duplicate Precision
Mb	Method Blank Contamination
Mb=0	Method Blank Sample Count = 0
Mb>1	Method Blank Sample Count > 1
Moist	Percent Moisture
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Lower Rejection
Ms	Matrix Spike Precision
Ms	Matrix Spike Upper Estimation
Ms	Matrix Spike Upper Rejection
Ms=0	Matrix Spike Sample Count = 0
Ms>1	Matrix Spike Sample Count > 1
PEM	Performance Evaluation Mixture
Preservation	Preservation
ProfJudg	Professional Judgment
REM	Resolution Check Mixture
RI	Reporting Limit
RI	Reporting Limit > Project Maximum Contamination Limit
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoA	Sampling to Analysis Rejection

Data Qualifier Summary

Lab Reporting Batch ID: A1D050444 **Laboratory: TALCAN**

EDD Filename: A1D050444 **eQAPP Name: Ravenna 111810**

StoE	Sampling to Extraction Estimation
StoE	Sampling to Extraction Rejection
StoL	Sampling to Leaching Estimation
StoL	Sampling to Leaching Rejection
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Lower Rejection
Surr	Surrogate/Tracer Recovery Upper Estimation
Surr	Surrogate/Tracer Recovery Upper Rejection
Tb	Trip Blank Contamination
TempEst	Temperature Estimation
TempRej	Temperature Rejection

Reporting Limit Outliers

Lab Reporting Batch ID: A1D050444

Laboratory: TALCAN

EDD Filename: A1D050444

eQAPP Name: Ravenna 111810

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGEQUIPRINSE1-1757-GW	2,4,6-TNT 2,6-DINITROTOLUENE	J J	0.053 0.086	0.097 0.097	PQL PQL	ug/L ug/L	J (all detects)
FWGLL4mw-193C-1726-GW	2,6-DINITROTOLUENE	J	0.068	0.11	PQL	ug/L	J (all detects)
FWGLL4mw-200C-1732-GW	4-NITROTOLUENE	J	0.11	0.48	PQL	ug/L	J (all detects)

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 16, 2011
Sample Delivery Group: A1D050458 **Revision:** 0

Data Validator: Angye Dragotta /Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On April 4, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1D050458.

Field Sample ID	Analytes	Method
FWGLL4mw-197c-1729-GW	VOCs SVOCs Pesticides PCBs Cyanide	SW846 8260B SW846 8270C SW846 8081A SW846 8082 SW846 9012A
FWGLL4mw-196c-1728-GW		
FWGLL4mw-195c-1727-GW		
FWGEQUIPRinse1-1757-GW		
FWGLL4mw-193c-1726-GW		
FWGLL4mw-198c-1730-GW		
FWGLL4mw-199c-1731-GW		
FWGLL4mw-DUP4-1749-GW		
FWGLL4mw-200c-1732-GW		
FWGEQUIPRinse1-1757-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL4mw-197c-1729-GF	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGLL4mw-196c-1728-GF		
FWGLL4mw-195c-1727-GF		
FWGLL4mw-193c-1726-GF		
FWGLL4mw-198c-1730-GF		
FWGLL4mw-199c-1731-GF		
FWGLL4mw-DUP4-1749-GF		
FWGLL4mw-200c-1732-GF		
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 1.3°C – 3.9°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, 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/ MRL verification criteria
- Method/Field/Trip blank Criteria
- Surrogate recoveries
- Field duplicate RPD criteria
- Laboratory Control Sample criteria
- Matrix Spike Recovery Criteria and RPD

MRL Recovery

- The opening MRL check analyzed 4/13/11, recovered above control limits of 70-130% for carbon disulfide at 131%, methylene chloride at 230% and bromoform at 134%.
- The closing MRL check analyzed 4/13/11, recovered above control limits of 70-130% for acetone at 171%, carbon disulfide at 133%, chloromethane at 164%, bromomethane at 144%, vinyl chloride at 135%, chloroethane at 173%, methylene chloride at 176% and bromoform at 140%.

The methylene chloride, acetone and 2-butanone results for FWGEQUIPRinse1-1757-GW were qualified as estimated, "J". The methylene chloride results for FWGTEAM1-Trip, FWGTEAM2-Trip and FWGTEAM3-Trip were qualified as estimated, "J". The acetone results for FWGLL4mw-199c-1731-GW and FWGLL4mw-DUP4-1749-GW were qualified as estimated, "J".

Blanks

Methylene chloride was detected in the method blanks 0.99ug/L. The methylene chloride results for samples FWGEQUIPRinse1-1757-GW, FWGTEAM2-Trip, FWGTEAM1-Trip and FWGTEAM3-Trip were qualified "B".

- FWGTEAM1-Trip had chloroform detected at 0.21ug/L and methylene chloride detected at 0.35ug/L.
- FWGTEAM3-Trip had chloroform detected at 0.25ug/L and methylene chloride detected at 0.42ug/L.
- FWGTEAM2-Trip had chloroform detected at 0.24ug/L and methylene chloride detected at 0.35ug/L.
- 2-butanone was detected in FWGEQUIPRinse1-1757-GW at 1.2ug/L, acetone at 4.6ug/L, chloroform at 0.76ug/L and methylene chloride at 1.9ug/L.

The acetone results for FWGLL4mw-199c-1731-GW and FWGLL4mw-DUP4-1749-GW were qualified, "B". The methylene chloride and chloroform results for FWGEQUIPRinse1-1757-GW were qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.

LCS Recovery

The LCS analyzed on 4/13/11 recovered above limits at 137% for carbon disulfide and at 128% for methylene chloride. The methylene chloride results for samples FWGEQUIPRinse1-1757-GW, FWGTEAM2-Trip, FWGTEAM1-Trip and FWGTEAM3-Trip were qualified as estimated, "J".

Matrix Spike Recovery Criteria

The matrix spike duplicate analyzed on sample FWGLL4mw-197c-1729-GW recovered above control limits for carbon disulfide at 139%. No qualification was made for the carbon disulfide outliers as carbon disulfide was not detected in sample FWGLL4mw-197c-1729-GW.

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

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 16, 2011
Sample Delivery Group: A1D050458 **Revision:** 0

MRL Recovery

- The closing MRL analyzed 4/13/11 @ 1624 recovered below control limits for 2,4-dinitrophenol at 51%. All 2,4-dinitrophenol results with the exception of FWGLL4mw-195c-1727-GW were qualified as estimated, "UJ".
- The closing MRL analyzed 4/20/11 @ 1603 recovered below control limits for 4,6-dinitro-2-methylphenol at 61%, pentachlorophenol at 55%, 2,4-dinitrophenol at 43% and 4-nitrophenol at 51%. An MDL check was analyzed following the closing MRL with detected results for all targets except 2,4-dinitrophenol. The 4,6-dinitro-2-methylphenol, pentachlorophenol and 4-nitrophenol results for FWGLL4mw-195c-1727-GW were qualified as estimated, "UJ". The bracketed 2,4-dinitrophenol samples were reanalyzed with acceptable MRL recoveries on 4/27/11. Documentation provided in SDG A1D080405.

Surrogate Recovery
Terphenyl-d14 recovered below control limits at 46% for sample FWGLL4mw-195c-1727-GW and at 45% for sample FWGLL4mw-199c-1731-GW. No qualifiers were applied to the sample results, as LCG allows for one surrogate per fraction to be outside control limits without qualification.

Field Duplicate RPD
The bis (2-ethylhexyl) phthalate field duplicate RPD was above control limits. No qualification was made as the sample results were less than the reporting limit.

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
- Method/Field blank Criteria
- LCS Recoveries
- Field Duplicate Criteria
- MDL/MRL verification criteria
- Matrix Spike Recovery Criteria and RPD
- Surrogate Recoveries
- Second Column confirmation criteria

Surrogate Recovery
The surrogate, DCB, recovered below control limits for sample FWGLL4mw-195c-1727-GW at 31%, FWGLL4mw-196c-1728-GW at 36%, FWGLL4mw-197c-1729-GW at 40%, FWGLL4mw-198c-1730-GW at 19% and FWGLL4mw-DUP4-1749-GW at 41%. The results for samples FWGLL4mw-195c-1727-GW, FWGLL4mw-196c-1728-GW, FWGLL4mw-197c-1729-GW, FWGLL4mw-198c-1730-GW and FWGLL4mw-DUP4-1749-GW were qualified as estimated, "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
- Method/Field blank Criteria
- LCS/ LCSD percent recoveries and RPD value criteria
- Second Column confirmation criteria
- Field Duplicate RPD criteria
- Matrix Spike Recovery Criteria and RPD
- Surrogate Recoveries

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 16, 2011
Sample Delivery Group: A1D050458 **Revision:** 0

Surrogate Recovery
The surrogate, DCB, recovered below control limits for sample FWGLL4mw-195c-1727-GW at 36%, FWGLL4mw-196c-1728-GW at 49%, FWGLL4mw-198c-1730-GW at 20% and FWGLL4mw-DUP4-1749-GW at 40%. The results for samples FWGLL4mw-195c-1727-GW, FWGLL4mw-196c-1728-GW, FWGLL4mw-198c-1730-GW and FWGLL4mw-DUP4-1749-GW were qualified as estimated, "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 criteria
- Method/Field blank Criteria
- 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.

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 criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

Blanks

- The ICB analyzed 4/11/11 had sodium detected at 34.5ug/L and thallium detected at 0.2ug/L. The thallium result for samples FWGLL4mw-197c-1729-GF and FWGLL4mw-196c-1728-GF were qualified "U" as the detected concentrations were <5x the thallium contamination.
- The CCBs analyzed 4/11/11 had detected thallium from 0.18ug/L to 0.25ug/L and sodium from 52.9ug/L to 93ug/L. No additional qualifications were made other than those made for the ICB 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.

Field Duplicate RPD
The antimony and zinc field duplicate RPDs were above control limits. No qualifications were made as the sample results were less than the reporting limit.

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 criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery

- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

No QC outliers 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
- ICB /CCBs criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria and RPD

The matrix spike recovered below control limits at 72%. The cyanide results associated with SDG A1D050458 were qualified as estimated, "UJ/J".

SAMPLE SUMMARY

A1D050458

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MGJ4D	001	FWGLL4mw-197C-1729-GW	04/04/11	12:35
MGJ4G	002	FWGLL4mw-197C-1729-GF	04/04/11	12:35
MGJ4H	003	FWGTEAM1-TRIP	04/04/11	11:00
MGJ4J	004	FWGLL4mw-196C-1728-GW	04/04/11	14:11
MGJ4K	005	FWGLL4mw-196C-1728-GF	04/04/11	14:11
MGJ4L	006	FWGLL4mw-195C-1727-GW	04/04/11	16:05
MGJ4N	007	FWGLL4mw-195C-1727-GF	04/04/11	16:05
MGJ4P	008	FWGEQUIPRINSE1-1757-GW	04/04/11	17:20
MGJ5E	009	FWGTEAM2-TRIP	04/04/11	11:30
MGJ5J	010	FWGLL4mw-193C-1726-GW	04/04/11	12:48
MGJ5Q	011	FWGLL4mw-193C-1726-GF	04/04/11	12:48
MGJ5V	012	FWGLL4mw-198C-1730-GW	04/04/11	15:22
MGJ57	013	FWGLL4mw-198C-1730-GF	04/04/11	15:22
MGJ6C	014	FWGTEAM3-TRIP	04/04/11	
MGJ6E	015	FWGLL4mw-199C-1731-GW	04/04/11	13:33
MGJ6F	016	FWGLL4mw-199C-1731-GF	04/04/11	13:33
MGJ6G	017	FWGLL4mw-DUP4-1749-GW	04/04/11	14:33
MGJ6H	018	FWGLL4mw-DUP4-1749-GF	04/04/11	14:33
MGJ6J	019	FWGLL4mw-200C-1732-GW	04/04/11	16:49
MGJ6L	020	FWGLL4mw-200C-1732-GF	04/04/11	16:49

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

20

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/4/11	Chain of Custody Number: 000489
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500	Lab Number:	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	Carrier/Waybill Number: Lab Pick-up		
Contract/Purchase Order/Quote No.: 130240.0006 PO# 16726			

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 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010 Hg 7470 Perch. Perc.		Special Instructions/ Conditions of Receipt: Cooler ID
FWGLL4mw-197C-1729-GW	4/4/11	12:35		X			9			3	1		X	X	X	X	X	X	X			404
FWGLL4mw-197C-1729-GF	4/4/11	12:35		X			1		1		1 EC 4/4/11									X	X	404
FWG Team 1 - Trip	4/4/11	11:00		X						2			X									C99
FWGLL4mw-196C-1728-GW	4/4/11	14:11		X			9			3	1		X	X	X	X	X	X	X			C99
FWGLL4mw-196C-1728-GF	4/4/11	14:11		X			1		1											X	X	C99
FWGLL4mw-195C-1727-GW	4/4/11	16:05		X			9			3	1		X	X	X	X	X	X	X			179
FWGLL4mw-195C-1727-GF	4/4/11	16:05		X					1											X		179
FWGEQUIPRinse1-1757-GW	4/4/11	17:20		X			10		1	3	1		X	X	X	X	X	X	X	X	X	Cl, Br, SO_4, ClO_4 not filtered this sample only
				EC 4/4/11																		

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 [ ] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metals and ClO_4 field filtered

	Date	Time		Date	Time
1. Relinquished By: EQM	4/4/11	1800	1. Received By: RC Team	4/4/11	1800
2. Relinquished By: RC Team	4/4/11	1900	2. Received By:	4/5/11	0830
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments: if sample collection is close to lab pick up time

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Temps may not meet requirements

All VOCs in C99

North Canton

Chain of Custody Record

TestAmerica 21
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Canton
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:	COC No: 019328
Address: 1800 CARILLON	Telephone: 513 825 7500	Telephone: Same	Telephone:	1 of 1 COCs
City/State/Zip: Cincinnati Oh 45240	Email: ecorbin@eqm.com	Analysis Turnaround Time (in bus days)		For lab use only
Phone: 513 825 7500		TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Line sampling ☐ Job SDG No.
Project Name: RVAAP	Method of Shipment/Carrier: Lab pickup			
Project Number: 30240.0006.37	Shipping/Tracking No:			
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite C/G	Analyses: VOC	SVOC	Pest	PCB	Diplo	Propellants	Metals	Cyanide			Sample Specific Notes / Special Instructions: Cooler id
FWG Team 2-Trip	4-4-11	1130		X						2					N	G	X										C119
FWGLL4MW193E1726-GW	↓	1248		X						3	1		9		N	G	X	X	X	X	X	X		X			C119
FWGLL4MW193E1726-GF	↓	↓		X					1						Y	G							X				C119
FWGLL4MW198C-1730-GW	↓	1522		X						3	1		9		N	G	X	X	X	X	X	X		X			12
FWGLL4MW198C-1730-GF	↓	↓		X					1						Y	G							X				12

Cool

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 were field filtered. Temp may not meet requirements if close to sample time. Add VOA in C119

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Lindsay Dwyer	EQM	4/4/11 1800	[signature]	TAL-NC	4/4/11 1800
[signature]	TAL-NC	4/4/11 1900			
			Received in Laboratory by: [signature]	TANC	4/5/11 0730

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TAL 0018-1 (04/10)

North Canton

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: E. Corbin	Lab Contact: Mark Loeb	COC No: AD001
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	Email: jmiller@eqm.com	Analysis Turnaround Time (in BUS days): TAT if different from below Sow; ☒ 3 weeks; ☐ 2 weeks; ☐ 1 week; ☐ 2 days; ☐ 1 day		For lab use only: Walk-in client ☐; Lab pickup ☐; Lab sampling ☐; Job/SDG No.
Phone: 513-825-7500				
Project Name: RVAAP	Method of Shipment/Carrier: Lab Pickup			
Project Number: 30240.0006	Shipping/Tracking No: Lab Pickup N/A			
PO# 16726				

Analyses

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite (Y/N)	Vac EPA 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010 6020 7470			Sample Specific Notes / Special Instructions: Cooler ID
FWG Team 3-Trip	4/4/11			X																							
~~FWGLL6MW-005C-1427-GW~~																											~~AD 4/4/11~~
FWGLL4MW-199C-1731-GW		1333		X						3	1		8		N	G	X	X	X	X	X	X	X				T137
FWGLL4MW-199C-1731-GF		↓		X					1						Y	G								X			T137
FWGLL4MW-DUP4-1749-GW		1433		X						3	1		9		N	G	X	X	X	X	X	X	X				L105
FWGLL4MW-DUP4-1749-GF		↓		X					1						Y	G								X			L105
FWGLL4MW-200C-1732-GW		1649		X						3	1		9		N	G	X	X	X	X	X	X	X				H112
FWGLL4MW-200C-1732-GF		↓		X					1						Y	G								X			H112
																											WA 4/4/11
																											WA 4/4/11

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 (GF) were field filtered
Jumps may not meet requirements if sample collection time is close to lab pickup time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	EQM	4/4/11 1800	[signature]	TAL-NC	4/4/11 1800
[signature]	TAL-NC	4/4/11 1900			
			Received in Laboratory by: [signature]	TA NC	4/5/11 0730

All VOAs in cooler T137

North Canton

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TAL-0018 (1008)

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 410050458
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 4/5/11 Opened on 4/5/11
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 9 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#* 100110-HNO_3; *Sulfuric Acid Lot#* 110410-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
197C	<2 >12		4/5/11	
196C	<2 >12			
195C	<2 >12			
EquipRinse1	<2 >12			
193C	<2 >12			
198C	<2 >12			
199C	<2 >12			
DUP4	<2 >12			

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
200C	<2 712	4/5/11	g

Cooler #	Temp. °C	Method	Coolant
404	1.3	IR	Ice
C99	2.9		
179	3.8		
Clotys	3.4		
C119	2.6		
C12	3.5		
T137	2.3		
L105	2.7		
H112	3.9		

Discrepancies Cont'd:

ANALYTICAL METHODS SUMMARY

A1D050458

PARAMETER	ANALYTICAL METHOD
Cyanide, Total	SW846 9012A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
ICP-MS (6020)	SW846 6020
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Organochlorine Pesticides	SW846 8081A
PCBs by SW-846 8082	SW846 8082
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B
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.

CASE NARRATIVE

A1D050458

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 030240.0006. The samples were received April 05, 2011, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods and Louisville Corps Guidelines version 5, where applicable, in all analytical reports. 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 May 02, 2011. 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. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

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 1.3 to 3.9° 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 FWGLL4mw-197C-1729-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 for batch 1103146 was recovered high and outside of criteria for methylene chloride and carbon disulfide. Since the analyte was not detected in any of the samples above reporting limits, the results were accepted. Slight positive bias is not believed to have impacted data quality.

GC/MS SEMIVOLATILES

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.

3-Methylphenol (m-Cresol) and 4-Methylphenol (p-Cresol) co-elute and cannot be reported as separate analytes. When these analytes are requested, the reported result represents a probable combination of the two analytes.

CASE NARRATIVE (continued)

GC/MS SEMIVOLATILES (cont)

For samples FWGLL4mw-195C-1727-GW and FWGLL4mw-199C-1731-GW the recovery for surrogate compound(s) are outside acceptance criteria. Since LCG criteria is that all surrogates be above the 10%, no corrective action is required.

The QCMRLCL failed 2,4-Dinitrophenol low at 52.24%. The MDLL3 failed 4-Nitrophenol for samples FWGLL4mw-197C-1729-GW, FWGLL4mw-196C-1728-GW, FWGEQUIPRINSE1-1757-GW, FWGLL4mw-193C-1726-GW, FWGLL4mw-198C-1730-GW, FWGLL4mw-199C-1731-GW, FWGLL4mw-DUP4-1749-GW, and FWGLL4mw-200C-1732-GW.

Insufficient sample volume was provided to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 1096042.

PESTICIDES-8081

For sample(s) FWGLL4mw-197C-1729-GW, FWGLL4mw-196C-1728-GW, FWGLL4mw-195C-1727-GW, FWGLL4mw-198C-1730-GW, and FWGLL4mw-DUP4-1749-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%)

Insufficient sample volume was provided to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 1096037.

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGLL4mw-196C-1728-GW, FWGLL4mw-195C-1727-GW, FWGLL4mw-198C-1730-GW, and FWGLL4mw-DUP4-1749-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%)

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).

CASE NARRATIVE (continued)

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 FWGLL4mw-197C-1729-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.

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, a Matrix Spike/Matrix Spike Duplicate (MS/MSD) pair or a Matrix Spike/Sample Duplicate (MS/DU) pair.
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. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch, with the exception of poor performing analytes. A list of these analytes is listed below. No corrective action is taken if these analytes do not meet criteria.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.

Poor performers

Method 8270 Water and Solid:	
4-Nitrophenol	3,3' – Dichlorobenzidine
Benzoic Acid	2,4,6 - Tribromophenol
Phenol	2,4-Dinitrophenol
Phenol-d5	Pentachlorophenol
4,6-Dinitro-2-methylphenol	Hexachlorocyclopentadiene (LCG only)
Benzyl Alcohol	4-Chloroaniline
Method 8151 Solid	
Dinoseb	
Method 8260 Water and Solid	
Dichlorodifluoromethane	Hexachlorobutadiene
Trichlorofluoromethane	Naphthalene
Chloroethane	1,2,3-Trichlorobenzene
Acetone	1,2,4-Trichlorobenzene
Bromomethane	2,2-Dichloropropane
Bromoform	Chloromethane

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 ten 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 do 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 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 or Matrix Spike/Sample Duplicate.

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, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, 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), DoD ELAP (ADE-1437) USDA Soil Permit (P33-08-00123)

MANUAL INTEGRATION SUMMARY

Lot A1D050458

Client ID: FWGLL4mw-DUP4-1749-
Compound Name: TCMX
Instrument ID: a2hp13.i
File Name: P1341526.D
Inj. Date and Time: 15-APR-2011 13:35

Client ID: FWGLL4mw-195C-1727-
Compound Name: Benzoic Acid
Instrument ID: a4hp10.i
File Name: MGJ4L1AC.D
Inj. Date and Time: 20-APR-2011 10:45
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL4mw-198C-1730-
Compound Name: Benzoic Acid
Instrument ID: a4hp10.i
File Name: MGJ5V1AC.D
Inj. Date and Time: 13-APR-2011 14:11
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL4mw-199C-1731-
Compound Name: Benzoic Acid
Instrument ID: a4hp10.i
File Name: MGJ6E1AC.D
Inj. Date and Time: 13-APR-2011 13:33
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL4mw-199C-1731-
Compound Name: bis(2-ethylhexyl)Phthalate
Instrument ID: a4hp10.i
File Name: MGJ6E1AC.D
Inj. Date and Time: 13-APR-2011 13:33
Manual Integration Reason: Poor Chromatography

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GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D050458 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 1.3 and 3.9 °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–March 8, 2011 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 and bromoform used a weighted linear curve.	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?	✓			4/14/11 @ 2017	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D050458 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 4/13/11, recovered above control limits of 70-130% for carbon disulfide at 131%, methylene chloride at 230% and bromoform at 134%. The closing MRL check analyzed 4/13/11, recovered above control limits of 70-130% for acetone at 171%, carbon disulfide at 133%, chloromethane at 164%, bromomethane at 144%, vinyl chloride at 135%, chloroethane at 173%, methylene chloride at 176% and bromoform at 140%. The methylene chloride, acetone and 2-butanone results for FWGEQUIPRinse1-1757-GW were qualified as estimated, "J". The methylene chloride results for FWGTEAM1-Trip, FWGTEAM2-Trip and FWGTEAM3-Trip were qualified as estimated, "J". The acetone results for FWGLL4mw-199c-1731-GW and FWGLL4mw-DUP4-1749-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%?	✓			3/8/2011 @1059	LCG Table 1, <60%=J/R >120%=J; 60-80%=J/UJ
18. Was a CCV run every 12 hours?	✓			4/13/11 @ 1010	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%?	✓			4/13/11-Carbon disulfide had a %D above control limits at 21%, No qualifications were made as the avg %D was <20%.	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D050458 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 blanks 0.99ug/L. The methylene chloride results for samples FWGEQUIPRinse1-1757-GW, FWGTEAM2-Trip, FWGTEAM1-Trip and FWGTEAM3-Trip were qualified "B".	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse1-1757-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGTEAM1-Trip had chloroform detected at 0.21ug/L and methylene chloride detected at 0.35ug/L. • FWGTEAM3-Trip had chloroform detected at 0.25ug/L and methylene chloride detected at 0.42ug/L. • FWGTEAM2-Trip had chloroform detected at 0.24ug/L and methylene chloride detected at 0.35ug/L. • 2-butanone was detected in FWGEQUIPRinse1-1757-GW at 1.2ug/L, acetone at 4.6ug/L, chloroform at 0.76ug/L and methylene chloride at 1.9ug/L. The acetone results for FWGLL4mw-199c-1731-GW and FWGLL4mw-DUP4-1749-GW were qualified, "B". The methylene chloride and chloroform results for FWGEQUIPRinse1-1757-GW were qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.	<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; The LCS analyzed on 4/13/11 recovered above limits at 137% for carbon disulfide and at 128% for methylene chloride. The methylene chloride results for samples FWGEQUIPRinse1-1757-GW, FWGTEAM2-Trip, FWGTEAM1-Trip and FWGTEAM3-Trip were 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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D050458 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
34. Was the MS/MSD parent sample a Ravenna sample?	✓				
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?		✓		The matrix spike duplicate analyzed on sample FWGLL4mw-197c-1729-GW recovered above control limits for carbon disulfide at 139%. No qualification was made for the carbon disulfide outliers as carbon disulfide was not detected in sample FWGLL4mw-197c-1729-GW.	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: FWGLL4mw-197C-1729-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-001 **Work Order #...:** MGJ4D1AA **Matrix.....:** WG
Date Sampled...: 04/04/11 12:35 **Date Received..:** 04/05/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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-1729-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-001 Work Order #...: MGJ4D1AA 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	83	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	81	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A1D050458-003 **Work Order #...:** MGJ4H1AA **Matrix.....:** WQ
Date Sampled...: 04/04/11 11:00 **Date Received..:** 04/05/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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	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	**0.21 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	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 #...: A1D050458-003 **Work Order #...:** MGJ4H1AA **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	83	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	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: FWGLL4mw-196C-1728-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-004 **Work Order #...:** MGJ4J1AA **Matrix.....:** WG
Date Sampled...: 04/04/11 14:11 **Date Received..:** 04/05/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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-1728-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-004 **Work Order #...:** MGJ4J1AA **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	81	(50 - 150)
1,2-Dichloroethane-d4	81	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	77	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-195C-1727-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-006 **Work Order #...:** MGJ4L1AA **Matrix.....:** WG
Date Sampled...: 04/04/11 16:05 **Date Received..:** 04/05/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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: FWGLL4mw-195C-1727-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-006 Work Order #...: MGJ4L1AA 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	82	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	77	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1757-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-008 **Work Order #...:** MGJ4P1AA **Matrix.....:** WQ
Date Sampled...: 04/04/11 17:20 **Date Received..:** 04/05/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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	**1.9 J,B**	**2.0**	**ug/L**	**0.33**
Acetone	**4.6 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	**0.76 J**	**1.0**	**ug/L**	**0.16**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**1.2 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: FWGEQUIPRINSE1-1757-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-008 Work Order #...: MGJ4P1AA 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	84	(50 - 150)
1,2-Dichloroethane-d4	81	(50 - 150)
Toluene-d8	80	(50 - 150)
4-Bromofluorobenzene	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: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1D050458-009 Work Order #...: MGJ5E1AA Matrix.....: WQ
Date Sampled...: 04/04/11 11:30 Date Received..: 04/05/11
Prep Date.....: 04/13/11 Analysis Date..: 04/13/11
Prep Batch #...: 1103146
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	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	**0.24 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	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 #...: A1D050458-009 **Work Order #...:** MGJ5E1AA **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	85	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	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: FWGLL4mw-193C-1726-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-010 **Work Order #...:** MGJ5J1AA **Matrix.....:** WG
Date Sampled...: 04/04/11 12:48 **Date Received..:** 04/05/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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-193C-1726-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-010 **Work Order #...:** MGJ5J1AA **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	82	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	77	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-198C-1730-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-012 **Work Order #...:** MGJ5V1AA **Matrix.....:** WG
Date Sampled...: 04/04/11 15:22 **Date Received..:** 04/05/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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-198C-1730-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-012 **Work Order #...:** MGJ5V1AA **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	84	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A1D050458-014 **Work Order #...:** MGJ6C1AA **Matrix.....:** WQ
Date Sampled...: 04/04/11 **Date Received..:** 04/05/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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	**0.42 J,B**	**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	**0.25 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	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 #...: A1D050458-014 **Work Order #...:** MGJ6C1AA **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	84	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	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: FWGLL4mw-199C-1731-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-015 **Work Order #...:** MGJ6E1AA **Matrix.....:** WG
Date Sampled...: 04/04/11 13:33 **Date Received..:** 04/05/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
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
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	**2.7 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: FWGLL4mw-199C-1731-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-015 **Work Order #...:** MGJ6E1AA **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	85	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	76	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-DUP4-1749-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-017	**Work Order #...:** MGJ6G1AA	**Matrix.....:** WG	
Date Sampled...: 04/04/11 14:33	**Date Received..:** 04/05/11		
Prep Date.....: 04/13/11	**Analysis Date..:** 04/13/11		
Prep Batch #...: 1103146			
Dilution Factor: 1	**Initial Wgt/Vol:** 5 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
Bromochloromethane	ND	1.0	ug/L	0.29
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	**3.6 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: FWGLL4mw-DUP4-1749-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-017 **Work Order #...:** MGJ6G1AA **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	88	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-200C-1732-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-019 **Work Order #...:** MGJ6J1AA **Matrix.....:** WG
Date Sampled...: 04/04/11 16:49 **Date Received..:** 04/05/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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-200C-1732-GW

GC/MS Volatiles

Lot-Sample #...: A1D050458-019 **Work Order #...:** MGJ6J1AA **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	85	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	76	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1D050458 **Work Order #...:** MGXP51AA **Matrix.....:** WATER
MB Lot-Sample #: A1D130000-146

Prep Date.....: 04/13/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/13/11 **Prep Batch #...:** 1103146
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	**0.99 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 #...: A1D050458 **Work Order #...:** MGXP51AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	83	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	78	(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 #...: A1D050458 Work Order #...: MGXP51AC Matrix.....: WATER
LCS Lot-Sample#: A1D130000-146
Prep Date.....: 04/13/11 Analysis Date..: 04/13/11
Prep Batch #...: 1103146
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Bromochloromethane	106	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	104	(75 - 122)	SW846 8260B
o-Xylene	106	(75 - 118)	SW846 8260B
cis-1,2-Dichloroethene	102	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	103	(75 - 134)	SW846 8260B
1,2-Dibromoethane	106	(75 - 127)	SW846 8260B
Chloromethane	106	(58 - 135)	SW846 8260B
Bromomethane	99	(35 - 153)	SW846 8260B
Vinyl chloride	101	(73 - 134)	SW846 8260B
Chloroethane	104	(72 - 129)	SW846 8260B
Methylene chloride	128 a	(69 - 118)	SW846 8260B
Acetone	103	(51 - 157)	SW846 8260B
Carbon disulfide	137 a	(74 - 123)	SW846 8260B
1,1-Dichloroethene	116	(75 - 125)	SW846 8260B
1,1-Dichloroethane	105	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	102	(85 - 111)	SW846 8260B
Chloroform	103	(74 - 127)	SW846 8260B
1,2-Dichloroethane	106	(67 - 132)	SW846 8260B
2-Butanone	108	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	102	(70 - 127)	SW846 8260B
Carbon tetrachloride	103	(71 - 132)	SW846 8260B
Bromodichloromethane	107	(70 - 130)	SW846 8260B
1,2-Dichloropropane	107	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	110	(73 - 132)	SW846 8260B
Trichloroethene	102	(67 - 128)	SW846 8260B
Dibromochloromethane	111	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	104	(75 - 136)	SW846 8260B
Benzene	104	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	120	(74 - 131)	SW846 8260B
Bromoform	104	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	114	(59 - 150)	SW846 8260B
2-Hexanone	118	(53 - 139)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D050458 **Work Order #...:** MGXP51AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D130000-146

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	95	(75 - 129)	**SW846 8260B**
1,1,2,2-Tetrachloroethane	104	(68 - 129)	**SW846 8260B**
Toluene	102	(75 - 125)	**SW846 8260B**
Chlorobenzene	101	(75 - 127)	**SW846 8260B**
Ethylbenzene	103	(75 - 120)	**SW846 8260B**
Styrene	111	(75 - 130)	**SW846 8260B**
Xylenes (total)	104	(90 - 114)	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	80	(50 - 150)
1,2-Dichloroethane-d4	76	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	95	(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 #...: A1D050458 Work Order #...: MGJ4D1AJ-MS Matrix.....: WG
MS Lot-Sample #: A1D050458-001 MGJ4D1AK-MSD
Date Sampled...: 04/04/11 12:35 Date Received..: 04/05/11
Prep Date.....: 04/13/11 Analysis Date..: 04/13/11
Prep Batch #...: 1103146
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	99	(70 - 130)			SW846 8260B
	102	(70 - 130)	3.6	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	102	(70 - 130)			SW846 8260B
	104	(70 - 130)	1.6	(0-30)	SW846 8260B
1,2-Dibromoethane	104	(70 - 130)			SW846 8260B
	104	(70 - 130)	0.09	(0-30)	SW846 8260B
Bromochloromethane	103	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.01	(0-30)	SW846 8260B
m-Xylene & p-Xylene	97	(70 - 130)			SW846 8260B
	101	(70 - 130)	3.7	(0-30)	SW846 8260B
o-Xylene	99	(70 - 130)			SW846 8260B
	103	(70 - 130)	4.6	(0-30)	SW846 8260B
Chloromethane	98	(70 - 130)			SW846 8260B
	106	(70 - 130)	7.8	(0-30)	SW846 8260B
Bromomethane	99	(70 - 130)			SW846 8260B
	111	(70 - 130)	12	(0-30)	SW846 8260B
Vinyl chloride	95	(70 - 130)			SW846 8260B
	102	(70 - 130)	7.8	(0-30)	SW846 8260B
Chloroethane	107	(70 - 130)			SW846 8260B
	114	(70 - 130)	6.8	(0-30)	SW846 8260B
Methylene chloride	116	(70 - 130)			SW846 8260B
	121	(70 - 130)	4.2	(0-30)	SW846 8260B
Acetone	104	(70 - 130)			SW846 8260B
	112	(70 - 130)	7.3	(0-30)	SW846 8260B
Carbon disulfide	129	(70 - 130)			SW846 8260B
	139 a	(70 - 130)	7.5	(0-30)	SW846 8260B
1,1-Dichloroethene	112	(70 - 130)			SW846 8260B
	123	(70 - 130)	9.5	(0-30)	SW846 8260B
1,1-Dichloroethane	101	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.34	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	100	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.6	(0-30)	SW846 8260B
Chloroform	101	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.1	(0-30)	SW846 8260B
1,2-Dichloroethane	107	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.7	(0-30)	SW846 8260B
2-Butanone	117	(70 - 130)			SW846 8260B
	113	(70 - 130)	4.2	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D050458 **Work Order #...:** MGJ4D1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A1D050458-001 MGJ4D1AK-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	100	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.5	(0-30)	SW846 8260B
Carbon tetrachloride	101	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.27	(0-30)	SW846 8260B
Bromodichloromethane	106	(70 - 130)			SW846 8260B
	106	(70 - 130)	0.13	(0-30)	SW846 8260B
1,2-Dichloropropane	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.86	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	97	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.5	(0-30)	SW846 8260B
Trichloroethene	96	(70 - 130)			SW846 8260B
	100	(70 - 130)	4.8	(0-30)	SW846 8260B
Dihromochloromethane	103	(70 - 130)			SW846 8260B
	106	(70 - 130)	3.0	(0-30)	SW846 8260B
1,1,2-Trichloroethane	104	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.79	(0-30)	SW846 8260B
Benzene	101	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.1	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	111	(70 - 130)			SW846 8260B
	115	(70 - 130)	3.7	(0-30)	SW846 8260B
Bromoform	105	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.39	(0-30)	SW846 8260B
4-Methyl-2-pentanone	120	(70 - 130)			SW846 8260B
	120	(70 - 130)	0.0	(0-30)	SW846 8260B
2-Hexanone	123	(70 - 130)			SW846 8260B
	122	(70 - 130)	1.1	(0-30)	SW846 8260B
Tetrachloroethene	87	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.3	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.3	(0-30)	SW846 8260B
Toluene	97	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.8	(0-30)	SW846 8260B
Chlorobenzene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.0	(0-30)	SW846 8260B
Ethylbenzene	97	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.1	(0-30)	SW846 8260B
Styrene	103	(70 - 130)			SW846 8260B
	108	(70 - 130)	4.4	(0-30)	SW846 8260B
Xylenes (total)	98	(70 - 130)			SW846 8260B
	102	(70 - 130)	4.0	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D050458 **Work Order #...:** MGJ4D1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A1D050458-001 MGJ4D1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	82	(50 - 150)
	83	(50 - 150)
1,2-Dichloroethane-d4	80	(50 - 150)
	78	(50 - 150)
Toluene-d8	82	(50 - 150)
	80	(50 - 150)
4-Bromofluorobenzene	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

a Spiked analyte recovery is outside stated control limits.

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\UXJ6611.D
Report Date: 13-Apr-2011 10:26

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 13-APR-2011 10:10
Lab File ID: UXJ6611.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 4 Dibromofluoromethane	0.25974	0.21372	0.21372	0.010	17.71969	50.00000	Averaged	
$ 5 1,2-Dichloroethane-d4	0.36608	0.27833	0.27833	0.010	23.97086	50.00000	Averaged	
$ 6 Toluene-d8	1.58383	1.30779	1.30779	0.010	17.42874	50.00000	Averaged	
$ 7 Bromofluorobenzene	0.46792	0.43011	0.43011	0.010	8.08014	50.00000	Averaged	
8 Dichlorodifluoromethane	0.17985	0.12929	0.12929	0.010	NT 28.11567	50.00000	Averaged	
9 Chloromethane	0.28503	0.29236	0.29236	0.100	-2.57100	50.00000	Averaged	
10 Vinyl Chloride	0.29220	0.29301	0.29301	0.010	-0.27686	20.00000	Averaged	
11 Bromomethane	0.11098	0.12351	0.12351	0.010	-11.28943	50.00000	Averaged	
12 Chloroethane	0.13415	0.14403	0.14403	0.010	-7.35971	50.00000	Averaged	
13 Trichlorofluoromethane	0.23588	0.27623	0.27623	0.010	-17.10949	50.00000	Averaged	
15 Acrolein	0.03332	0.03188	0.03188	0.010	4.33409	50.00000	Averaged	
16 Acetone	100	115	0.09028	0.010	-15.49401	0.000e+000	Wt Linear	
17 1,1-Dichloroethene	0.18050	0.18363	0.18363	0.010	-1.73256	20.00000	Averaged	
18 Freon-113	0.10774	0.10016	0.10016	0.010	7.03634	50.00000	Averaged	
19 Iodomethane	0.18442	0.21262	0.21262	0.010	-15.29256	50.00000	Averaged	
20 Carbon Disulfide	0.39346	0.47650	0.47650	0.010	-21.10577	50.00000	Averaged	
21 Methylene Chloride	0.19948	0.23422	0.23422	0.010	-17.41951	50.00000	Averaged	
22 Acetonitrile	0.02417	0.02856	0.02856	0.010	-18.19701	50.00000	Averaged	
23 Acrylonitrile	0.09347	0.10337	0.10337	0.010	-10.59322	50.00000	Averaged	
24 Methyl tert-butyl ether	0.75233	0.74007	0.74007	0.010	1.63051	50.00000	Averaged	
25 trans-1,2-Dichloroethene	0.28939	0.27696	0.27696	0.010	4.29605	50.00000	Averaged	
26 Hexane	0.07922	0.06140	0.06140	0.010	NT 22.49639	20.00000	Averaged	<-
27 Vinyl acetate	0.48325	0.41372	0.41372	0.010	14.38737	50.00000	Averaged	
28 1,1-Dichloroethane	0.54218	0.51817	0.51817	0.100	4.42911	50.00000	Averaged	
29 tert-Butyl Alcohol	0.01466	0.01500	0.01500	0.010	-2.37028	50.00000	Averaged	
30 2-Butanone	0.11189	0.12466	0.12466	0.010	-11.41260	50.00000	Averaged	
M 31 1,2-Dichloroethene (total)	0.30104	0.28676	0.28676	0.010	4.74369	50.00000	Averaged	
32 cis-1,2-dichloroethene	0.31269	0.29657	0.29657	0.010	5.15797	50.00000	Averaged	
33 2,2-Dichloropropane	0.21702	0.21231	0.21231	0.010	2.16859	50.00000	Averaged	
34 Bromochloromethane	0.14161	0.14016	0.14016	0.010	1.02390	50.00000	Averaged	
35 Chloroform	0.50905	0.49343	0.49343	0.010	3.06783	20.00000	Averaged	
36 Tetrahydrofuran	0.07305	0.06843	0.06843	0.010	6.32790	50.00000	Averaged	
37 1,1,1-Trichloroethane	0.32666	0.30866	0.30866	0.010	5.50934	50.00000	Averaged	
38 1,1-Dichloropropene	0.42519	0.39572	0.39572	0.010	6.93090	50.00000	Averaged	
39 Carbon Tetrachloride	0.29162	0.27530	0.27530	0.010	5.59776	50.00000	Averaged	
40 1,2-Dichloroethane	0.43979	0.43248	0.43248	0.010	1.66203	50.00000	Averaged	
41 Benzene	1.25459	1.20274	1.20274	0.010	4.13238	50.00000	Averaged	
42 Trichloroethene	0.30048	0.28024	0.28024	0.010	6.73520	50.00000	Averaged	
43 1,2-Dichloropropane	0.31378	0.31288	0.31288	0.010	0.28563	20.00000	Averaged	
44 1,4-Dioxane	0.00202	0.00200	0.00200	0.010	0.63947	50.00000	Averaged	<-
45 Dibromomethane	0.16625	0.16961	0.16961	0.010	-2.02271	50.00000	Averaged	
46 Bromodichloromethane	0.34286	0.34305	0.34305	0.010	-0.05606	50.00000	Averaged	
47 2-Chloroethyl vinyl ether	0.17112	0.18251	0.18251	0.010	-6.65866	50.00000	Averaged	

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\UXJ6611.D
Report Date: 13-Apr-2011 10:26

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 13-APR-2011 10:10
Lab File ID: UXJ6611.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\8260LLUX11.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
48 cis-1,3-Dichloropropene	0.40462	0.44348	0.44348	0.010	-9.60225	50.00000	Averaged
49 4-Methyl-2-pentanone	0.21859	0.25236	0.25236	0.010	-15.44859	50.00000	Averaged
50 Toluene	1.86792	1.80946	1.80946	0.010	3.12947	20.00000	Averaged
51 trans-1,3-Dichloropropene	0.48234	0.53672	0.53672	0.010	-11.27406	50.00000	Averaged
52 Ethyl Methacrylate	0.46666	0.48411	0.48411	0.010	-3.73923	50.00000	Averaged
53 1,1,2-Trichloroethane	0.34340	0.34564	0.34564	0.010	-0.65224	50.00000	Averaged
54 1,3-Dichloropropane	0.66131	0.66518	0.66518	0.010	-0.58629	50.00000	Averaged
55 Tetrachloroethene	0.33197	0.29183	0.29183	0.010	12.08973	50.00000	Averaged
56 2-Hexanone	0.19815	0.23066	0.23066	0.010	-16.40698	50.00000	Averaged
57 Dibromochloromethane	0.31240	0.32501	0.32501	0.010	-4.03571	50.00000	Averaged
58 1,2-Dibromoethane	0.32344	0.32390	0.32390	0.010	-0.14336	50.00000	Averaged
59 Chlorobenzene	1.16010	1.10339	1.10339	0.300	4.88848	50.00000	Averaged
60 1,1,1,2-Tetrachloroethane	0.35359	0.35606	0.35606	0.010	-0.69621	50.00000	Averaged
61 Ethylbenzene	0.60603	0.59263	0.59263	0.010	2.21036	20.00000	Averaged
62 m + p-Xylene	0.76602	0.75091	0.75091	0.010	1.97256	50.00000	Averaged
M 63 Xylenes (total)	0.74685	0.73468	0.73468	0.010	1.62954	50.00000	Averaged
64 Xylene-o	0.70850	0.70221	0.70221	0.010	0.88777	50.00000	Averaged
65 Styrene	1.10338	1.17891	1.17891	0.010	-6.84558	50.00000	Averaged
66 Bromoform	50.00000	49.39740	0.16390	0.100	1.20520	0.000e+000	Wt Linear
67 Isopropylbenzene	1.75232	1.65673	1.65673	0.010	5.45499	50.00000	Averaged
68 1,1,2,2-Tetrachloroethane	0.99123	0.97752	0.97752	0.300	1.38351	50.00000	Averaged
69 1,4-Dichloro-2-butene	50.00000	61.63312	0.28317	0.010	-23.26625	0.000e+000	Wt Linear
70 1,2,3-Trichloropropane	0.32774	0.32374	0.32374	0.010	1.22043	50.00000	Averaged
71 Bromobenzene	1.15566	1.06274	1.06374	0.010	7.95359	50.00000	Averaged
72 n-Propylbenzene	1.27783	1.15905	1.15905	0.010	9.29501	50.00000	Averaged
73 2-Chlorotoluene	1.11057	1.01679	1.01679	0.010	8.44424	50.00000	Averaged
74 1,3,5-Trimethylbenzene	3.47092	3.20247	3.20247	0.010	7.73428	50.00000	Averaged
75 4-Chlorotoluene	1.14500	1.06840	1.06840	0.010	6.68998	50.00000	Averaged
76 tert-Butylbenzene	2.93625	2.51375	2.51375	0.010	14.38911	50.00000	Averaged
77 1,2,4-Trimethylbenzene	3.27311	3.10712	3.10712	0.010	5.07158	50.00000	Averaged
78 sec-Butylbenzene	3.90997	3.35514	3.35514	0.010	14.19031	50.00000	Averaged
79 4-Isopropyltoluene	2.91119	2.54400	2.54400	0.010	12.61302	50.00000	Averaged
80 1,3-Dichlorobenzene	1.70300	1.57166	1.57166	0.010	7.71203	50.00000	Averaged
81 1,4-Dichlorobenzene	1.71671	1.59009	1.59009	0.010	7.37597	50.00000	Averaged
82 n-Butylbenzene	2.24550	1.86284	1.86284	0.010	17.04153	50.00000	Averaged
83 1,2-Dichlorobenzene	1.38991	1.30899	1.30899	0.010	5.82204	50.00000	Averaged
84 1,2-Dibromo-3-chloropropane	50.00000	39.89923	0.06558	0.010	20.20155	0.000e+000	Wt Linear
85 1,2,4-Trichlorobenzene	0.72673	0.44296	0.44296	0.010	-39.04788	50.00000	Averaged
86 Hexachlorobutadiene	0.29980	0.16902	0.16902	0.010	43.62107	50.00000	Averaged
87 Naphthalene	1.52045	0.86901	0.86901	0.010	42.84546	50.00000	Averaged
88 1,2,3-Trichlorobenzene	0.67411	0.36825	0.36825	0.010	45.37292	50.00000	Averaged
98 Cyclohexane	0.41389	0.36741	0.36741	0.010	11.23039	50.00000	Averaged
143 Methyl Acetate	0.20101	0.22396	0.22396	0.010	-11.41999	50.00000	Averaged

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\UXJ6611.D
Report Date: 13-Apr-2011 10:26

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 13-APR-2011 10:10
Lab File ID: UXJ6611.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
144 Methylcyclohexane	0.47028	0.38338	0.38338	0.010	18.47771	50.00000	Averaged
141 1,3,5-Trichlorobenzene	0.80914	0.55460	0.55460	0.010	31.45827	50.00000	Averaged
150 Vinyl Acetate-86	0.04983	0.04410	0.04410	0.010	11.50963	50.00000	Averaged

4/13/11
D2021

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\UXJ6638.D
Report Date: 14-Apr-2011 08:02

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QMCRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\8260LLUX11.m
Misc Info: J10413A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.298	129.80	70-130
	42	Trichloroethene	1.000	1.040	103.99	70-130
	59	Chlorobenzene	1.000	1.061	106.09	70-130
	50	Toluene	1.000	1.083	108.28	70-130
	41	Benzene	1.000	1.093	109.32	70-130
	16	Acetone	2.000	3.424	171.18*	70-130
	20	Carbon Disulfide	1.000	1.335	133.48*	70-130
	9	Chloromethane	1.000	1.638	163.84*	70-130
	11	Bromomethane	1.000	1.443	144.28*	70-130
	10	Vinyl Chloride	1.000	1.354	135.45*	70-130
	12	Chloroethane	1.000	1.734	173.37*	70-130
	21	Methylene Chloride	1.000	1.768	176.86*	70-130
	28	1,1-Dichloroethane	1.000	1.093	109.29	70-130
M	31	1,2-Dichloroethene	2.000	2.203	110.15	70-130
	35	Chloroform	1.000	1.160	116.00	70-130
	40	1,2-Dichloroethane	1.000	1.115	111.50	70-130
	30	2-Butanone	2.000	2.676	133.81*	70-130
	37	1,1,1-Trichloroeth	1.000	1.040	104.03	70-130
	39	Carbon Tetrachlori	1.000	0.9378	93.78	70-130
	46	Bromodichlorometha	1.000	1.047	104.68	70-130
	43	1,2-Dichloropropan	1.000	1.114	111.38	70-130
	48	cis-1,3-Dichloropr	1.000	0.9143	91.43	70-130
	54	1,3-Dichloropropan	1.000	1.192	119.24	70-130
	57	Dibromochlorometha	1.000	0.9330	93.30	70-130
	53	1,1,2-Trichloroeth	1.000	1.172	117.19	70-130
	51	trans-1,3-Dichloro	1.000	0.9877	98.77	70-130
	49	4-Methyl-2-pentano	2.000	2.023	101.14	70-130
	56	2-Hexanone	2.000	2.000	100.03	70-130
	55	Tetrachloroethene	1.000	0.9465	94.65	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.245	124.55	70-130
	66	Bromoform	1.000	1.398	139.80*	70-130
	61	Ethylbenzene	1.000	0.9518	95.19	70-130
	65	Styrene	1.000	0.8598	85.98	70-130
M	63	Xylenes (total)	3.000	2.672	89.07	70-130
	32	cis-1,2-dichloroet	1.000	1.076	107.61	70-130
	25	trans-1,2-Dichloro	1.000	1.127	112.68	70-130
	8	Dichlorodifluorome	1.000	0.8239	82.39	70-130
	13	Trichlorofluoromet	1.000	1.430	NT 143.04*	70-130

Team 1 TRIP MeCl2
Equip Rinse MeCl2, Acetone
2-Butanone

70 1,2,3-Trichloropro	1.000	1.155	115.48	70-130
18 Freon-113	1.000	0.9896	98.96	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\UXJ6638.D
Report Date: 14-Apr-2011 08:02

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	1.021	102.07	70-130
58 1,2-Dibromoethane	1.000	0.9849	98.49	70-130
67 Isopropylbenzene	1.000	0.7567	75.67	70-130
80 1,3-Dichlorobenzen	1.000	1.004	100.39	70-130
81 1,4-Dichlorobenzen	1.000	1.028	102.77	70-130
83 1,2-Dichlorobenzen	1.000	1.040	103.97	70-130
84 1,2-Dibromo-3-chlo	1.000	1.371	NT 137.07*	70-130
85 1,2,4-Trichloroben	1.000	1.004	100.40	70-130
98 Cyclohexane	1.000	0.8147	81.47	70-130
143 Methyl Acetate	2.000	2.695	NT 134.74*	70-130
144 Methylcyclohexane	1.000	0.6881	68.81*	70-130
71 Bromobenzene	1.000	0.9483	94.83	70-130
34 Bromochloromethane	1.000	1.039	103.91	70-130
82 n-Butylbenzene	1.000	0.7227	72.27	70-130
78 sec-Butylbenzene	1.000	0.7492	74.92	70-130
76 tert-Butylbenzene	1.000	0.6610	NT 66.10*	70-130
73 2-Chlorotoluene	1.000	0.8337	83.37	70-130
75 4-Chlorotoluene	1.000	0.8915	89.15	70-130
45 Dibromomethane	1.000	1.216	121.63	70-130
33 2,2-Dichloropropan	1.000	1.029	102.94	70-130
38 1,1-Dichloropropen	1.000	0.8538	85.38	70-130
86 Hexachlorobutadien	1.000	1.153	115.29	70-130
19 Iodomethane	1.000	1.506	NT 150.60*	70-130
79 4-Isopropyltoluene	1.000	0.7359	73.59	70-130
87 Naphthalene	1.000	1.071	107.07	70-130
72 n-Propylbenzene	1.000	0.7820	78.20	70-130
60 1,1,1,2-Tetrachlor	1.000	1.027	102.74	70-130
88 1,2,3-Trichloroben	1.000	1.392	NT 139.23*	70-130
77 1,2,4-Trimethylben	1.000	0.7563	75.63	70-130
74 1,3,5-Trimethylben	1.000	0.7741	77.41	70-130
150 Vinyl Acetate-86	1.000	0.6789	NT 67.89*	70-130
62 m + p-Xylene	2.000	1.775	88.77	70-130
64 Xylene-o	1.000	0.8966	89.66	70-130
49 4-Methyl-2-pentano	2.000	2.023	101.14	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	8.170	81.70	75-121
$ 5 1,2-Dichloroethane	10.000	8.130	81.30	63-129
$ 6 Toluene-d8	10.000	8.111	81.11	74-115
$ 7 Bromofluorobenzene	10.000	8.548	85.48	66-117

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\UXJ6613.D
Report Date: 13-Apr-2011 11:22

TestAmerica North Canton

RECOVERY REPORT

4/13/11 @ 1055

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: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\8260LLUX11.m
Misc Info: J10413A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.211	121.10	70-130
	42	Trichloroethene	1.000	1.084	108.39	70-130
	59	Chlorobenzene	1.000	1.126	112.55	70-130
	50	Toluene	1.000	1.138	113.79	70-130
	41	Benzene	1.000	1.109	110.89	70-130
	16	Acetone	2.000	1.971	98.53	70-130
	20	Carbon Disulfide	1.000	1.309	130.89*	70-130
	9	Chloromethane	1.000	1.256	125.64	70-130
	11	Bromomethane	1.000	1.241	124.10	70-130
	10	Vinyl Chloride	1.000	1.069	106.90	70-130
	12	Chloroethane	1.000	1.205	120.48	70-130
	21	Methylene Chloride	1.000	2.300	229.97*	70-130
	28	1,1-Dichloroethane	1.000	1.103	110.28	70-130
M	31	1,2-Dichloroethene	2.000	2.171	108.53	70-130
	35	Chloroform	1.000	1.066	106.56	70-130
	40	1,2-Dichloroethane	1.000	1.196	119.64	70-130
	30	2-Butanone	2.000	2.534	126.68	70-130
	37	1,1,1-Trichloroeth	1.000	1.064	106.40	70-130
	39	Carbon Tetrachlori	1.000	0.9928	99.28	70-130
	46	Bromodichlorometha	1.000	1.019	101.90	70-130
	43	1,2-Dichloropropan	1.000	1.135	113.49	70-130
	48	cis-1,3-Dichloropr	1.000	0.9407	94.07	70-130
	54	1,3-Dichloropropan	1.000	1.111	111.11	70-130
	57	Dibromochlorometha	1.000	1.112	111.20	70-130
	53	1,1,2-Trichloroeth	1.000	1.155	115.52	70-130
	51	trans-1,3-Dichloro	1.000	0.9890	98.90	70-130
	49	4-Methyl-2-pentano	2.000	1.945	97.25	70-130
	56	2-Hexanone	2.000	1.876	93.79	70-130
	55	Tetrachloroethene	1.000	1.056	105.59	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.151	115.13	70-130
	66	Bromoform	1.000	1.341	134.14*	70-130
	61	Ethylbenzene	1.000	1.073	107.29	70-130
	65	Styrene	1.000	0.9658	96.58	70-130
M	63	Xylenes (total)	3.000	2.924	97.46	70-130
	32	cis-1,2-dichloroet	1.000	1.119	111.87	70-130
	25	trans-1,2-Dichloro	1.000	1.052	105.19	70-130
	8	Dichlorodifluorome	1.000	0.7705	77.05	70-130
	13	Trichlorofluoromet	1.000	1.183	118.28	70-130

70	1,2,3-Trichloropro	1.000	1.161	116.08	70-130
18	Freon-113	1.000	0.9067	90.67	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10413A.b\UXJ6613.D
Report Date: 13-Apr-2011 11:22

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24	Methyl tert-butyl	1.000	1.028	102.83	70-130
58	1,2-Dibromoethane	1.000	1.091	109.09	70-130
67	Isopropylbenzene	1.000	0.9005	90.05	70-130
80	1,3-Dichlorobenzen	1.000	1.012	101.19	70-130
81	1,4-Dichlorobenzen	1.000	1.210	120.96	70-130
83	1,2-Dichlorobenzen	1.000	1.160	115.97	70-130
84	1,2-Dibromo-3-chlo	1.000	1.390	NT 138.97*	70-130
85	1,2,4-Trichloroben	1.000	1.254	125.45	70-130
98	Cyclohexane	1.000	0.9500	95.00	70-130
143	Methyl Acetate	2.000	2.449	122.44	70-130
144	Methylcyclohexane	1.000	0.9192	91.92	70-130
71	Bromobenzene	1.000	1.082	108.16	70-130
34	Bromochloromethane	1.000	1.058	105.85	70-130
82	n-Butylbenzene	1.000	0.9136	91.36	70-130
78	sec-Butylbenzene	1.000	0.9456	94.56	70-130
76	tert-Butylbenzene	1.000	0.9131	91.31	70-130
73	2-Chlorotoluene	1.000	1.020	101.98	70-130
75	4-Chlorotoluene	1.000	1.013	101.35	70-130
45	Dibromomethane	1.000	1.148	114.82	70-130
33	2,2-Dichloropropan	1.000	1.009	100.89	70-130
38	1,1-Dichloropropen	1.000	1.039	103.91	70-130
86	Hexachlorobutadien	1.000	1.555	NT 155.48*	70-130
19	Iodomethane	1.000	1.401	NT 140.07*	70-130
79	4-Isopropyltoluene	1.000	0.9392	93.92	70-130
87	Naphthalene	1.000	1.469	NT 146.90*	70-130
72	n-Propylbenzene	1.000	1.001	100.10	70-130
60	1,1,1,2-Tetrachlor	1.000	1.061	106.08	70-130
88	1,2,3-Trichloroben	1.000	1.970	NT 197.01*	70-130
77	1,2,4-Trimethylben	1.000	0.9679	96.79	70-130
74	1,3,5-Trimethylben	1.000	0.9345	93.45	70-130
150	Vinyl Acetate-86	1.000	0.5824	NT 58.24*	70-130
62	m + p-Xylene	2.000	1.943	97.14	70-130
64	Xylene-o	1.000	0.9810	98.10	70-130
49	4-Methyl-2-pentano	2.000	1.945	97.25	70-130

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4	Dibromofluorometha	10.000	8.115	81.15	75-121
$ 5	1,2-Dichloroethane	10.000	7.984	79.84	63-129
$ 6	Toluene-d8	10.000	8.256	82.56	74-115
$ 7	Bromofluorobenzene	10.000	8.667	86.67	66-117

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GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 13, 2011

SDG: A1D050458 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 1.3 and 3.9 °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?	✓			A4HP10-4/12/2011, 4/26/11 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
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			4/12/11-Benzoic acid 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

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
				4/26/11-Benzoic acid and 2,4-dinitrophenol, 4-nitrophenol, 4,6-dinitro-2-methylphenol, pentachlorophenol, 3,3'-dimethylbenzidine used a quadratic fit. No qualifications were made as coefficients of determination (COD), r were ≥0.99.	
16. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			4/12/11	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓				LCG Table 2
18. Were the QC/MRL recoveries 70-130%?	✓			The closing MRL analyzed 4/13/11 @ 1624 recovered below control limits for 2,4-dinitrophenol at 51%. All 2,4-dinitrophenol results with the exception of FWGLL4mw-195c-1727-GW were qualified as estimated, "UJ". The closing MRL analyzed 4/20/11 @ 1603 recovered below control limits for 4,6-dinitro-2-methylphenol at 61%, pentachlorophenol at 55%, 2,4-dinitrophenol at 43% and 4-nitrophenol at 51%. An MDL check was analyzed following the closing MRL with detected results for all targets except 2,4-dinitrophenol. The 4,6-dinitro-2-methylphenol, pentachlorophenol and 4-nitrophenol results for FWGLL4mw-195c-1727-GW were qualified as estimated, "UJ". The bracketed 2,4-dinitrophenol samples were reanalyzed with acceptable MRL recoveries on 4/27/11. Documentation provided in SDG A1D080405.	LCG Table 2 >130%=J; <50%=J/R 50-70%=J/UJ
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			4/12/11 @ 2000, 4/26/11 @2012	LCG Table 2 >130%=J; <50%=J/R 50-70%=J/UJ;
20. Was a CCV analyzed every 12 hours?	✓			4/13/11 @ 1100, 4/20/11 @0930, 4/27/11 @0924 (2,4-dinitrophenol only)	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 13, 2011

SDG: A1D050458 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.	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?	✓				
32. Were the field duplicate RPDs ≤30%?		✓		Checked by ADR. The bis (2-ethylhexyl) phthalate field duplicate RPD was above control limits. No qualification was made as the sample results were less than the reporting limit.	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?		✓		Not enough sample provided to extract MS/MSD from this workorder.	LCG Table 2
36. Was the MS/MSD parent a Ravenna sample?			✓		

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 13, 2011

SDG: A1D050458 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%?			✓		LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?		✓		Checked by ADR. Terphenyl-d14 recovered below control limits at 46% for sample FWGLL4mw-195c-1727-GW and at 45% for sample FWGLL4mw-199c-1731-GW. No qualifiers were applied to the sample results, as LCG allows for one surrogate per fraction to be outside control limits 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.	✓				

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 Compounds	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

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 13, 2011

SDG: A1D050458 R0
Analysis: SW846 8270C (including PAHs)

2,4-Dinitrophenol	0.050
4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1729-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-001 Work Order #...: MGJ4D1AC Matrix.....: WG
Date Sampled...: 04/04/11 12:35 Date Received..: 04/05/11
Prep Date.....: 04/06/11 Analysis Date..: 04/13/11
Prep Batch #...: 1096042
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: FWGLL4mw-197C-1729-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-001 Work Order #...: MGJ4D1AC 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: FWGLL4mw-197C-1729-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-001 **Work Order #...:** MGJ4D1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	87	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	71	(50 - 150)
2,4,6-Tribromophenol	87	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1728-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-004 **Work Order #...:** MGJ4J1AC **Matrix.....:** WG
Date Sampled...: 04/04/11 14:11 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1096042
Dilution Factor: 1 **Initial Wgt/Vol:** 970 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	**0.82 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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1728-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-004 Work Order #...: MGJ4J1AC 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-1728-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-004 **Work Order #...:** MGJ4J1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	85	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-195C-1727-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-006 **Work Order #...:** MGJ4L1AC **Matrix.....:** WG
Date Sampled...: 04/04/11 16:05 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/20/11
Prep Batch #...: 1096042
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	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: FWGLL4mw-195C-1727-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-006 **Work Order #...:** MGJ4L1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	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-195C-1727-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-006 **Work Order #...:** MGJ4L1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	52	(50 - 150)
Phenol-d5	76	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-195C-1727-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-006	**Work Order #...:** MGJ4L2AC	**Matrix.....:** WG	
Date Sampled...: 04/04/11 16:05	**Date Received..:** 04/05/11		
Prep Date.....: 04/06/11	**Analysis Date..:** 04/27/11		
Prep Batch #...: 1096042			
Dilution Factor: 1	**Initial Wgt/Vol:** 1040 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	61	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	46 *	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	69	(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: FWGEQUIPRINSE1-1757-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-008 **Work Order #...:** MGJ4P1AC **Matrix.....:** WQ
Date Sampled...: 04/04/11 17:20 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1096042
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: FWGEQUIPRINSE1-1757-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-008 **Work Order #...:** MGJ4P1AC **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: FWGEQUIPRINSE1-1757-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-008 Work Order #...: MGJ4P1AC Matrix.....: WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(50 - 150)
2-Fluorobiphenyl	77	(50 - 150)
Terphenyl-d14	91	(50 - 150)
Phenol-d5	84	(50 - 150)
2-Fluorophenol	84	(50 - 150)
2,4,6-Tribromophenol	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-193C-1726-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-010 **Work Order #...:** MGJ5J1AC **Matrix.....:** WG
Date Sampled...: 04/04/11 12:48 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1096042
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: FWGLL4mw-193C-1726-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-010 **Work Order #...:** MGJ5J1AC **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-193C-1726-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-010 Work Order #...: MGJ5J1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	74	(50 - 150)
Terphenyl-d14	73	(50 - 150)
Phenol-d5	77	(50 - 150)
2-Fluorophenol	76	(50 - 150)
2,4,6-Tribromophenol	65	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-198C-1730-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-012 **Work Order #...:** MGJ5V1AC **Matrix.....:** WG
Date Sampled...: 04/04/11 15:22 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1096042
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	**2.2 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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-198C-1730-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-012 **Work Order #...:** MGJ5V1AC **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-198C-1730-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-012 Work Order #...: MGJ5V1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	73	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	79	(50 - 150)
2-Fluorophenol	77	(50 - 150)
2,4,6-Tribromophenol	90	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-199C-1731-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-015	**Work Order #...:** MGJ6E1AC	**Matrix.....:** WG	
Date Sampled...: 04/04/11 13:33	**Date Received..:** 04/05/11		
Prep Date.....: 04/06/11	**Analysis Date..:** 04/13/11		
Prep Batch #...: 1096042			
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	**1.8 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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-199C-1731-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-015 **Work Order #...:** MGJ6E1AC **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-199C-1731-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-015 **Work Order #...:** MGJ6E1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	45 *	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	87	(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: FWGLL4mw-DUP4-1749-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-017 Work Order #...: MGJ6G1AC Matrix.....: WG
Date Sampled...: 04/04/11 14:33 Date Received..: 04/05/11
Prep Date.....: 04/06/11 Analysis Date..: 04/13/11
Prep Batch #...: 1096042
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: FWGLL4mw-DUP4-1749-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-017 Work Order #...: MGJ6G1AC 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-DUP4-1749-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-017 Work Order #...: MGJ6G1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	65	(50 - 150)
Phenol-d5	78	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	89	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-200C-1732-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-019 **Work Order #...:** MGJ6J1AC **Matrix.....:** WG
Date Sampled...: 04/04/11 16:49 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1096042
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: FWGLL4mw-200C-1732-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-019 Work Order #...: MGJ6J1AC 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-200C-1732-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D050458-019 **Work Order #...:** MGJ6J1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	73	(50 - 150)
Terphenyl-d14	89	(50 - 150)
Phenol-d5	79	(50 - 150)
2-Fluorophenol	79	(50 - 150)
2,4,6-Tribromophenol	88	(50 - 150)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D050458 **Work Order #...:** MGK1T1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D060000-042

Prep Date.....: 04/06/11 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 04/13/11 **Prep Batch #...:** 1096042
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	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

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D050458 **Work Order #...:** MGK1T1AA **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	70	(50 - 150)
2-Fluorobiphenyl	74	(50 - 150)
Terphenyl-d14	89	(50 - 150)
Phenol-d5	80	(50 - 150)
2-Fluorophenol	77	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D050458 Work Order #...: MGK1T1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	84	(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 #...: A1D050458 Work Order #...: MGK1T1AC Matrix.....: WATER
LCS Lot-Sample#: A1D060000-042
Prep Date.....: 04/06/11 Analysis Date..: 04/13/11
Prep Batch #...: 1096042
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
4-Nitroaniline	74	(30 - 140)	SW846 8270C
Anthracene	81	(45 - 118)	SW846 8270C
1,2,4-Trichloro-benzene	74	(30 - 120)	SW846 8270C
Acenaphthene	79	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	83	(34 - 151)	SW846 8270C
Pyrene	78	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	72	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	78	(30 - 115)	SW846 8270C
Pentachlorophenol	45	(30 - 150)	SW846 8270C
Phenol	84	(30 - 115)	SW846 8270C
2-Chlorophenol	82	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	83	(31 - 121)	SW846 8270C
4-Nitrophenol	84	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	78	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	74	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	80	(36 - 135)	SW846 8270C
4-Methylphenol	80	(31 - 115)	SW846 8270C
Acenaphthylene	78	(37 - 115)	SW846 8270C
Benzo(a)anthracene	75	(43 - 138)	SW846 8270C
Benzo(a)pyrene	69	(38 - 144)	SW846 8270C
Benzo(h)fluoranthene	71	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	81	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	94	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	84	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	78	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	81	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	80	(30 - 154)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D050458 Work Order #...: MGK1T1AC Matrix.....: WATER
LCS Lot-Sample#: A1D060000-042

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	81	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	83	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	63	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	44	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	84	(43 - 122)	SW846 8270C
2-Chloronaphthalene	78	(35 - 115)	SW846 8270C
2-Methylnaphthalene	92	(32 - 115)	SW846 8270C
2-Methylphenol	80	(30 - 116)	SW846 8270C
2-Nitroaniline	73	(36 - 140)	SW846 8270C
2-Nitrophenol	84	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	43	(30 - 160)	SW846 8270C
3-Nitroaniline	67	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	80	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	87	(43 - 118)	SW846 8270C
4-Chloroaniline	62	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	81	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	84	(37 - 136)	SW846 8270C
Carbazole	81	(49 - 126)	SW846 8270C
Chrysene	77	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	79	(38 - 130)	SW846 8270C
Dibenzofuran	79	(40 - 115)	SW846 8270C
Diethyl phthalate	82	(43 - 132)	SW846 8270C
Dimethyl phthalate	81	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	75	(36 - 151)	SW846 8270C
Fluoranthene	83	(47 - 132)	SW846 8270C
Fluorene	79	(41 - 115)	SW846 8270C
Hexachlorobenzene	84	(42 - 123)	SW846 8270C
Hexachlorobutadiene	75	(30 - 120)	SW846 8270C
Hexachloroethane	71	(30 - 120)	SW846 8270C
Isophorone	79	(33 - 115)	SW846 8270C
Naphthalene	79	(30 - 119)	SW846 8270C
Nitrobenzene	83	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	72	(35 - 124)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D050458 Work Order #...: MGK1T1AC Matrix.....: WATER
LCS Lot-Sample#: A1D060000-042

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	80	(45 - 117)	SW846 8270C
Indeno(1,2,3-cd)pyrene	79	(37 - 130)	SW846 8270C
Di-n-butyl phthalate	85	(46 - 123)	SW846 8270C
Hexachlorocyclopenta-diene	41	(30 - 115)	SW846 8270C
Benzoic acid	60	(30 - 136)	SW846 8270C
Benzyl alcohol	83	(29 - 115)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	77	(50 - 150)
Terphenyl-d14	89	(50 - 150)
Phenol-d5	82	(50 - 150)
2-Fluorophenol	82	(50 - 150)
2,4,6-Tribromophenol	88	(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\MSS\a4hp10.i\10413a.b\QCMRLCL.D Page 1
Report Date: 13-Apr-2011 15:36

TestAmerica North Canton

RECOVERY REPORT

2,4-Dinitrophenol Failed low

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: qcmrlcl
Level: LOW
Data Type: MS DATA
SpikeList File: qcmrl.spk
Sublist File: qcmrl.sub
Method File: \\cansvr11\dd\chem\MSS\a4hp10.i\10413a.b\8270C-625.m
Misc Info:

4/13/2011 @1624

Client SDG: SDGa00195
Fraction: SV

Operator: 001710
SampleType: mrl
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
82 Acenaphthene	10.000	10.156	101.57	70-130
79 Acenaphthylene	10.000	9.9399	99.40	70-130
116 Anthracene	10.000	9.7820	97.82	70-130
136 Benzo(a)Anthracene	10.000	9.3054	93.05	70-130
141 Benzo(b)fluoranthe	10.000	8.6626	86.63	70-130
151 Benzo(g,h,i)peryle	10.000	9.8267	98.27	70-130
146 Benzo(a)pyrene	10.000	9.7686	97.69	70-130
29 Benzyl Alcohol	10.000	10.070	100.70	70-130
44 bis(2-Chloroethoxy	10.000	10.040	100.40	70-130
23 bis(2-Chloroethyl)	10.000	9.4022	94.02	70-130
31 bis(2-Chloroisopro	10.000	10.068	100.68	70-130
139 bis(2-ethylhexyl)P	10.000	10.164	101.64	70-130
106 4-Bromophenyl-phen	10.000	10.118	101.18	70-130
131 Butylbenzylphthala	10.000	9.9718	99.72	70-130
52 4-Chloroaniline	10.000	9.3599	93.60	70-130
70 2-Chloronaphthalen	10.000	10.069	100.69	70-130
95 4-Chlorophenyl-phe	10.000	10.345	103.45	70-130
137 Chrysene	10.000	9.5252	95.25	70-130
150 Dibenz(a,h)anthrac	10.000	9.9733	99.73	70-130
86 Dibenzofuran	10.000	9.9866	99.87	70-130
120 Di-n-Butylphthalat	10.000	10.064	100.64	70-130
28 1,2-Dichlorobenzen	10.000	10.064	100.65	70-130
26 1,3-Dichlorobenzen	10.000	9.9856	99.86	70-130
27 1,4-Dichlorobenzen	10.000	10.107	101.07	70-130
135 3,3'-Dichlorobenzi	10.000	9.7678	97.68	70-130
93 Diethylphthalate	10.000	10.209	102.09	70-130
76 Dimethylphthalate	10.000	10.126	101.26	70-130
87 2,4-Dinitrotoluene	10.000	10.274	102.74	70-130
78 2,6-Dinitrotoluene	10.000	10.291	102.91	70-130
140 Di-n-octylphthalat	10.000	9.9079	99.08	70-130
123 Fluoranthene	10.000	9.7027	97.03	70-130
94 Fluorene	10.000	9.9230	99.23	70-130
107 Hexachlorobenzene	10.000	10.437	104.37	70-130
56 Hexachlorobutadien	10.000	10.316	103.16	70-130
64 Hexachlorocyclopen	10.000	9.0022	90.02	70-130
34 Hexachloroethane	10.000	10.178	101.79	70-130
149 Indeno(1,2,3-cd)py	10.000	9.8192	98.19	70-130
41 Isophorone	10.000	9.9879	99.88	70-130
63 1-Methylnaphthalen	10.000	9.7688	97.69	70-130
62 2-Methylnaphthalen	10.000	9.7881	97.88	70-130

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
51	Naphthalene	10.000	9.7296	97.30	70-130
73	2-Nitroaniline	10.000	10.122	101.22	70-130
81	3-Nitroaniline	10.000	10.032	100.32	70-130
96	4-Nitroaniline	10.000	9.6577	96.58	70-130
35	Nitrobenzene	10.000	9.9964	99.96	70-130
32	N-Nitroso-di-n-pro	10.000	9.9777	99.78	70-130
99	N-Nitrosodiphenyla	10.000	10.104	101.04	70-130
115	Phenanthrene	10.000	9.8400	98.40	70-130
125	Pyrene	10.000	9.8004	98.00	70-130
50	1,2,4-Trichloroben	10.000	9.9617	99.62	70-130
49	Benzoic Acid	20.000	17.923	89.61	70-130
59	4-Chloro-3-Methylp	10.000	9.9949	99.95	70-130
24	2-Chlorophenol	10.000	9.9199	99.20	70-130
48	2,4-Dichlorophenol	10.000	9.6130	96.13	70-130
43	2,4-Dimethylphenol	10.000	9.7106	97.11	70-130
98	4,6-Dinitro-2-meth	10.000	7.4623	74.62	70-130
83	2,4-Dinitrophenol	20.000	10.447	52.24*	70-130
30	2-Methylphenol	10.000	9.9418	99.42	70-130
192	4-Methylphenol	10.000	9.8570	98.57	70-130
42	2-Nitrophenol	10.000	9.6876	96.88	70-130
85	4-Nitrophenol	10.000	7.2959	72.96	70-130
111	Pentachlorophenol	20.000	16.621	83.11	70-130
22	Phenol	10.000	10.075	100.75	70-130
67	2,4,5-Trichlorophe	10.000	9.7984	97.98	70-130
66	2,4,6-Trichlorophe	10.000	9.6173	96.17	70-130
119	Carbazole	10.000	10.119	101.19	70-130
142	Benzo(k)fluoranthe	10.000	10.929	109.29	70-130
37	Acetophenone	10.000	10.193	101.93	70-130
209	Benzaldehyde	10.000	12.012	120.12	70-130
210	Caprolactam	10.000	9.3799	93.80	70-130
211	1,1'-Biphenyl	10.000	10.054	100.54	70-130
212	Atrazine	10.000	10.050	100.50	70-130
21	Aniline	10.000	10.068	100.68	70-130
10	N-Nitrosodimethyla	10.000	10.260	102.60	70-130
80	1,2-Dinitrobenzene	10.000	9.7737	97.74	70-130
91	2,3,5,6-Tetrachlor	10.000	9.7365	97.36	70-130

Data File: \\cansvr11\dd\chem\MSS\a4hp10.i\10413a.b\QCHRLCL.D
Date : 13-APR-2011 16:24
Client ID:
Sample Info: qcmrlcl,10413a,b,8270C-625,qcmrl,sub
Volume Injected (uL): 0.5
Column phase: db5.625

Instrument: a4hp10.i
Operator: 001710
Column diameter: 0.32

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PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 13, 2011

SDG: A1D050458 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 1.3 and 3.9 °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 4/15/11 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?	✓			Instrument A2HP9 3/15/11	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%?		✓			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%?		✓		Instrument A2HP9 4/15/11 @ 0632, tox 4/15/11 @ 0352	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 13, 2011

SDG: A1D050458 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a CCV run every 12 hours?	✓				LCG Table 4
16. Was the %D for all target analytes ≤5%? 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.	LCG Appendix C >UL=J; <30%=J/R 30%-LL=J/UJ;
23. Was a MS/MSD pair prepared with each batch?		✓		Not enough sample provided to extract MS/MSD from this workorder.	LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?			✓		
25. Were MS/MSD recoveries 50-150% and RPD ≤20%?			✓		*Was QAPP Table 3-2*, Pj
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits for sample FWGLL4mw-195c-1727-GW at 31%, FWGLL4mw-196c-1728-GW at 36%, FWGLL4mw-197c-1729-GW at 40%, FWGLL4mw-198c-1730-GW at 19% and FWGLL4mw-DUP4-1749-GW at 41%. The results for samples FWGLL4mw-195c-1727-GW, FWGLL4mw-196c-1728-GW, FWGLL4mw-197c-1729-GW GW, FWGLL4mw-198c-1730-GW and FWGLL4mw-DUP4-1749-GW were qualified as estimated, "UJ".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓				QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPD's ≤ 40?			✓	There were no detected results above the RL.	LCG Table 4 >40 RPD=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 13, 2011

SDG: A1D050458 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?		✓			
31. 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 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: FWGLL4mw-197C-1729-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-001 **Work Order #...:** MGJ4D1AD **Matrix.....:** WG
Date Sampled...: 04/04/11 12:35 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1096037
Dilution Factor: 1 **Initial Wgt/Vol:** 940 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	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1728-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-004 **Work Order #...:** MGJ4J1AD **Matrix.....:** WG
Date Sampled...: 04/04/11 14:11 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1096037
Dilution Factor: 1 **Initial Wgt/Vol:** 910 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	36 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-195C-1727-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-006 **Work Order #...:** MGJ4L1AD **Matrix.....:** WG
Date Sampled...: 04/04/11 16:05 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1096037
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	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1757-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-008 **Work Order #...:** MGJ4P1AD **Matrix.....:** WQ
Date Sampled...: 04/04/11 17:20 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1096037
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	86	(50 - 150)
Decachlorobiphenyl	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-193C-1726-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-010 **Work Order #...:** MGJ5J1AD **Matrix.....:** WG
Date Sampled...: 04/04/11 12:48 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1096037
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	87	(50 - 150)
Decachlorobiphenyl	59	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-198C-1730-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-012 **Work Order #...:** MGJ5V1AD **Matrix.....:** WG
Date Sampled...: 04/04/11 15:22 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1096037
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	78	(50 - 150)
Decachlorobiphenyl	19 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-199C-1731-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-015 **Work Order #...:** MGJ6E1AD **Matrix.....:** WG
Date Sampled...: 04/04/11 13:33 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1096037
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	91	(50 - 150)
Decachlorobiphenyl	59	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-DUP4-1749-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-017	**Work Order #...:** MGJ6G1AD	**Matrix.....:** WG	
Date Sampled...: 04/04/11 14:33	**Date Received..:** 04/05/11		
Prep Date.....: 04/06/11	**Analysis Date..:** 04/16/11		
Prep Batch #...: 1096037			
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	82	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-200C-1732-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-019 **Work Order #...:** MGJ6J1AD **Matrix.....:** WG
Date Sampled...: 04/04/11 16:49 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1096037
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	83	(50 - 150)
Decachlorobiphenyl	74	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1D050458 **Work Order #...:** MGK1J1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D060000-037

Prep Date.....: 04/06/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/16/11 **Prep Batch #...:** 1096037
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	81	(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 #...: A1D050458 **Work Order #...:** MGK1J1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D060000-037
Prep Date.....: 04/06/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1096037
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	**85**	**(44 - 137)**	**SW846 8081A**
beta-BHC	**84**	**(50 - 135)**	**SW846 8081A**
delta-BHC	**88**	**(58 - 160)**	**SW846 8081A**
gamma-BHC (Lindane)	**81**	**(58 - 127)**	**SW846 8081A**
Heptachlor	**86**	**(48 - 150)**	**SW846 8081A**
Aldrin	**79**	**(53 - 128)**	**SW846 8081A**
Heptachlor epoxide	**84**	**(50 - 127)**	**SW846 8081A**
Endosulfan I	**54**	**(50 - 160)**	**SW846 8081A**
Dieldrin	**86**	**(50 - 124)**	**SW846 8081A**
4,4'-DDE	**88**	**(50 - 130)**	**SW846 8081A**
Endrin	**89**	**(50 - 137)**	**SW846 8081A**
Endosulfan II	**61**	**(50 - 144)**	**SW846 8081A**
4,4'-DDD	**96**	**(50 - 137)**	**SW846 8081A**
Endosulfan sulfate	**88**	**(50 - 160)**	**SW846 8081A**
4,4'-DDT	**91**	**(50 - 145)**	**SW846 8081A**
Methoxychlor	**94**	**(50 - 160)**	**SW846 8081A**
Endrin ketone	**86**	**(50 - 150)**	**SW846 8081A**
Endrin aldehyde	**73**	**(30 - 160)**	**SW846 8081A**
alpha-Chlordane	**84**	**(50 - 122)**	**SW846 8081A**
gamma-Chlordane	**86**	**(50 - 130)**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	60	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

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POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 13, 2011

SDG: A1D050458 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 1.3 and 3.9°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 4/13/11 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?	✓			3/9/11	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%?	✓			4/13/11	LCG Table 3 >115%=J; <80%=J/R 80-85%=J/UJ;
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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 13, 2011

SDG: A1D050458 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; <30%=J/R LL-30%=J/UJ;
21. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?		✓		The MS/MSD parent sample was from another 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 for sample FWGLL4mw-195c-1727-GW at 36%, FWGLL4mw-196c-1728-GW at 49%, FWGLL4mw-198c-1730-GW at 20% and FWGLL4mw-DUP4-1749-GW at 40%. The results for samples FWGLL4mw-195c-1727-GW, FWGLL4mw-196c-1728-GW, FWGLL4mw-198c-1730-GW and FWGLL4mw-DUP4-1749-GW 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%?	✓			Checked by ADR.	QAPP Table 3-2 RPD >30=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 13, 2011

SDG: A1D050458 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.		✓			

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:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1729-GW

GC Semivolatiles

Lot-Sample #...:	A1D050458-001	**Work Order #...:**	MGJ4D1AF	**Matrix.....:**	WG
Date Sampled...:	04/04/11 12:35	**Date Received..:**	04/05/11		
Prep Date.....:	04/06/11	**Analysis Date..:**	04/18/11		
Prep Batch #...:	1096038				
Dilution Factor:	1	**Initial Wgt/Vol:**	940 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	91	(50 - 150)
Decachlorobiphenyl	51	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1728-GW

GC Semivolatiles

Lot-Sample #...:	A1D050458-004	**Work Order #...:**	MGJ4J1AF	**Matrix.....:**	WG
Date Sampled...:	04/04/11 14:11	**Date Received..:**	04/05/11		
Prep Date.....:	04/06/11	**Analysis Date..:**	04/18/11		
Prep Batch #...:	1096038				
Dilution Factor:	1	**Initial Wgt/Vol:**	910 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	49 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-195C-1727-GW

GC Semivolatiles

Lot-Sample #...:	A1D050458-006	**Work Order #...:**	MGJ4L1AF	**Matrix.....:**	WG
Date Sampled...:	04/04/11 16:05	**Date Received..:**	04/05/11		
Prep Date.....:	04/06/11	**Analysis Date..:**	04/18/11		
Prep Batch #...:	1096038				
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	88	(50 - 150)
Decachlorobiphenyl	36 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1757-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-008	**Work Order #...:** MGJ4P1AF	**Matrix.....:** WQ	
Date Sampled...: 04/04/11 17:20	**Date Received..:** 04/05/11		
Prep Date.....: 04/06/11	**Analysis Date..:** 04/18/11		
Prep Batch #...: 1096038			
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	96	(50 - 150)
Decachlorobiphenyl	97	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-193C-1726-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-010 **Work Order #...:** MGJ5J1AF **Matrix.....:** WG
Date Sampled...: 04/04/11 12:48 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1096038
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	92	(50 - 150)
Decachlorobiphenyl	66	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-198C-1730-GW

GC Semivolatiles

Lot-Sample #...: A1D050458-012	**Work Order #...:** MGJ5V1AF	**Matrix.....:** WG	
Date Sampled...: 04/04/11 15:22	**Date Received..:** 04/05/11		
Prep Date.....: 04/06/11	**Analysis Date..:** 04/19/11		
Prep Batch #...: 1096038			
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	84	(50 - 150)
Decachlorobiphenyl	20 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-199C-1731-GW

GC Semivolatiles

Lot-Sample #...:	A1D050458-015	**Work Order #...:**	MGJ6E1AF	**Matrix.....:**	WG
Date Sampled...:	04/04/11 13:33	**Date Received..:**	04/05/11		
Prep Date.....:	04/06/11	**Analysis Date..:**	04/18/11		
Prep Batch #...:	1096038				
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	93	(50 - 150)
Decachlorobiphenyl	68	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-DUP4-1749-GW

GC Semivolatiles

Lot-Sample #...:	A1D050458-017	**Work Order #...:**	MGJ6G1AF	**Matrix.....:**	WG
Date Sampled...:	04/04/11 14:33	**Date Received..:**	04/05/11		
Prep Date.....:	04/06/11	**Analysis Date..:**	04/18/11		
Prep Batch #...:	1096038				
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	88	(50 - 150)
Decachlorobiphenyl	46 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-200C-1732-GW

GC Semivolatiles

Lot-Sample #...:	A1D050458-019	**Work Order #...:**	MGJ6J1AF	**Matrix.....:**	WG
Date Sampled...:	04/04/11 16:49	**Date Received..:**	04/05/11		
Prep Date.....:	04/06/11	**Analysis Date..:**	04/18/11		
Prep Batch #...:	1096038				
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	88	(50 - 150)
Decachlorobiphenyl	81	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1D050458 **Work Order #...:** MGK1K1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D060000-038

Prep Date.....: 04/06/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/18/11 **Prep Batch #...:** 1096038
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	88	(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 #...: A1D050458 **Work Order #...:** MGK1K1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D060000-038
Prep Date.....: 04/06/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1096038
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	**83**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(50 - 150)
Decachlorobiphenyl	58	(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 #...: A1D050458 **Work Order #...:** MGJ921DT-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D050477-006 MGJ921DU-MSD
Date Sampled...: 04/04/11 11:55 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1096039
Dilution Factor: 2 **Initial Wgt/Vol:** 525 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**84**	**(10 - 166)**			**SW846 8082**
	79	**(10 - 166)**	**7.1**	**(0-30)**	**SW846 8082**
Aroclor 1260	**81**	**(21 - 140)**			**SW846 8082**
	68	**(21 - 140)**	**17**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(27 - 130)
	82	(27 - 130)
Decachlorobiphenyl	60	(10 - 127)
	48	(10 - 127)

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 #...: A1D050458 **Work Order #...:** MGJ9L1AM-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D050477-001 MGJ9L1AN-MSD
Date Sampled...: 04/04/11 12:30 **Date Received..:** 04/05/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1096039
Dilution Factor: 2 **Initial Wgt/Vol:** 515 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**82**	**(10 - 166)**			**SW846 8082**
	85	**(10 - 166)**	**3.0**	**(0-30)**	**SW846 8082**
Aroclor 1260	**61**	**(21 - 140)**			**SW846 8082**
	70	**(21 - 140)**	**14**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(27 - 130)
	79	(27 - 130)
Decachlorobiphenyl	32	(10 - 127)
	39	(10 - 127)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

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METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 15, 2011

SDG: A1D050458 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 1.3 and 3.9°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?	✓			1/1/11	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
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		ICPMS The ICB analyzed 4/11/11 had sodium detected at 34.5ug/L and thallium detected at 0.2ug/L. The thallium result for samples FWGLL4mw-197c-1729-GF and FWGLL4mw-196c-1728-GF were qualified "U" as the detected concentrations were <5x the thallium 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.	LCG Table 7 < 5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 15, 2011

SDG: A1D050458 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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, <85%=J/R 90-85%=J/UJ;
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICPMS The CCBs analyzed 4/11/11 had detected thallium from 0.18ug/L to 0.25ug/L and sodium from 52.9ug/L to 93ug/L. No additional qualifications were made other than those made for the ICB 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.	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
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%=J/R 60%-LL= J/UJ;
27. Was a MS prepared with each batch?	✓				LCG Table 7

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 15, 2011

SDG: A1D050458 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
28. Was the MS and Lab Duplicate parent a Ravenna sample?	✓				
29. Were the MS recoveries within 75-125%?	✓				LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤20%?	✓			Checked by ADR. Only sample results with detections above the RL were evaluated.	LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	Matrix spike recoveries were within control limits.	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. The antimony and zinc field duplicate RPDs were above control limits. No qualifications were made as the sample results were less than the reporting limit.	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 15, 2011

SDG: A1D050458 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 1.1 and 2.9°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?	✓			1/1/11	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**: A1D050458 R0
Sample Event: April 2011 **Analysis**: SW846 7470A
Data Reviewer/Date: Angye Dragotta/ May 15, 2011

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%?	✓			Checked by ADR.	LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓				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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 15, 2011

SDG: A1D050458 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: FWGLL4mw-197C-1729-GF

TOTAL Metals

Lot-Sample #...: A1D050458-002 **Matrix.....:** WG
Date Sampled...: 04/04/11 12:35 **Date Received..:** 04/05/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1096018						
Silver	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4G1AN
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4G1AA
		Dilution Factor: 1		Analysis Time..: 14:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4G1AK
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**13.1**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4G1AP**
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4G1AC
		Dilution Factor: 1		Analysis Time..: 14:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**104000**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4G1AQ**
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/06-04/11/11	MGJ4G1AD
		Dilution Factor: 1		Analysis Time..: 14:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4G1AR
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4G1AT
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4G1AU
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1729-GF

TOTAL Metals

Lot-Sample #...: A1D050458-002 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4G1AE
		Dilution Factor: 1		Analysis Time..: 14:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/06-04/07/11	MGJ4G1A2
		Dilution Factor: 1		Analysis Time..: 09:27	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1020**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4G1AV**
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**17500**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4G1AW**
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4G1AX
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1340**	**1000**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ4G1AJ**
		Dilution Factor: 1		Analysis Time..: 14:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4G1A0
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4G1AL
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4G1AF
		Dilution Factor: 1		Analysis Time..: 14:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4G1AM
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1729-GF

TOTAL Metals

Lot-Sample #...: A1D050458-002 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.20 B**	**1.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ4G1AH**
		Dilution Factor: 1		Analysis Time..: 14:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4G1A1
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4G1AG
		Dilution Factor: 1		Analysis Time..: 14:52	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: FWGLL4mw-196C-1728-GF

TOTAL Metals

Lot-Sample #...: A1D050458-005 **Matrix.....:** WG
Date Sampled...: 04/04/11 14:11 **Date Received..:** 04/05/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1096018						
Silver	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4K1AR
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4K1AE
		Dilution Factor: 1		Analysis Time..: 15:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4K1AN
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**45.2**	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4K1AT
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4K1AF
		Dilution Factor: 1		Analysis Time..: 15:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**63700**	1000	ug/L	SW846 6010B	04/06-04/14/11	MGJ4K1AU
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/06-04/11/11	MGJ4K1AG
		Dilution Factor: 1		Analysis Time..: 15:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4K1AV
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4K1AW
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4K1AX
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1728-GF

TOTAL Metals

Lot-Sample #...: A1D050458-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**311**	**50.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ4K1AH**
		Dilution Factor: 1		Analysis Time..: 15:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/06-04/07/11	MGJ4K1AD
		Dilution Factor: 1		Analysis Time..: 09:38	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**664 B**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4K1A0**
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**17800**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4K1A1**
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**59.0**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4K1A2**
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2260**	**1000**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ4K1AM**
		Dilution Factor: 1		Analysis Time..: 15:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4K1AA
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4K1AP
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4K1AJ
		Dilution Factor: 1		Analysis Time..: 15:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4K1AQ
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1728-GF

TOTAL Metals

Lot-Sample #...: A1D050458-005 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.18 B**	**1.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ4K1AL**
		Dilution Factor: 1		Analysis Time..: 15:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4K1AC
		Dilution Factor: 1		Analysis Time..: 12:38	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4K1AK
		Dilution Factor: 1		Analysis Time..: 15:13	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: FWGLL4mw-195C-1727-GF

TOTAL Metals

Lot-Sample #...: A1D050458-007 **Matrix.....:** WG
Date Sampled...: 04/04/11 16:05 **Date Received..:** 04/05/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1096018						
Silver	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4N1AR
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4N1AE
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4N1AN
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**26.9**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4N1AT**
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4N1AF
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**198000**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4N1AU**
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/06-04/11/11	MGJ4N1AG
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**3.3 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4N1AV**
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4N1AW
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4N1AX
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-195C-1727-GF

TOTAL Metals

Lot-Sample #...: A1D050458-007 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**7320**	**50.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ4N1AH**
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/06-04/07/11	MGJ4N1AD
		Dilution Factor: 1		Analysis Time..: 09:47	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**987 B**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4N1A0**
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**53000**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4N1A1**
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**3490**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4N1A2**
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**9210**	**1000**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ4N1AM**
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**3.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ4N1AA**
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4N1AP
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4N1AJ
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4N1AQ
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-195C-1727-GF

TOTAL Metals

Lot-Sample #...: A1D050458-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4N1AL
		Dilution Factor: 1		Analysis Time..: 15:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4N1AC
		Dilution Factor: 1		Analysis Time..: 12:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**7.5 B**	**10.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ4N1AK**
		Dilution Factor: 1		Analysis Time..: 15:18	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: FWGEQUIPRINSE1-1757-GW

TOTAL Metals

Lot-Sample #...: A1D050458-008 **Matrix.....:** WQ
Date Sampled...: 04/04/11 17:20 **Date Received..:** 04/05/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1096018						
Silver	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1AU
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4P1AG
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1AQ
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1AV
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4P1AH
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1AW
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/06-04/11/11	MGJ4P1AJ
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1AX
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1A0
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1A1
		Dilution Factor: 1		Analysis Time..: 21:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1757-GW

TOTAL Metals

Lot-Sample #...: A1D050458-008 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4P1AK
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/06-04/07/11	MGJ4P1A7
		Dilution Factor: 1		Analysis Time..: 09:31	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1A2
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1A3
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1A4
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6020	04/06-04/11/11	MGJ4P1AP
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1A5
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1AR
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4P1AL
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1AT
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1757-GW

TOTAL Metals

Lot-Sample #...: A1D050458-008 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4P1AN
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ4P1A6
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/06-04/11/11	MGJ4P1AM
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-193C-1726-GF

TOTAL Metals

Lot-Sample #...: A1D050458-011 **Matrix.....:** WG
Date Sampled...: 04/04/11 12:48 **Date Received..:** 04/05/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1096018						
Silver	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ5Q1AR
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ5Q1AE
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ5Q1AN
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**23.8**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ5Q1AT**
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ5Q1AF
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**104000**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ5Q1AU**
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/06-04/11/11	MGJ5Q1AG
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ5Q1AV
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ5Q1AW
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ5Q1AX
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-193C-1726-GF

TOTAL Metals

Lot-Sample #...: A1D050458-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ5Q1AH
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/06-04/07/11	MGJ5Q1AD
		Dilution Factor: 1		Analysis Time..: 08:56	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**891 B**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ5Q1A0**
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**34600**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ5Q1A1**
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**181**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ5Q1A2**
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**10400**	**1000**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ5Q1AM**
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ5Q1AA
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ5Q1AP
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/06-04/11/11	MGJ5Q1AJ
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ5Q1AQ
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-193C-1726-GF

TOTAL Metals

Lot-Sample #...: A1D050458-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ5Q1AL
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ5Q1AC
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**9.3 B**	**10.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ5Q1AK**
		Dilution Factor: 1		Analysis Time..: 15:28	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: FWGLL4mw-198C-1730-GF

TOTAL Metals

Lot-Sample #...: A1D050458-013 **Matrix.....:** WG
Date Sampled...: 04/04/11 15:22 **Date Received..:** 04/05/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1096018						
Silver	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 13:13 MDL.....: 1.7	04/06-04/14/11 Analyst ID.....: 002260	MGJ571AR
Aluminum	ND	50.0 Dilution Factor: 1 Instrument ID..: I8	ug/L	SW846 6020 Analysis Time..: 15:44 MDL.....: 19.0	04/06-04/11/11 Analyst ID.....: 000079	MGJ571AE
Arsenic	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 13:13 MDL.....: 3.3	04/06-04/14/11 Analyst ID.....: 002260	MGJ571AN
Barium	**8.7 B**	**10.0** Dilution Factor: 1 Instrument ID..: I5	**ug/L**	**SW846 6010B** Analysis Time..: 13:13 MDL.....: 2.8	**04/06-04/14/11** Analyst ID.....: 002260	**MGJ571AT**
Beryllium	ND	1.0 Dilution Factor: 1 Instrument ID..: I8	ug/L	SW846 6020 Analysis Time..: 15:44 MDL.....: 0.20	04/06-04/11/11 Analyst ID.....: 000079	MGJ571AF
Calcium	**27300**	**1000** Dilution Factor: 1 Instrument ID..: I5	**ug/L**	**SW846 6010B** Analysis Time..: 13:13 MDL.....: 634	**04/06-04/14/11** Analyst ID.....: 002260	**MGJ571AU**
Cadmium	ND	0.50 Dilution Factor: 1 Instrument ID..: I8	ug/L	SW846 6020 Analysis Time..: 15:44 MDL.....: 0.13	04/06-04/11/11 Analyst ID.....: 000079	MGJ571AG
Cobalt	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 13:13 MDL.....: 1.5	04/06-04/14/11 Analyst ID.....: 002260	MGJ571AV
Chromium	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 13:13 MDL.....: 1.4	04/06-04/14/11 Analyst ID.....: 002260	MGJ571AW
Copper	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 13:13 MDL.....: 4.4	04/06-04/14/11 Analyst ID.....: 002260	MGJ571AX

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-198C-1730-GF

TOTAL Metals

Lot-Sample #...: A1D050458-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**4720**	**50.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ571AH**
		Dilution Factor: 1		Analysis Time..: 15:44	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/06-04/07/11	MGJ571AD
		Dilution Factor: 1		Analysis Time..: 09:36	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**591 B**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ571A0**
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**14100**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ571A1**
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1010**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ571A2**
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**5630**	**1000**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ571AM**
		Dilution Factor: 1		Analysis Time..: 15:44	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**25.3**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ571AA**
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ571AP
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/06-04/11/11	MGJ571AJ
		Dilution Factor: 1		Analysis Time..: 15:44	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ571AQ
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-198C-1730-GF

TOTAL Metals

Lot-Sample #...: A1D050458-013 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ571AL
		Dilution Factor: 1		Analysis Time..: 15:44	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ571AC
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**61.6**	**10.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ571AK**
		Dilution Factor: 1		Analysis Time..: 15:44	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: FWGLL4mw-199C-1731-GF

TOTAL Metals

Lot-Sample #...: A1D050458-016 **Matrix.....:** WG
Date Sampled...: 04/04/11 13:33 **Date Received..:** 04/05/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1096018						
Silver	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6F1AR
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6F1AE
		Dilution Factor: 1		Analysis Time..: 15:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**11.4**	**5.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6F1AN**
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**105**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6F1AT**
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6F1AF
		Dilution Factor: 1		Analysis Time..: 15:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**92100**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6F1AU**
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/06-04/11/11	MGJ6F1AG
		Dilution Factor: 1		Analysis Time..: 15:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6F1AV
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6F1AW
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6F1AX
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-199C-1731-GF

TOTAL Metals

Lot-Sample #...: A1D050458-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**5830**	**50.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ6F1AH**
		Dilution Factor: 1		Analysis Time..: 15:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/06-04/07/11	MGJ6F1AD
		Dilution Factor: 1		Analysis Time..: 09:35	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1320**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6F1A0**
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**22200**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6F1A1**
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**836**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6F1A2**
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**8480**	**1000**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ6F1AM**
		Dilution Factor: 1		Analysis Time..: 15:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6F1AA
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6F1AP
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.52 B**	**2.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ6F1AJ**
		Dilution Factor: 1		Analysis Time..: 15:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6F1AQ
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-199C-1731-GF

TOTAL Metals

Lot-Sample #...: A1D050458-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6F1AL
		Dilution Factor: 1		Analysis Time..: 15:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6F1AC
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**2.9 B**	**10.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ6F1AK**
		Dilution Factor: 1		Analysis Time..: 15:49	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: FWGLL4mw-DUP4-1749-GF

TOTAL Metals

Lot-Sample #...: A1D050458-018 **Matrix.....:** WG
Date Sampled...: 04/04/11 14:33 **Date Received..:** 04/05/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1096018						
Silver	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6H1AR
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6H1AE
		Dilution Factor: 1		Analysis Time..: 15:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**10**	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6H1AN
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**105**	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6H1AT
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6H1AF
		Dilution Factor: 1		Analysis Time..: 15:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**92200**	1000	ug/L	SW846 6010B	04/06-04/14/11	MGJ6H1AU
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/06-04/11/11	MGJ6H1AG
		Dilution Factor: 1		Analysis Time..: 15:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6H1AV
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6H1AW
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6H1AX
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-DUP4-1749-GF

TOTAL Metals

Lot-Sample #...: A1D050458-018 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**6010**	**50.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ6H1AH**
		Dilution Factor: 1		Analysis Time..: 15:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/06-04/07/11	MGJ6H1AD
		Dilution Factor: 1		Analysis Time..: 09:32	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1310**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6H1A0**
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**22200**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6H1A1**
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**834**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6H1A2**
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**8630**	**1000**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ6H1AM**
		Dilution Factor: 1		Analysis Time..: 15:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6H1AA
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6H1AP
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6H1AJ
		Dilution Factor: 1		Analysis Time..: 15:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6H1AQ
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-DUP4-1749-GF

TOTAL Metals

Lot-Sample #...: A1D050458-018 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6H1AL
		Dilution Factor: 1		Analysis Time..: 15:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6H1AC
		Dilution Factor: 1		Analysis Time..: 13:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6H1AK
		Dilution Factor: 1		Analysis Time..: 15:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-200C-1732-GF

TOTAL Metals

Lot-Sample #...: A1D050458-020 **Matrix.....:** WG
Date Sampled...: 04/04/11 16:49 **Date Received..:** 04/05/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1096018						
Silver	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6L1AR
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6L1AE
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6L1AN
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**10.1**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6L1AT**
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6L1AF
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**168000**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6L1AU**
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/06-04/11/11	MGJ6L1AG
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6L1AV
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6L1AW
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6L1AX
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-200C-1732-GF

TOTAL Metals

Lot-Sample #...: A1D050458-020 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6L1AH
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/06-04/07/11	MGJ6L1AD
		Dilution Factor: 1		Analysis Time..: 09:34	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**519 B**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6L1A0**
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**51500**	**1000**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6L1A1**
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**2.1 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/06-04/14/11**	**MGJ6L1A2**
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**8430**	**1000**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ6L1AM**
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6L1AA
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6L1AP
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6L1AJ
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6L1AQ
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-200C-1732-GF

TOTAL Metals

Lot-Sample #...: A1D050458-020 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGJ6L1AL
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGJ6L1AC
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**2.5 B**	**10.0**	**ug/L**	**SW846 6020**	**04/06-04/11/11**	**MGJ6L1AK**
		Dilution Factor: 1		Analysis Time..: 15:58	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 #...: A1D050458 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1D060000-018 **Prep Batch #...:** 1096018						
Aluminum	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGK0M1AA
		Dilution Factor: 1				
		Analysis Time..: 14:41		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	04/06-04/11/11	MGK0M1AF
		Dilution Factor: 1				
		Analysis Time..: 14:41		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AK
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AP
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGK0M1AC
		Dilution Factor: 1				
		Analysis Time..: 14:41		Analyst ID.....: 000079	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	04/06-04/11/11	MGK0M1AD
		Dilution Factor: 1				
		Analysis Time..: 14:41		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AQ
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AT
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AR
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AU
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	04/06-04/11/11	MGK0M1AE
		Dilution Factor: 1				
		Analysis Time..: 14:41		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1D050458 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AL
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AW
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AX
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	04/06-04/07/11	MGK0M1A2
		Dilution Factor: 1				
		Analysis Time..: 09:22		Analyst ID.....: 002260	Instrument ID..: H1	
Nickel	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1A0
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AV
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AM
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1AN
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6020	04/06-04/11/11	MGK0M1AJ
		Dilution Factor: 1				
		Analysis Time..: 14:41		Analyst ID.....: 000079	Instrument ID..: I8	
Thallium	ND	1.0	ug/L	SW846 6020	04/06-04/11/11	MGK0M1AH
		Dilution Factor: 1				
		Analysis Time..: 14:41		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	04/06-04/14/11	MGK0M1A1
		Dilution Factor: 1				
		Analysis Time..: 12:02		Analyst ID.....: 002260	Instrument ID..: I5	
Zinc	ND	10.0	ug/L	SW846 6020	04/06-04/11/11	MGK0M1AG
		Dilution Factor: 1				
		Analysis Time..: 14:41		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1D050458 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 #...: A1D050458 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A1D060000-018 **Prep Batch #...:** 1096018					
Aluminum	97	(80 - 120)	SW846 6020	04/06-04/11/11	MGK0M1A3
		Dilution Factor: 1	Analysis Time..: 14:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	102	(80 - 120)	SW846 6020	04/06-04/11/11	MGK0M1A4
		Dilution Factor: 1	Analysis Time..: 14:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Cadmium	104	(80 - 120)	SW846 6020	04/06-04/11/11	MGK0M1A5
		Dilution Factor: 1	Analysis Time..: 14:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	99	(80 - 120)	SW846 6020	04/06-04/11/11	MGK0M1A6
		Dilution Factor: 1	Analysis Time..: 14:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	102	(80 - 120)	SW846 6020	04/06-04/11/11	MGK0M1A7
		Dilution Factor: 1	Analysis Time..: 14:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	110	(80 - 120)	SW846 6020	04/06-04/11/11	MGK0M1A8
		Dilution Factor: 1	Analysis Time..: 14:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	98	(80 - 120)	SW846 6020	04/06-04/11/11	MGK0M1A9
		Dilution Factor: 1	Analysis Time..: 14:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Sodium	109	(80 - 120)	SW846 6020	04/06-04/11/11	MGK0M1CA
		Dilution Factor: 1	Analysis Time..: 14:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Arsenic	95	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CC
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Lead	104	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CD
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D050458 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	107	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CE
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Silver	93	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CF
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Barium	107	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CG
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Calcium	98	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CH
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Cobalt	99	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CJ
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Chromium	98	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CK
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Copper	104	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CL
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Potassium	101	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CM
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Magnesium	97	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CN
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Manganese	105	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CP
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Nickel	96	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CQ
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D050458 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	102	(80 - 120)	SW846 6010B	04/06-04/14/11	MGK0M1CR
		Dilution Factor: 1	Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: I5			
Mercury	99	(80 - 120)	SW846 7470A	04/06-04/07/11	MGK0M1CT
		Dilution Factor: 1	Analysis Time..: 09:26	Analyst ID.....: 002260	
		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 #...: A1D050458 **Matrix.....:** WG
Date Sampled...: 04/04/11 12:35 **Date Received..:** 04/05/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1D050458-002 **Prep Batch #...:** 1096018					
Aluminum	96	(75 - 125)	SW846 6020	04/06-04/11/11	MGJ4G1A3
		Dilution Factor: 1	Analysis Time..: 14:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	100	(75 - 125)	SW846 6020	04/06-04/11/11	MGJ4G1A7
		Dilution Factor: 1	Analysis Time..: 14:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	94	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CC
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Barium	105	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CG
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Beryllium	100	(75 - 125)	SW846 6020	04/06-04/11/11	MGJ4G1A4
		Dilution Factor: 1	Analysis Time..: 14:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	102	(75 - 125)	SW846 6020	04/06-04/11/11	MGJ4G1A5
		Dilution Factor: 1	Analysis Time..: 14:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	95	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CH
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Chromium	94	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CK
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Cobalt	96	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CJ
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Copper	103	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CL
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D050458 **Matrix.....:** WG
Date Sampled...: 04/04/11 12:35 **Date Received..:** 04/05/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	97	(75 - 125)	SW846 6020	04/06-04/11/11	MGJ4G1A6
		Dilution Factor: 1	Analysis Time..: 14:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	100	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CD
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Magnesium	96	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CN
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Manganese	103	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CP
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Mercury	100	(80 - 120)	SW846 7470A	04/06-04/07/11	MGJ4G1CT
		Dilution Factor: 1	Analysis Time..: 09:27	Instrument ID..: H1	
		Analyst ID.....: 002260			
Nickel	92	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CQ
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Potassium	100	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CM
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Selenium	105	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CE
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Silver	92	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CF
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Sodium	109	(75 - 125)	SW846 6020	04/06-04/11/11	MGJ4G1CA
		Dilution Factor: 1	Analysis Time..: 14:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Thallium	100	(75 - 125)	SW846 6020	04/06-04/11/11	MGJ4G1A9
		Dilution Factor: 1	Analysis Time..: 14:52	Instrument ID..: I8	
		Analyst ID.....: 000079			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D050458 **Matrix.....:** WG
Date Sampled...: 04/04/11 12:35 **Date Received..:** 04/05/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	100	(75 - 125)	SW846 6010B	04/06-04/14/11	MGJ4G1CR
		Dilution Factor: 1	Analysis Time..: 12:14	Instrument ID..: I5	
		Analyst ID.....: 002260			
Zinc	102	(75 - 125)	SW846 6020	04/06-04/11/11	MGJ4G1A8
		Dilution Factor: 1	Analysis Time..: 14:52	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

Lot-Sample #...: A1D050458-000 **Work Order #...:** MGJ4G-SMP MGJ4G-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A1D050458-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/06-04/14/11	1096018
		Dilution Factor: 1				Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A1D050458-002		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/06-04/11/11	1096018
		Dilution Factor: 1				Analysis Time..: 14:52	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A1D050458-002		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	04/06-04/07/11	1096018
		Dilution Factor: 1				Analysis Time..: 09:27	Analyst ID.....: 002260	
		Instrument ID..: H1						
Potassium						SD Lot-Sample #: A1D050458-002		
	1020	976 B	ug/L	4.7	(0-20)	SW846 6010B	04/06-04/14/11	1096018
		Dilution Factor: 1				Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A1D050458-002		
	17500	18400	ug/L	4.9	(0-20)	SW846 6010B	04/06-04/14/11	1096018
		Dilution Factor: 1				Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A1D050458-002		
	ND	2.3 B	ug/L	200	(0-20)	SW846 6010B	04/06-04/14/11	1096018
		Dilution Factor: 1				Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A1D050458-002		
	1340	1300	ug/L	3.2	(0-20)	SW846 6020	04/06-04/11/11	1096018
		Dilution Factor: 1				Analysis Time..: 14:52	Analyst ID.....: 000079	
		Instrument ID..: I8						
Nickel						SD Lot-Sample #: A1D050458-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/06-04/14/11	1096018
		Dilution Factor: 1				Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A1D050458-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/06-04/14/11	1096018
		Dilution Factor: 1				Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1D050458-000 **Work Order #...:** MGJ4G-SMP MGJ4G-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A1D050458-002		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/06-04/11/11	1096018
		Dilution Factor: 1				Analysis Time..: 14:52	Analyst ID.....: 000079	
		Instrument ID..: I8						
Selenium						SD Lot-Sample #: A1D050458-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/06-04/14/11	1096018
		Dilution Factor: 1				Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5						
Thallium						SD Lot-Sample #: A1D050458-002		
	0.20 B	ND	ug/L	200	(0-20)	SW846 6020	04/06-04/11/11	1096018
		Dilution Factor: 1				Analysis Time..: 14:52	Analyst ID.....: 000079	
		Instrument ID..: I8						
Vanadium						SD Lot-Sample #: A1D050458-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/06-04/14/11	1096018
		Dilution Factor: 1				Analysis Time..: 12:14	Analyst ID.....: 002260	
		Instrument ID..: I5						
Zinc						SD Lot-Sample #: A1D050458-002		
	ND	5.8 B	ug/L	200	(0-20)	SW846 6020	04/06-04/11/11	1096018
		Dilution Factor: 1				Analysis Time..: 14:52	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

THE LEADER IN ENVIRONMENTAL TESTING

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 15, 2011

SDG: A1D050458 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 1.3 and 3.9°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 ≥ .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?	✓			1/19/11	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 15, 2011

SDG: A1D050458 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%=J/R 75-80%=J/UJ;
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%=R 50-79%=J/UJ;
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 matrix spike recovered below control limits at 72%. The cyanide results associated with SDG A1D050458 were qualified as estimated, "UJ/J". (Parent sample lab ID for the matrix spike analysis incorrectly listed in the raw data as MGJD4, should be MGJ4D.)	QAPP Table 3-2 >125%=J; <30%=J/R 30-75%=J/UJ;
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued?		✓			
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 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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 15, 2011

SDG: A1D050458 R0
Analysis: SW846 9012

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1729-GW

General Chemistry

Lot-Sample #...: A1D050458-001 **Work Order #...:** MGJ4D **Matrix.....:** WG
Date Sampled...: 04/04/11 12:35 **Date Received..:** 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	0.0076 B	0.010	mg/L	SW846 9012A	04/07/11	1097302

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: FWGLL4mw-196C-1728-GW

General Chemistry

Lot-Sample #...: A1D050458-004 **Work Order #...:** MGJ4J **Matrix.....:** WG
Date Sampled...: 04/04/11 14:11 **Date Received..:** 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-195C-1727-GW

General Chemistry

Lot-Sample #...: A1D050458-006 **Work Order #...:** MGJ4L **Matrix.....:** WG
Date Sampled...: 04/04/11 16:05 **Date Received..:** 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1757-GW

General Chemistry

Lot-Sample #...: A1D050458-008 **Work Order #...:** MGJ4P **Matrix.....:** WQ
Date Sampled...: 04/04/11 17:20 **Date Received..:** 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-193C-1726-GW

General Chemistry

Lot-Sample #...: A1D050458-010 **Work Order #...:** MGJ5J **Matrix.....:** WG
Date Sampled...: 04/04/11 12:48 **Date Received..:** 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-198C-1730-GW

General Chemistry

Lot-Sample #...: A1D050458-012 **Work Order #...:** MGJ5V **Matrix.....:** WG
Date Sampled...: 04/04/11 15:22 **Date Received..:** 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-199C-1731-GW

General Chemistry

Lot-Sample #...: A1D050458-015 **Work Order #...:** MGJ6E **Matrix.....:** WG
Date Sampled...: 04/04/11 13:33 **Date Received..:** 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-DUP4-1749-GW

General Chemistry

Lot-Sample #...: A1D050458-017 **Work Order #...:** MGJ6G **Matrix.....:** WG
Date Sampled...: 04/04/11 14:33 **Date Received..:** 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-200C-1732-GW

General Chemistry

Lot-Sample #...: A1D050458-019 **Work Order #...:** MGJ6J **Matrix.....:** WG
Date Sampled...: 04/04/11 16:49 **Date Received..:** 04/05/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1D050458 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MGPAG1AA		MB Lot-Sample #:	A1D070000-302	
	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302
		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 #...: A1D050458 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MGPAG1AC	LCS Lot-Sample#: A1D070000-302		
	105	(80 - 120)	SW846 9012A	04/07/11	1097302
		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 #...: A1D050458 **Matrix.....:** WG
Date Sampled...: 04/04/11 12:35 **Date Received..:** 04/05/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: MGJ4D1AG-MS/MGJ4D1AH-MSD				MS Lot-Sample #: A1D050458-001	
	72 N	(80 - 120)			SW846 9012A	04/07/11	1097302
	83	(80 - 120)	11	(0-20)	SW846 9012A	04/07/11	1097302
		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.

Appendix 1

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1D050458										
6010B	FWGLL4mw-193C-1726-GF	AQ	N							
				Potassium	1000	891B		J	ug/L	L
6010B	FWGLL4mw-195C-1727-GF	AQ	N							
				Cobalt	5.0	3.3B		J	ug/L	L
				Nickel	10.0	3.8B		J	ug/L	L
				Potassium	1000	987B		J	ug/L	L
6010B	FWGLL4mw-196C-1728-GF	AQ	N							
				Potassium	1000	664B		J	ug/L	L
6010B	FWGLL4mw-198C-1730-GF	AQ	N							
				Barium	10.0	8.7B		J	ug/L	L
				Potassium	1000	591B		J	ug/L	L
6010B	FWGLL4mw-200C-1732-GF	AQ	N							
				Manganese	10.0	2.1B		J	ug/L	L
				Potassium	1000	519B		J	ug/L	L
6020	FWGLL4mw-193C-1726-GF	AQ	N							
				Zinc	10.0	9.3B		J	ug/L	L
6020	FWGLL4mw-195C-1727-GF	AQ	N							
				Zinc	10.0	7.5B		J	ug/L	L
6020	FWGLL4mw-196C-1728-GF	AQ	N							
				Thallium	1.0	0.18B		UJ	ug/L	Cb,L
6020	FWGLL4mw-197C-1729-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: A1D050458										
6020	FWGLL4mw-199C-1731-GF	AQ	N							
				Antimony	2.0	0.52B		J	ug/L	L,P
				Zinc	10.0	2.9B		J	ug/L	L,P
6020	FWGLL4mw-200C-1732-GF	AQ	N							
				Zinc	10.0	2.5B		J	ug/L	L
8081A	FWGLL4mw-195C-1727-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: A1D050458										
8081A	FWGLL4mw-196C-1728-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: A1D050458										
8081A	FWGLL4mw-197C-1729-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: A1D050458										
8081A	FWGLL4mw-198C-1730-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: A1D050458										
8081A	FWGLL4mw-DUP4-1749-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	FWGLL4mw-195C-1727-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: A1D050458										
8082	FWGLL4mw-196C-1728-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	FWGLL4mw-198C-1730-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	FWGLL4mw-DUP4-1749-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	FWGEQUIPRINSE1-1757-GW	AQ	EB							
				2-Butanone	10	1.2J		J	ug/L	Pj,L
				Acetone	10	4.6J		J	ug/L	Pj,L
				Chloroform	1.0	0.76J		J	ug/L	L
				Methylene chloride	2.0	1.9J B		JB	ug/L	Pj,J,F,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: A1D050458										
8260B	FWGLL4mw-199C-1731-GW	AQ	N							
				Acetone	10	2.7J		JB	ug/L	Pj,N,L
8260B	FWGLL4mw-DUP4-1749-GW	AQ	FD							
				Acetone	10	3.6J		JB	ug/L	Pj,N,L
8260B	FWGTEAM1-TRIP	AQ	TB							
				Chloroform	1.0	0.21J		J	ug/L	L
				Methylene chloride	2.0	0.35J B		JB	ug/L	Pj,J,F,L
8260B	FWGTEAM2-TRIP	AQ	TB							
				Chloroform	1.0	0.24J		J	ug/L	L
				Methylene chloride	2.0	0.35J B		JB	ug/L	Pj,J,F,L
8260B	FWGTEAM3-TRIP	AQ	TB							
				Chloroform	1.0	0.25J		J	ug/L	L
				Methylene chloride	2.0	0.42J B		JB	ug/L	Pj,J,F,L
8270C	FWGEQUIPRINSE1-1757-GW	AQ	EB							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGLL4mw-193C-1726-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGLL4mw-195C-1727-GW	AQ	N							
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	Pj
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGLL4mw-196C-1728-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	0.82J		J	ug/L	L
8270C	FWGLL4mw-197C-1729-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		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: A1D050458										
8270C	FWGLL4mw-198C-1730-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	2.2J		J	ug/L	L
8270C	FWGLL4mw-199C-1731-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.8J		J	ug/L	L,P
8270C	FWGLL4mw-200C-1732-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGLL4mw-DUP4-1749-GW	AQ	FD							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
9012A	FWGEQUIPRINSE1-1757-GW	AQ	EB							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGLL4mw-193C-1726-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGLL4mw-195C-1727-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGLL4mw-196C-1728-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGLL4mw-197C-1729-GW	AQ	N							
				Cyanide	0.010	0.0076B		J	mg/L	L,H
9012A	FWGLL4mw-198C-1730-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H

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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: A1D050458										
9012A	FWGLL4mw-199C-1731-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGLL4mw-200C-1732-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGLL4mw-DUP4-1749-GW	AQ	FD							
				Cyanide	0.010	0.010U		UJ	mg/L	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 : FWGEQUIPRINSE1-1757-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458008

Reviewed By / Date : Angye Dragotta 6/3/2011 **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	1.2		ug/L	J	YES	J								J							Pj,L
Acetone	4.6		ug/L	J	YES	J								J							Pj,L
Chloroform	0.76		ug/L	J	YES	J								J							L
Methylene chloride	1.9		ug/L	J B	YES	UJ JB			UB	J				J							Pj,J,F,L
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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 : FWGLL4mw-193C-1726-GF **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D050458011

Reviewed By / Date : Angye Dragotta 6/3/2011 **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	891		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	9.3		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 : FWGLL4mw-193C-1726-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458010

Reviewed By / Date : Angye Dragotta 6/3/2011 **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**															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										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 : FWGLL4mw-195C-1727-GF **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D050458007

Reviewed By / Date : Angye Dragotta 6/3/2011 **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	3.8		ug/L	B	YES	J								J							L
Potassium	987		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	7.5		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 : FWGLL4mw-195C-1727-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458006

Reviewed By / Date : Angye Dragotta 6/3/2011 **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 : FWGLL4mw-195C-1727-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458006

Reviewed By / Date : Angye Dragotta 6/3/2011 **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**															
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	**UJ**															Pj
4-Nitrophenol	5.0		ug/L	U	YES	**UJ**															Pj
Pentachlorophenol	5.0		ug/L	U	YES	**UJ**															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										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 : FWGLL4mw-196C-1728-GF **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D050458005

Reviewed By / Date : Angye Dragotta 6/3/2011 **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	664		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.18		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 : FWGLL4mw-196C-1728-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458004

Reviewed By / Date : Angye Dragotta 6/3/2011 **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 : FWGLL4mw-196C-1728-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458004

Reviewed By / Date : Angye Dragotta 6/3/2011 **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**															Pj
bis(2-Ethylhexyl) phthalate	0.82		ug/L	J	YES	**J**								J							L
Analysis Method : 9012A							**Dilution: 1**														
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										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 : FWGLL4mw-197C-1729-GF **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D050458002

Reviewed By / Date : Angye Dragotta 6/3/2011 **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	0.20		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 : FWGLL4mw-197C-1729-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458001

Reviewed By / Date : Angye Dragotta 6/3/2011 **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**															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.0076		mg/L	B	YES	**J**					J			J							L,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 : FWGLL4mw-198C-1730-GF **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D050458013

Reviewed By / Date : Angye Dragotta 6/3/2011 **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	591		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-198C-1730-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458012

Reviewed By / Date : Angye Dragotta 6/3/2011 **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 : FWGLL4mw-198C-1730-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458012

Reviewed By / Date : Angye Dragotta 6/3/2011 **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															PJ
bis(2-Ethylhexyl) phthalate	2.2		ug/L	J	YES	J								J							L
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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 : FWGLL4mw-199C-1731-GF **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D050458016

Reviewed By / Date : Angye Dragotta 6/3/2011 **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	0.52		ug/L	B	YES	J								J							L,P
Zinc	2.9		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 : FWGLL4mw-199C-1731-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458015

Reviewed By / Date : Angye Dragotta 6/3/2011 **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	2.7		ug/L	J	YES	UJ	JB							J		JB					Pj,N,L
Analysis Method : 8270C							**Dilution: 1**														
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.8		ug/L	J	YES	J								J							L,P
Analysis Method : 9012A							**Dilution: 1**														
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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 : FWGLL4mw-200C-1732-GF **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D050458020

Reviewed By / Date : Angye Dragotta 6/3/2011 **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**															
Manganese	2.1		ug/L	B	YES	J								J							L
Potassium	519		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	2.5		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 : FWGLL4mw-200C-1732-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458019

Reviewed By / Date : Angye Dragotta 6/3/2011 **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**															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										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 : FWGLL4mw-DUP4-1749-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458017

Reviewed By / Date : Angye Dragotta 6/3/2011 **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 : FWGLL4mw-DUP4-1749-GW **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458017

Reviewed By / Date : Angye Dragotta 6/3/2011 **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	3.6		ug/L	J	YES	UJ JB								J		UJ B					Pj,N,L
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										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 :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458003

Reviewed By / Date : Angye Dragotta 6/3/2011 **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**														
Chloroform	0.21		ug/L	J	YES	J								J							L
Methylene chloride	0.35		ug/L	J B	YES	UJ JB			JB	J				J							Pj,J,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 :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458009

Reviewed By / Date : Angye Dragotta 6/3/2011 **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**														
Chloroform	0.24		ug/L	J	YES	J								J							L
Methylene chloride	0.35		ug/L	J B	YES	UJ	5B		JB	J				J							Pj,J,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 : FWGTEAM3-TRIP **Lab Report Batch :** A1D050458 **Lab ID :** TALCAN

Sample Date : 04/04/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D050458014

Reviewed By / Date : Angye Dragotta 6/3/2011 **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**															
Chloroform	0.25		ug/L	J	YES	J								J							L
Methylene chloride	0.42		ug/L	J B	YES	~~U~~ JB			~~U~~ B	J				J							Pj,J,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

Surrogate Recovery Outlier Report

Lab Report Batch: A1D050458 **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
FWGLL4mw-195C-1727-GW	A1D050458006	8081A	1	AQ	Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	36	50.0	150.0	10.0	All Target
FWGLL4mw-196C-1728-GW	A1D050458004	8081A	1	AQ	Decachlorobiphenyl	36	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	49	50.0	150.0	10.0	All Target
FWGLL4mw-197C-1729-GW	A1D050458001	8081A	1	AQ	Decachlorobiphenyl	40	50.0	150.0	10.0	All Target
FWGLL4mw-198C-1730-GW	A1D050458012	8081A	1	AQ	Decachlorobiphenyl	19	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	20	50.0	150.0	10.0	All Target
FWGLL4mw-DUP4-1749-GW	A1D050458017	8081A	1	AQ	Decachlorobiphenyl	41	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	46	50.0	150.0	10.0	All Target

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 1097302 **Analysis Method :** 9012A **Analysis Date :** 04/07/2011

Preparation Batch : 1097302 **Preparation Type :** Gen Prep **Preparation Date :** 04/07/2011

Lab Reporting Batch : A1D050458 **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
FWGLL4mw-197C-1729-	A1D050458001S	AQ	Cyanide	72		40.00	80.00	120.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE1-1757-GW	A1D050458008
FWGLL4mw-193C-1726-GW	A1D050458010
FWGLL4mw-195C-1727-GW	A1D050458006
FWGLL4mw-196C-1728-GW	A1D050458004
FWGLL4mw-197C-1729-GW	A1D050458001
FWGLL4mw-198C-1730-GW	A1D050458012
FWGLL4mw-199C-1731-GW	A1D050458015
FWGLL4mw-200C-1732-GW	A1D050458019
FWGLL4mw-DUP4-1749-GW	A1D050458017

* 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 : 1103146 **Analysis Method :** 8260B **Analysis Date :** 04/13/2011

Preparation Batch : 1103146 **Preparation Type :** 5030B **Preparation Date :** 04/13/2011

Lab Reporting Batch : A1D050458 **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
FWGLL4mw-197C-1729-	A1D050458001D	AQ	Carbon disulfide	139		0.00	70.00	130.00	30.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL4mw-197C-1729-GW	A1D050458001

* 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)

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 1103146 **Analysis Method :** 8260B **Analysis Date :** 04/13/2011

Preparation Batch : 1103146 **Preparation Type :** 5030B **Preparation Date :** 04/13/2011

Lab Reporting Batch : A1D050458 **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
A1D130000146C	AQ	Carbon disulfide	137		30.00	74.00	123.00	30.00
		Methylene chloride	128		30.00	69.00	118.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE1-1757-GW	A1D050458008
FWGLL4mw-193C-1726-GW	A1D050458010
FWGLL4mw-195C-1727-GW	A1D050458006
FWGLL4mw-196C-1728-GW	A1D050458004
FWGLL4mw-197C-1729-GW	A1D050458001
FWGLL4mw-198C-1730-GW	A1D050458012
FWGLL4mw-199C-1731-GW	A1D050458015
FWGLL4mw-200C-1732-GW	A1D050458019
FWGLL4mw-DUP4-1749-GW	A1D050458017
FWGTEAM1-TRIP	A1D050458003
FWGTEAM2-TRIP	A1D050458009
FWGTEAM3-TRIP	A1D050458014

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)

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: A1D050458 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE1-1757	A1D050458008	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Potassium	U	1000	200.00	ug/L
		6020		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)**

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A1D050458
Lab ID: TALCAN
Method/Preparation Batch : 1103146 / 1103146
Analysis Date : 04/13/2011
Client Sample ID : FWGEQUIPRINSE1-1757-GW
Preparation Date : 04/13/2011
Lab Sample ID : A1D050458008
Preparation Type : 5030B

Analysis Method : 8260B

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.2	10	ug/L	J	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:	4.6	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
FWGLL4mw-199C-1731-GW	A1D050458015	1	2.7	J	ug/L
FWGLL4mw-DUP4-1749-GW	A1D050458017	1	3.6	J	ug/L

Chloroform	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.76	1.0	ug/L	J	

Chloroform contamination found in the equipment blank did not qualify any samples.

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.9	2.0	ug/L	J B	Common Contaminant

Methylene chloride contamination found in the equipment blank did not qualify any samples.

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A1D050458 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE1-1757	A1D050458008	8260B	AQ	2-Butanone	J	1.2	10	ug/L
				Acetone	J	4.6	10	ug/L
				Chloroform	J	0.76	1.0	ug/L
				Methylene chloride	J B	1.9	2.0	ug/L
FWGLL4mw-193C-1726-G	A1D050458011	6010B		Potassium	B	891	1000	ug/L
		6020		Zinc	B	9.3	10.0	ug/L
FWGLL4mw-195C-1727-G	A1D050458007	6010B		Cobalt	B	3.3	5.0	ug/L
				Nickel	B	3.8	10.0	ug/L
				Potassium	B	987	1000	ug/L
		6020		Zinc	B	7.5	10.0	ug/L
FWGLL4mw-196C-1728-G	A1D050458005	6010B		Potassium	B	664	1000	ug/L
		6020		Thallium	B	0.18	1.0	ug/L
FWGLL4mw-196C-1728-G	A1D050458004	8270C		bis(2-Ethylhexyl) phthalate	J	0.82	10	ug/L
FWGLL4mw-197C-1729-G	A1D050458002	6020		Thallium	B	0.20	1.0	ug/L
FWGLL4mw-197C-1729-G	A1D050458001	9012A		Cyanide	B	0.0076	0.010	mg/L
FWGLL4mw-198C-1730-G	A1D050458013	6010B		Barium	B	8.7	10.0	ug/L
				Potassium	B	591	1000	ug/L
FWGLL4mw-198C-1730-G	A1D050458012	8270C		bis(2-Ethylhexyl) phthalate	J	2.2	10	ug/L
FWGLL4mw-199C-1731-G	A1D050458016	6020		Antimony	B	0.52	2.0	ug/L
				Zinc	B	2.9	10.0	ug/L
FWGLL4mw-199C-1731-G	A1D050458015	8260B		Acetone	J	2.7	10	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J	1.8	10	ug/L
FWGLL4mw-200C-1732-G	A1D050458020	6010B		Manganese	B	2.1	10.0	ug/L
				Potassium	B	519	1000	ug/L
		6020		Zinc	B	2.5	10.0	ug/L
FWGLL4mw-DUP4-1749-	A1D050458017	8260B		Acetone	J	3.6	10	ug/L
FWGTEAM1-TRIP	A1D050458003			Chloroform	J	0.21	1.0	ug/L
				Methylene chloride	J B	0.35	2.0	ug/L
FWGTEAM2-TRIP	A1D050458009			Chloroform	J	0.24	1.0	ug/L
				Methylene chloride	J B	0.35	2.0	ug/L
FWGTEAM3-TRIP	A1D050458014			Chloroform	J	0.25	1.0	ug/L
				Methylene chloride	J B	0.42	2.0	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A1D050458
Lab ID: TALCAN
Analysis Method : 8260B
Analysis Date : 04/13/2011
Preparation Type : 5030B
Preparation Date : 04/13/2011
Method Blank Lab Sample ID : A1D130000146B
Preparation Batch : 1103146

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.99	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
FWGEQUIPRINSE1-1757-G	A1D050458008	1	1.9	J B	ug/L
FWGTEAM1-TRIP	A1D050458003	1	0.35	J B	ug/L
FWGTEAM2-TRIP	A1D050458009	1	0.35	J B	ug/L
FWGTEAM3-TRIP	A1D050458014	1	0.42	J B	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A1D050458 **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	Antimony	FWGLL4mw-199C	ES/TO	0.52	B	FWGLL4mw-DUP	ES/TO	2.0	U	200.0	30	ug/L
	AQ	Zinc		ES/TO	2.9	B		ES/TO	10.0	U	200.0	30	ug/L
8270C	AQ	bis(2-Ethylhexyl) phthalate	FWGLL4mw-199C	RES	1.8	J	FWGLL4mw-DUP	RES	10	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.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 4, 2011
TA Sample Delivery Group: A1D060428 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On April 5, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1D060428.

Field Sample ID	Analytes	Method
FWGB12mw-012c-1713-GW	Explosives Nitroguanidine Nitrocellulose	SW846 8330 SW846 M8330 TAL- SOP WS-WC-0050
FWGLL1mw-085c-1720-GW		
FWGLL1mw-084c-1719-GW		
FWGLL1mw-DUP2-1747-GW		
FWGB12mw-010c-1712-GW		
FWGDETmw-003c-1739-GW		
FWGEQUIPRinse2-1758-GW		
FWGDETmw-004c-1740-GW		
FWGLL1mw-082c-1718-GW		
FWGLL1mw-081c-1716-GW		
FWGLL1mw-067c-1715-GW		
FWGBKGmw-010c-1708-GW		
FWGSCFmw-004-1744-GW	Nitrate-Nitrite Explosives Nitroguanidine Nitrocellulose	353.2 SW846 8330 SW846 M8330 TAL- SOP WS-WC-0050
FWGSCFmw-DUP1-1751-GW		
FWGSCFmw-005-1745-GW		
FWGSCFmw-006-1746-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 cooler temperatures were documented as being received from 1.9°C – 3.8°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.

Explosives- 8330
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
- Retention time criteria
- MDL Verification
- Surrogate recovery criteria
- Equipment and method blanks free from contamination
- MS Recovery Criteria
- LCS Recovery Criteria

MRL Recovery
LC10- the following outliers were noted:

- The MRL analyzed 4/13/11 @2051 recovered above control limits with a %D of 31% for 2-nitrotoluene.
- The MRL analyzed 4/14/11 @0553 recovered above control limits with a %D of 31% for 2-nitrotoluene and 46% for 3-nitrotoluene.
- The MRL analyzed 4/14/11 @1454 recovered above control limits with a %D of 34% for 2-nitrotoluene and 33% for 4-nitrotoluene.
- The MRL analyzed 4/14/11 @2355 recovered above control limits with a %D of 37% for 2,6-dinitrotoluene and 36% for 3-nitrotoluene.
- The MRL analyzed 4/15/11 @1247 recovered above control limits with a %D of 32% for 4-amino-2,6-dinitrotoluene and 33% for 4-nitrotoluene.
- The MRL analyzed 4/15/11 @2148 recovered above control limits with a %D of 34% for 2,6-dinitrotoluene and 35% for 3-nitrotoluene.

LC12- the following outliers were noted:

- The MRL analyzed 4/15/11 @2002 recovered above control limits with a %D of 32% for RDX.

No qualifications were made, as there were no associated detections bracketed by the MRL outliers.

Blanks
Due to excessive particulates, sample FWGB12mw-012c-1713-GW, required filtration. A filter blank was prepared and analyzed with no detected concentrations.

Confirmation Column RPD
The 1,3,5-trinitrobenzene and HMX results for samples FWGLL1mw-084c-1719-GW and FWGLL1mw-DUP2-1747-GW had confirmation column RPDs above control limits as did the 1,3,5-trinitrobenzene result for FWGLL1mw-081c-1716-GW. Targets with confirmation column outlier RPDs were qualified as estimated, "J" for samples FWGLL1mw-084c-1719-GW, FWGLL1mw-DUP2-1747-GW and FWGLL1mw-081c-1716-GW.

Surrogate Recoveries
The surrogate 3,4-dinitrotoluene recovered above control limits (~ 400%) in samples FWGLL1mw-084c-1719-GW and FWGLL1mw-DUP2-1747-GW. Surrogate recoveries due to high levels of 4-amino2,6-dintrotoluene present in samples FWGLL1mw-084c-1719-GW and FWGLL1mw-DUP2-1747-GW. Detected results for samples FWGLL1mw-084c-1719-GW and FWGLL1mw-DUP2-1747-GW were qualified as estimated, "J".

Nitroguanidine- 8330M
The following QC criteria were reviewed with acceptable results, except as noted below:

- 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 – WS-WC-0050
The following QC criteria were reviewed with acceptable results, except as noted below:

- 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.

Nitrate/Nitrite –353.2

The following QC criteria were reviewed with acceptable results, except as noted below:

- 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

The matrix spike and duplicate recovered below control limits at 87% and 88%. The nitrate-nitrite results were qualified as estimated, "UJ/J".

SAMPLE SUMMARY

A1D060428

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MGLG7	001	FWGB12mw-012C-1713-GW	04/05/11	09:11
MGLH8	002	FWGLL1mw-085C-1720-GW	04/05/11	10:51
MGLJC	003	FWGLL1mw-084C-1719-GW	04/05/11	13:25
MGLJD	004	FWGLL1mw-DUP2-1747-GW	04/05/11	14:15
MGLJH	005	FWGB12mw-010C-1712-GW	04/05/11	16:00
MGLJM	006	FWGDETmw-003C-1739-GW	04/05/11	17:50
MGLJP	007	FWGSCFmw-004-1744-GW	04/05/11	10:02
MGLJR	008	FWGSCFmw-DUP1-1751-GW	04/05/11	13:02
MGLJW	009	FWGSCFmw-005-1745-GW	04/05/11	15:08
MGLJX	010	FWGSCFmw-006-1746-GW	04/05/11	16:38
MGLJ0	011	FWGEQUIPRINSE2-1758-GW	04/05/11	18:22
MGLJ2	012	FWGDETmw-004C-1740-GW	04/04/11	18:00
MGLJ7	013	FWGLL1mw-082C-1718-GW	04/05/11	09:23
MGLKA	014	FWGLL1mw-081C-1716-GW	04/05/11	11:23
MGLKH	015	FWGLL1mw-067C-1715-GW	04/05/11	14:23
MGLKK	016	FWGBKGmw-010C-1708-GW	04/05/11	17:03

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

15

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	4/5/11	000491
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 2**
1800 Carillon Blvd	513-825-7500		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Cincinnati / OH / 45240	E. Corbin	M. Loeb	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP OH	Lab pick-up		
Contract/Purchase Order/Quote No.			
030240.0006 PO# 16726			

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 8260	SVOC 8270	Pest 8081	PCB 8082	Explosive 8330	Propellants	Cyanide 9012	Metals 6010/7470	Special Instructions/ Conditions of Receipt
																					Cooler ID
✓ FWGTeam1-Trip	4/5/11	08:00		X						3			X								13
FWGB12mw-012C-1713-GW	4/5/11	09:11		X			4			3	1		X	X		X	X	X	X		13 Minimum Volumes
FWGB12mw-012C-1713-GF	4/5/11	09:11		X					1											X	13 Min Volume
FWGLL1mw-085C-1720-GW	4/5/11	10:51		X			9			3	1		X	X	X	X	X	X	X		PH4
FWGLL1mw-085C-1720-GF	4/5/11	10:51		X					1											X	PH4
FWGLL1mw-084C-1719-GW		13:25		X			9			3	1		X	X	X	X	X	X	X		AD7
~~FWGLL1mw-DUP2~~																					
FWGLL1mw-084C-1719-GF	4/5/11	13:25		X					1											X	AD7
✓ FWGLL1mw-DUP2-1747-GW	4/5/11	14:15		X			9			3	1		X	X	X	X	X	X	X		M12
FWGLL1mw-DUP2-1747-GF	4/5/11	14:15		X					1											X	M12
FWGB12mw-010C-1712-GW	4/5/11	16:00		X			9			3	1		X	X	X	X	X	X	X		219
FWGB12mw-010C-1712-GF	4/5/11	16:00		X					1											X	219

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 are field filtered

1. Relinquished By: Gabe Corbin EQ	Date 4/5/11	Time 18:45	1. Received By: FedEx
2. Relinquished By: FedEx	Date 4/5/11	Time 1952	2. Received By: [signature]
3. Relinquished By	Date	Time	3. Received By

1. Received By: FedEx	Date 4/5/11	Time 1845	
2. Received By: [signature]	Date 4/6/11	Time 0700	
3. Received By	Date	Time	

Comments: Temps may not meet requirements if sample collection close to lab pickup
All VOCs in Cooler 13

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

16

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	4/5/11	000492
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 2**
1800 Carillon Blvd	513-825-7500		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Cincinnati / OH / 45240	E. Corbin	M. Loeb	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP OH	Lab pickup		
Contract/Purchase Order/Quote No.			
03-240-0006 PO# 16726			

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 8260	SVOC 8270	Pest 8081	PCB 8082	Explosive 8330	Propellants	Cyanide 9012	Metals 6010B/7470A	Special Instructions/ Conditions of Receipt
																					Cooler ID
FWGDETmw-003C-1739-GW	4/5/11	17:50		X			9			3	1		X	X	X	X	X	X	X		AS03
FWGDETmw-003C-1739-GF	4/5/11	17:50		X					1		1									X	AS03

4/5/11

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 [ ] 21 Days [ ] Other per SOW

QC Requirements (Specify): Metals are field filtered

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	4/5/11	18:45	1. Received By:	4/5/11	1845
2. Relinquished By:	4/5/11	1952	2. Received By:	4/6/11	0700
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments: Temps may not meet requirements if sample collection close to lab pickup
All VOCs in cooler 3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica Laboratory location: Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Page 2 = 019326

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: E. Corbin	Lab Contact: M. Loeb	COC No: 019329
Address: 1800 CAPILLON	Telephone: 825 7500	Telephone: 513 825-7500	Telephone: 330 4979396	1 of 2 COCs
City/State/Zip: CINCINNATI OH 45240	Email: ecorbin@eqm.com			
Phone: 513 825 7500				
Project Name: RVAAP Ravenna OH	Method of Shipment/Carrier: Lab Pickup			
Project Number: 30240.0006.	Shipping/Tracking No: N/A			
PO #				

Analysis Turnaround Time (Business days): 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:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite (Y/N)	VOC	SVOC	Pest	PCB	Expl	Propellants	Cyanide	NO2 NO3	Metals	Sample Specific Notes / Special Instructions:
FWG Team 2 - Trip - 0404 11	4-4-11	1800		✓				1		2							X									180
FWG SCFmw-004-1744-GW	4-5-11	1002		✓				1		3	1		9				X	X	X	X	X	X	X	X		313
FWG SCFmw-004-1744-GF	+	1002		✓					1																X	313
FWG SCFmw-DUP1 1751-GW	+	1302		✓				1		3	1		9				X	X	X	X	X	X	X	X		182
FWG SCFmw-DUP1-1751-GF	+	1302		✓					1																X	182
FWG SCFmw-005-1745-GW	+	1508		✓				1		3	1		9				X	X	X	X	X	X	X	X		180
FWG SCFmw-005-1745-GF	+	1508		✓					1																X	180
FWG SCFmw-006-1746-GW	+	1638		✓				1		3	1		9				X	X	X	X	X	X	X	X		C222
FWG SCFmw-006-1746-GF	+	1638		✓					1																X	C222
FWG EQUIP Rinse 2-1758-GW	+	1822		✓				1	1	3	1		9				X	X	X	X	X	X	X	X	X	STE-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:

temps may not be w/in limits if it is close to sample pickup time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	4/5/11 18:45	[illegible]	TAL-NC	4/5/11 1845
[illegible]	TAL-NC	4/5/11 - 1952			
			Received in Laboratory by: [illegible]	TA NC	4/6/11 0700

Metals field filtered

All VOAs in cooler 180

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TAL 0018-1 (04/10)

North Canton

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Chain of Custody Record

TestAmerica Laboratory location: Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

Pg 1 = 19329

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: E Corbin	Lab Contact: M. Loeb	COC No: 019326
Address: 1800 CARNEGIE	Telephone: 5138257500	Telephone: 5138257500	Telephone: 3304979396	2 of 2 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com	Analysis Turnaround Time (CALENDAR DAYS or BUS DAYS)	Analyses	
Phone: 5138257500		TAT if different from below ____		
Project Name: RVAAP	Method of Shipment/Carrier: FC Lab Pickup	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 30240.0006	Shipping/Tracking No:			
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	VOC	SVOC	Pest	PCB	Explosives	Propellants	Nitrates	Metals	Sample Specific Notes / Special Instructions:
FWGDETMW004C-1740-GW	4-4-11	1800		✓						3	1		9				X	X	X	X	X	X			317
FWG DETMW-004C-1740 GF	↓	↓		✓					1														X		317

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 were filtered. temps/pres not metal requirements if close to lab pick up. all VOAs in cooler 180.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Emily Corbin	EQ	4/5/11 1845	FC Fedex	TAL-XIC	4/5/11 1845
FC Fedex	TAL-XIC	4/5/11 1952			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA NC	4/6/11 0700

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North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	4/5/11	000464
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
1800 Carillon	5138257500	330497 936	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Cincinnati / OH / 45240	E. Corbin	M. Lobb	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP			
Contract/Purchase Order/Quote No.			
30240.0002			

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	Zn Ac/ NaOH	Analysis (Attach list if more space is needed): VOC 8260	SVOC 8270	PAST 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/7470	Special Instructions/ Conditions of Receipt: Cooler ID
FWG-Team 3-Trip	4-5-11	0800		X									X								T52
FWGLLMW-082C-1718-GW		0923		X			9			3	1		X	X	X	X	X	X	X		T52
FWGLLMW-082C-1718-GF		↓		X					1											X	T52
FWGLLMW-081C-1716-GW		1123		X			27			9	3		X	X	X	X	X	X	X		0411, 176, 316
FWGLLMW-081C-1716-GF		↓		X					3											X	0411, 176, 316
FWGLLMW-067C-1715-GW		1423		X			9			3	1		X	X	X	X	X	X	X		8
FWGLLMW-067C-1715-GF		↓		X					1											X	8
FWGBYGMW-010C-1708-GW		1703		X			9			3	1		X	X	X	X	X	X	X		12009
FWGBYGMW-010C-1708-GF		↓		X					1											X	12009
FWGRQLMW-017C-1638-GW		1543		X			1			3			X	X							8
~~AD~~ 4/5/11																					

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 SOW

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.		4/5/11	1845		4/5/11	1845
2.		4/5/11	1952		4/6/11	0700
3.		Date	Time		Date	Time

Comments: Metals (GF) were field filtered
Temps may not meet requirements if sample collection time is close to lab pickup time.
All VOAs in cooler T52

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 410604428

North Canton Facility

Client EQM Project RVAAP By: (Signature)

Cooler Received on 4/6/11 Opened on 4/6/11

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 3
   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#* 100110-HNO_3; *Sulfuric Acid Lot#* 110410-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
1713	<2 >12	4/6/11	[illegible]
1720	<2 >12		
1719	<2 >12		
1747	<2 >12		
1712	<2 >12		
1739	<2 >12		
1744	<2 <2 >12		
1751	<2 <2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1745	<2 <2 >12	4/6/11	9
1746	<2 <2 >12		
1758	<2 <2 >12		
1740	<2 >12		
1718	<2 >12		
1716	<2 >12		
1715	<2 >12		
1708	<2 >12		

Cooler #	Temp. °C	Cooler #	Temp.	Method	Coolant
13	1.9	T52	2.2	IR	Ice
PH4	3.8	0411	3.4		
AD7	3.6	176	2.2		
M12	3.2	316	3.2		
219	2.9	8	3.1		
ASD3	2.3	12009	2.1		
313	3.8				
182	3.0				
180	2.5				
C222	2.7				
STL-1	2.7				
317	3.3				

Discrepancies Cont'd:

CASE NARRATIVE

A1D060428

The following report contains the analytical results for sixteen 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 April 06, 2011, according to documented sample acceptance procedures.

All analyses were performed at the TestAmerica West Sacramento Laboratory. Refer to the 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 April 21, 2011. 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. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

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 1.9 to 3.8° 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 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) 1102390 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.

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, a Matrix Spike/Matrix Spike Duplicate (MS/MSD) pair or a Matrix Spike/Sample Duplicate (MS/DU) pair.
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. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch, with the exception of poor performing analytes. A list of these analytes is listed below. No corrective action is taken if these analytes do not meet criteria.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.

Poor performers

Method 8270 Water and Solid:	
4-Nitrophenol	3,3' – Dichlorobenzidine
Benzoic Acid	2,4,6 - Tribromophenol
Phenol	2,4-Dinitrophenol
Phenol-d5	Pentachlorophenol
4,6-Dinitro-2-methylphenol	Hexachlorocyclopentadiene (LCG only)
Benzyl Alcohol	4-Chloroaniline
Method 8151 Solid	
Dinoseb	
Method 8260 Water and Solid	
Dichlorodifluoromethane	Hexachlorobutadiene
Trichlorofluoromethane	Naphthalene
Chloroethane	1,2,3-Trichlorobenzene
Acetone	1,2,4-Trichlorobenzene
Bromomethane	2,2-Dichloropropane
Bromoform	Chloromethane

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 ten 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 do 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 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 or Matrix Spike/Sample Duplicate.

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, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, 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), DoD ELAP (ADE-1437) USDA Soil Permit (P33-08-00123)

Case Narrative

TestAmerica West Sacramento Project Number A1D060428

General Comments
The samples were received at 1 degrees C.

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 integration being performed. The following samples and analytes required manual integration:

LC10
8330 MRL standard (analyzed on 4/13/11 @ 20:51) – Tetryl
8330 MRL standard (analyzed on 4/14/11 @ 05:53) – Tetryl
8330 MRL standard (analyzed on 4/14/11 @ 23:55) – Tetryl & PETN
8330 MRL standard (analyzed on 4/15/11 @ 12:47) - Tetryl & 2,4,6-Trinitrotoluene
Sample 14MS – Tetryl, 3,4-Dinitrotoluene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Amino-4,6-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
Sample 14MSD - Tetryl

WATER, 8330, Explosives
Sample(s): 1
This sample was filtered prior to extraction since it 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, 14MS, 14MSD, 15, 16
The percent difference values for some of the following analytes are above the project specific acceptance criteria in the associated MRL standards: RDX, 4-Nitrotoluene, 4-Amino-2,6-Dinitrotoluene, 3-Nitrotoluene, 2,6-Dinitrotoluene, PETN, & 2-Nitrotoluene. For corrective action a standard at approximately 2X the MDL was analyzed and these analytes were detected.

Sample(s): 3, 4
These samples have high surrogate recoveries due to visible chromatographic interferences. The surrogate recoveries in the associated method blank and laboratory control sample (LCS) were within established control limits. The results for these samples may be biased high.

There were no other anomalies associated with this project.

ANALYTICAL METHODS SUMMARY

A1D060428

PARAMETER	ANALYTICAL METHOD
Nitrate-Nitrite	MCAWW 353.2
Nitroaromatics and Nitramines by HPLC	SW846 8330
Nitrocellulose as N, WS-WC-0050 (Colorimetric)	TAL-SOP WS-WC-0050
Organics by UV/HPLC	SW846 8330 (Modified)

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

TAL-SOP TESTAMERICA LABORATORIES INC., LABORATORY STANDARD OPERATING PROCEDURE

WATER, 8330, Explosives

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 4, 2011

SDG: A1D060428 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 cooler temperatures were documented as being received from 1.9°C – 3.8°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 4/13/11 @2051 recovered above control limits with a %D of 31% for 2-nitrotoluene. • The MRL analyzed 4/14/11 @0553 recovered above control limits with a %D of 31% for 2-nitrotoluene and 46% for 3-nitrotoluene. • The MRL analyzed 4/14/11 @1454 recovered above control limits with a %D of 34% for 2-nitrotoluene and 33% for 4-nitrotoluene. • The MRL analyzed 4/14/11 @2355 recovered above control limits with a %D of 37% for 2,6-dinitrotoluene and 36% for 3-nitrotoluene. • The MRL analyzed 4/15/11 @1247 recovered above control limits with a %D of 32% for 4-amino-2,6-dinitrotoluene and 33% for 4-nitrotoluene. • The MRL analyzed 4/15/11 @2148 recovered above control limits with a %D of 34% for 2,6-dinitrotoluene and 35% for 3-nitrotoluene. LC12- the following outliers were noted: • The MRL analyzed 4/15/11 @2002 recovered above control limits with a %D of 32% for RDX. No qualifications were made, as there were no associated detections bracketed by the MRL outliers.	LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			LC10 1/9/11, LC12 4/12/11 LC12- 2-nitrotoluene coeluted with 4-nitrotoluene. LC12 is not used for quantitation purposes, so no qualification was made.	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

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 4, 2011

SDG: A1D060428 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
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 1/9/11@1027 , LC12 4/13/11 @ 0034	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
15. Was a method blank prepared and analyzed with each batch?	✓			Due to excessive particulates, sample FWGB12mw-012c-1713-GW, required filtration. A filter blank was prepared and analyzed with no detected concentrations.	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%?			✓		QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Were the RPDs ≤ 40%?		✓		The 1,3,5-trinitrobenzene and HMX results for samples FWGLL1mw-084c-1719-GW and FWGLL1mw-DUP2-1747-GW had confirmation column RPDs above control limits as did the 1,3,5-trinitrobenzene result for FWGLL1mw-081c-1716-GW. Targets with confirmation column outlier RPDs were qualified as estimated, "J" for samples FWGLL1mw-084c-1719-GW, FWGLL1mw-DUP2-1747-GW and FWGLL1mw-081c-1716-GW.	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?	✓				

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 4, 2011

SDG: A1D060428 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
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.	✓			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:
The surrogate 3,4-dinitrotoluene recovered above control limits (~ 400%) in samples FWGLL1mw-084c-1719-GW and FWGLL1mw-DUP2-1747-GW. Surrogate recoveries due to high levels of 4-amino2,6-dintrotoluene present in samples FWGLL1mw-084c-1719-GW and FWGLL1mw-DUP2-1747-GW. Detected results for samples FWGLL1mw-084c-1719-GW and FWGLL1mw-DUP2-1747-GW were qualified as estimated, "J".

Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-012C-1713-GW

HPLC

Lot-Sample #...: A1D060428-001 Work Order #...: MGLG71AA Matrix.....: WG
Date Sampled...: 04/05/11 09:11 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1.19 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.036
1,3-Dinitrobenzene	ND	0.12	ug/L	0.060
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.12
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.060
2,4-Dinitrotoluene	ND	0.12	ug/L	0.060
2,6-Dinitrotoluene	ND	0.12	ug/L	0.060
2-Nitrotoluene	ND	0.60	ug/L	0.10
3-Nitrotoluene	ND	0.60	ug/L	0.068
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.060
4-Nitrotoluene	ND	0.60	ug/L	0.10
HMX	ND	0.12	ug/L	0.043
Nitrobenzene	ND	0.12	ug/L	0.060
Nitroglycerin	ND	0.77	ug/L	0.39
RDX	ND	0.12	ug/L	0.043
PETN	ND	0.77	ug/L	0.36
Tetryl	ND	0.12	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1720-GW

HPLC

Lot-Sample #...: A1D060428-002 Work Order #...: MGLH81AA Matrix.....: WG
Date Sampled...: 04/05/11 10:51 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
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	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1719-GW

HPLC

Lot-Sample #...: A1D060428-003 Work Order #...: MGLJC1AA Matrix.....: WG
Date Sampled...: 04/05/11 13:25 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1.1 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	3.3 PG	0.11	ug/L	0.033
1,3-Dinitrobenzene	0.41	0.11	ug/L	0.055
2-Amino-4,6-dinitrotoluene	13	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	8.4	0.11	ug/L	0.055
2,4-Dinitrotoluene	1.7	0.11	ug/L	0.055
2,6-Dinitrotoluene	0.69	0.11	ug/L	0.055
2-Nitrotoluene	ND	0.55	ug/L	0.097
3-Nitrotoluene	ND	0.55	ug/L	0.063
4-Nitrotoluene	ND	0.55	ug/L	0.097
HMX	0.79 PG	0.11	ug/L	0.040
Nitrobenzene	0.096 J	0.11	ug/L	0.055
Nitroglycerin	ND	0.72	ug/L	0.36
RDX	0.42	0.11	ug/L	0.040
PETN	ND	0.72	ug/L	0.33
Tetryl	ND	0.11	ug/L	0.055

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	415 *	(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-1719-GW

HPLC

Lot-Sample #...: A1D060428-003 Work Order #...: MGLJC2AA Matrix.....: WG
Date Sampled...: 04/05/11 13:25 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/15/11
Prep Batch #...: 1101074
Dilution Factor: 2.19 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4-Amino-2,6-dinitrotoluene	26	0.22	ug/L	0.11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	412 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1747-GW

HPLC

Lot-Sample #...: A1D060428-004 Work Order #...: MGLJD1AA Matrix.....: WG
Date Sampled...: 04/05/11 14:15 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1.15 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	3.8 PG	0.12	ug/L	0.034
1,3-Dinitrobenzene	0.56	0.12	ug/L	0.058
2-Amino-4,6-dinitrotoluene	13	0.12	ug/L	0.12
2,4,6-Trinitrotoluene	9.8	0.12	ug/L	0.058
2,4-Dinitrotoluene	2.0	0.12	ug/L	0.058
2,6-Dinitrotoluene	0.81	0.12	ug/L	0.058
2-Nitrotoluene	ND	0.58	ug/L	0.10
3-Nitrotoluene	ND	0.58	ug/L	0.066
4-Nitrotoluene	ND	0.58	ug/L	0.10
HMX	0.85 PG	0.12	ug/L	0.041
Nitrobenzene	ND	0.12	ug/L	0.058
Nitroglycerin	ND	0.75	ug/L	0.38
RDX	0.49	0.12	ug/L	0.041
PETN	ND	0.75	ug/L	0.34
Tetryl	ND	0.12	ug/L	0.058

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	400 *	(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%.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-DUP2-1747-GW

HPLC

Lot-Sample #...: A1D060428-004 Work Order #...: MGLJD2AA Matrix.....: WG
Date Sampled...: 04/05/11 14:15 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/15/11
Prep Batch #...: 1101074
Dilution Factor: 2.31 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4-Amino-2,6-dinitrotoluene	27	0.23	ug/L	0.12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	389 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-010C-1712-GW

HPLC

Lot-Sample #...: A1D060428-005 Work Order #...: MGLJH1AA Matrix.....: WG
Date Sampled...: 04/05/11 16:00 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
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	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-003C-1739-GW

HPLC

Lot-Sample #...: A1D060428-006 Work Order #...: MGLJM1AA Matrix.....: WG
Date Sampled...: 04/05/11 17:50 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1.1 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.033
1,3-Dinitrobenzene	ND	0.11	ug/L	0.055
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.055
2,4-Dinitrotoluene	ND	0.11	ug/L	0.055
2,6-Dinitrotoluene	ND	0.11	ug/L	0.055
2-Nitrotoluene	ND	0.55	ug/L	0.097
3-Nitrotoluene	ND	0.55	ug/L	0.063
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.055
4-Nitrotoluene	ND	0.55	ug/L	0.097
HMX	ND	0.11	ug/L	0.040
Nitrobenzene	ND	0.11	ug/L	0.055
Nitroglycerin	ND	0.72	ug/L	0.36
RDX	ND	0.11	ug/L	0.040
PETN	ND	0.72	ug/L	0.33
Tetryl	ND	0.11	ug/L	0.055

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1744-GW

HPLC

Lot-Sample #...: A1D060428-007 Work Order #...: MGLJP1AC Matrix.....: WG
Date Sampled...: 04/05/11 10:02 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1.22 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.037
1,3-Dinitrobenzene	ND	0.12	ug/L	0.061
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.12
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.061
2,4-Dinitrotoluene	ND	0.12	ug/L	0.061
2,6-Dinitrotoluene	ND	0.12	ug/L	0.061
2-Nitrotoluene	ND	0.61	ug/L	0.11
3-Nitrotoluene	ND	0.61	ug/L	0.070
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.061
4-Nitrotoluene	ND	0.61	ug/L	0.11
HMX	ND	0.12	ug/L	0.044
Nitrobenzene	ND	0.12	ug/L	0.061
Nitroglycerin	ND	0.79	ug/L	0.40
RDX	ND	0.12	ug/L	0.044
PETN	ND	0.79	ug/L	0.37
Tetryl	ND	0.12	ug/L	0.061

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1751-GW

HPLC

Lot-Sample #...: A1D060428-008 Work Order #...: MGLJR1AC Matrix.....: WG
Date Sampled...: 04/05/11 13:02 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
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	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1745-GW

HPLC

Lot-Sample #...: A1D060428-009 Work Order #...: MGLJW1AC Matrix.....: WG
Date Sampled...: 04/05/11 15:08 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1.15 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.034
1,3-Dinitrobenzene	ND	0.12	ug/L	0.058
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.12
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.058
2,4-Dinitrotoluene	ND	0.12	ug/L	0.058
2,6-Dinitrotoluene	ND	0.12	ug/L	0.058
2-Nitrotoluene	ND	0.58	ug/L	0.10
3-Nitrotoluene	ND	0.58	ug/L	0.066
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.058
4-Nitrotoluene	ND	0.58	ug/L	0.10
HMX	ND	0.12	ug/L	0.041
Nitrobenzene	ND	0.12	ug/L	0.058
Nitroglycerin	ND	0.75	ug/L	0.38
RDX	ND	0.12	ug/L	0.041
PETN	ND	0.75	ug/L	0.34
Tetryl	ND	0.12	ug/L	0.058

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1746-GW

HPLC

Lot-Sample #...: A1D060428-010 Work Order #...: MGLJX1AC Matrix.....: WG
Date Sampled...: 04/05/11 16:38 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
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	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1758-GW

HPLC

Lot-Sample #...: A1D060428-011 Work Order #...: MGLJ01AC Matrix.....: WQ
Date Sampled...: 04/05/11 18:22 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1.14 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.034
1,3-Dinitrobenzene	ND	0.11	ug/L	0.057
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.057
2,4-Dinitrotoluene	ND	0.11	ug/L	0.057
2,6-Dinitrotoluene	ND	0.11	ug/L	0.057
2-Nitrotoluene	ND	0.57	ug/L	0.10
3-Nitrotoluene	ND	0.57	ug/L	0.065
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.057
4-Nitrotoluene	ND	0.57	ug/L	0.10
HMX	ND	0.11	ug/L	0.041
Nitrobenzene	ND	0.11	ug/L	0.057
Nitroglycerin	ND	0.74	ug/L	0.38
RDX	ND	0.11	ug/L	0.041
PETN	ND	0.74	ug/L	0.34
Tetryl	ND	0.11	ug/L	0.057

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-004C-1740-GW

HPLC

Lot-Sample #...: A1D060428-012 Work Order #...: MGLJ21AA Matrix.....: WG
Date Sampled...: 04/04/11 18:00 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1.16 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	0.058
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.12
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.058
2,4-Dinitrotoluene	ND	0.12	ug/L	0.058
2,6-Dinitrotoluene	ND	0.12	ug/L	0.058
2-Nitrotoluene	ND	0.58	ug/L	0.10
3-Nitrotoluene	ND	0.58	ug/L	0.066
4-Amino-2,6-dinitrotoluene	**0.10 J**	**0.12**	**ug/L**	**0.058**
4-Nitrotoluene	ND	0.58	ug/L	0.10
HMX	**2.4**	**0.12**	**ug/L**	**0.042**
Nitrobenzene	ND	0.12	ug/L	0.058
Nitroglycerin	ND	0.75	ug/L	0.38
RDX	**5.4**	**0.12**	**ug/L**	**0.042**
PETN	ND	0.75	ug/L	0.35
Tetryl	ND	0.12	ug/L	0.058

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-082C-1718-GW

HPLC

Lot-Sample #...: A1D060428-013 Work Order #...: MGLJ71AA Matrix.....: WG
Date Sampled...: 04/05/11 09:23 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1.11 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.033
1,3-Dinitrobenzene	ND	0.11	ug/L	0.056
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.056
2,4-Dinitrotoluene	ND	0.11	ug/L	0.056
2,6-Dinitrotoluene	ND	0.11	ug/L	0.056
2-Nitrotoluene	ND	0.56	ug/L	0.098
3-Nitrotoluene	ND	0.56	ug/L	0.063
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.056
4-Nitrotoluene	ND	0.56	ug/L	0.098
HMX	**0.40**	**0.11**	**ug/L**	**0.040**
Nitrobenzene	ND	0.11	ug/L	0.056
Nitroglycerin	ND	0.72	ug/L	0.37
RDX	**0.42**	**0.11**	**ug/L**	**0.040**
PETN	ND	0.72	ug/L	0.33
Tetryl	ND	0.11	ug/L	0.056

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1716-GW

HPLC

Lot-Sample #...: A1D060428-014 Work Order #...: MGLKA1AA Matrix.....: WG
Date Sampled...: 04/05/11 11:23 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 0.99 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	0.11 PG	0.099	ug/L	0.030
1,3-Dinitrobenzene	ND	0.099	ug/L	0.050
2-Amino-4,6-dinitrotoluene	1.4	0.099	ug/L	0.099
2,4,6-Trinitrotoluene	0.057 J	0.099	ug/L	0.050
2,4-Dinitrotoluene	0.058 J	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	1.8	0.099	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.087
HMX	0.70	0.099	ug/L	0.036
Nitrobenzene	ND	0.099	ug/L	0.050
Nitroglycerin	ND	0.64	ug/L	0.33
RDX	1.6	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	99	(50 - 150)

NOTE(S):

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-067C-1715-GW

HPLC

Lot-Sample #...: A1D060428-015 Work Order #...: MGLKH1AA Matrix.....: WG
Date Sampled...: 04/05/11 14:23 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
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	101	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-010C-1708-GW

HPLC

Lot-Sample #...: A1D060428-016 Work Order #...: MGLKK1AA Matrix.....: WG
Date Sampled...: 04/05/11 17:03 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1.2 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.036
1,3-Dinitrobenzene	ND	0.12	ug/L	0.060
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.12
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.060
2,4-Dinitrotoluene	ND	0.12	ug/L	0.060
2,6-Dinitrotoluene	ND	0.12	ug/L	0.060
2-Nitrotoluene	ND	0.60	ug/L	0.11
3-Nitrotoluene	ND	0.60	ug/L	0.068
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.060
4-Nitrotoluene	ND	0.60	ug/L	0.11
HMX	ND	0.12	ug/L	0.043
Nitrobenzene	ND	0.12	ug/L	0.060
Nitroglycerin	ND	0.78	ug/L	0.40
RDX	ND	0.12	ug/L	0.043
PETN	ND	0.78	ug/L	0.36
Tetryl	ND	0.12	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

METHOD BLANK REPORT

HPLC

Client Lot #...: A1D060428 Work Order #...: MGTWF1AA Matrix.....: WATER
MB Lot-Sample #: G1D110000-074

Prep Date.....: 04/11/11
Analysis Date..: 04/13/11 Prep Batch #...: 1101074
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	100	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

METHOD BLANK REPORT

HPLC

Client Lot #...: A1D060428 Work Order #...: MGTWF1AD Matrix.....: WATER
MB Lot-Sample #: G1D110000-074

Prep Date.....: 04/11/11
Analysis Date..: 04/14/11 Prep Batch #...: 1101074
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.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1D060428 Work Order #...: MGTWF1AC Matrix.....: WATER
LCS Lot-Sample#: G1D110000-074
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	110	(53 - 135)	SW846 8330
1,3-Dinitrobenzene	112	(54 - 120)	SW846 8330
2-Amino-4,6-dinitrotoluene	107	(53 - 120)	SW846 8330
2,4,6-Trinitrotoluene	85	(37 - 120)	SW846 8330
2,4-Dinitrotoluene	108	(58 - 136)	SW846 8330
2,6-Dinitrotoluene	108	(52 - 144)	SW846 8330
2-Nitrotoluene	103	(52 - 120)	SW846 8330
3-Nitrotoluene	102	(48 - 136)	SW846 8330
4-Amino-2,6-dinitrotoluene	107	(58 - 159)	SW846 8330
4-Nitrotoluene	105	(46 - 136)	SW846 8330
HMX	105	(45 - 140)	SW846 8330
Nitrobenzene	107	(49 - 120)	SW846 8330
Nitroglycerin	100	(60 - 120)	SW846 8330
RDX	112	(39 - 120)	SW846 8330
PETN	95	(60 - 120)	SW846 8330
Tetryl	98	(30 - 120)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(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 #...: A1D060428 Work Order #...: MGLKA1AC-MS Matrix.....: WG
MS Lot-Sample #: A1D060428-014 MGLKA1AD-MSD
Date Sampled...: 04/05/11 11:23 Date Received..: 04/06/11
Prep Date.....: 04/11/11 Analysis Date..: 04/14/11
Prep Batch #...: 1101074
Dilution Factor: 1.03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	96	(50 - 150)			SW846 8330
	98	(50 - 150)	1.8	(0-50)	SW846 8330
1,3-Dinitrobenzene	109	(50 - 150)			SW846 8330
	112	(50 - 150)	0.88	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	126	(50 - 150)			SW846 8330
	121	(50 - 150)	3.4	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	83	(50 - 150)			SW846 8330
	85	(50 - 150)	0.05	(0-50)	SW846 8330
2,4-Dinitrotoluene	106	(50 - 150)			SW846 8330
	107	(50 - 150)	1.8	(0-50)	SW846 8330
2,6-Dinitrotoluene	105	(50 - 150)			SW846 8330
	108	(50 - 150)	0.55	(0-50)	SW846 8330
2-Nitrotoluene	106	(50 - 150)			SW846 8330
	108	(50 - 150)	0.91	(0-50)	SW846 8330
3-Nitrotoluene	105	(50 - 150)			SW846 8330
	105	(50 - 150)	2.8	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	137	(50 - 150)			SW846 8330
	130	(50 - 150)	3.8	(0-50)	SW846 8330
4-Nitrotoluene	106	(50 - 150)			SW846 8330
	107	(50 - 150)	2.2	(0-50)	SW846 8330
HMX	107	(50 - 150)			SW846 8330
	108	(50 - 150)	1.1	(0-50)	SW846 8330
Nitrobenzene	102	(50 - 150)			SW846 8330
	107	(50 - 150)	1.4	(0-50)	SW846 8330
Nitroglycerin	98	(50 - 150)			SW846 8330
	100	(50 - 150)	1.3	(0-50)	SW846 8330
RDX	130	(50 - 150)			SW846 8330
	117	(50 - 150)	6.1	(0-50)	SW846 8330
PETN	96	(50 - 150)			SW846 8330
	97	(50 - 150)	1.8	(0-50)	SW846 8330
Tetryl	94	(50 - 150)			SW846 8330
	102	(50 - 150)	4.4	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1D060428 **Work Order #...:** MGLKA1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1D060428-014 MGLKA1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)
	104	(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: 04132011
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
13-APR-2011	10:18	NS	PRIMER	A-000001.	1000 mL	20 mL	1	
13-APR-2011	11:04	NS	STD_06 11GCSV0170 8330 200-500	A-000002.	0 g	0 mL	1	
13-APR-2011	11:49	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000003.	0 g	0 mL	1	2x mpr Check
13-APR-2011	12:34	NS	MGQCX1AA 1098154 G1D080000-154	A-000004.	1000 mL	20 mL	1	
13-APR-2011	13:19	NS	MGQCX1AE 1098154 G1D080000-154	A-000005.	1000 mL	20 mL	1	
13-APR-2011	14:05	NS	MGQCX1AC 1098154 G1D080000-154	A-000006.	1000 mL	20 mL	1	
13-APR-2011	14:50	NS	MGQCX1AD 1098154 G1D080000-154	A-000007.	1000 mL	20 mL	1	
13-APR-2011	15:35	NS	MGJ191AA 1098154 A1D050444-1 1	A-000008.	1005.12 mL	20 mL	1	
13-APR-2011	16:20	NS	MGJ2C1AA 1098154 A1D050444-2 1	A-000009.	968.96 mL	20 mL	1	
13-APR-2011	17:05	NS	MGJ2D1AA 1098154 A1D050444-3 1	A-000010.	1024.28 mL	20 mL	1	
13-APR-2011	17:51	NS	MGJ2F1AA 1098154 A1D050444-4 1	A-000011.	1028.57 mL	20 mL	1	
13-APR-2011	18:36	NS	MGJ2H1AA 1098154 A1D050444-5 1	A-000012.	897.69 mL	20 mL	1	
13-APR-2011	19:21	NS	MGJ2J1AA 1098154 A1D050444-6 1	A-000013.	1018.9 mL	20 mL	1	
13-APR-2011	20:06	NS	STD_05 10GCSV0524 8330 100-200	A-000014.	0 g	0 mL	1	
13-APR-2011	20:51	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000015.	0 g	0 mL	1	2-NT
13-APR-2011	21:36	NS	MGJ2L1AA 1098154 A1D050444-7 1	A-000016.	1002.47 mL	20 mL	1	
13-APR-2011	22:21	NS	MGJ2M1AA 1098154 A1D050444-8 1	A-000017.	1019.86 mL	20 mL	1	
13-APR-2011	23:07	NS	MGJ2N1AA 1098154 A1D050444-9 1	A-000018.	1029.84 mL	20 mL	1	
13-APR-2011	23:52	NS	MGTWF1AA 1101074 G1D110000-74	A-000019.	1000 mL	20 mL	1	
14-APR-2011	00:37	NS	MGTWF1AD 1101074 G1D110000-74	A-000020.	1000 mL	20 mL	1	
14-APR-2011	01:22	NS	MGTWF1AC 1101074 G1D110000-74	A-000021.	1000 mL	20 mL	1	
14-APR-2011	02:07	NS	MGLG71AA 1101074 A1D060428-1 1	A-000022.	839.4 mL	20 mL	1	
14-APR-2011	02:52	NS	MGLH81AA 1101074 A1D060428-2 1	A-000023.	944.39 mL	20 mL	1	
14-APR-2011	03:37	NS	MGLJC1AA 1101074 A1D060428-3 1	A-000024.	909.33 mL	20 mL	1	
14-APR-2011	04:22	NS	MGLJD1AA 1101074 A1D060428-4 1	A-000025.	863.58 mL	20 mL	1	
14-APR-2011	05:08	NS	STD_05 10GCSV0524 8330 100-200	A-000026.	0 g	0 mL	1	2-NT & 3-NT
14-APR-2011	05:53	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000027.	0 g	0 mL	1	
14-APR-2011	06:38	NS	MGLJH1AA 1101074 A1D060428-5 1	A-000028.	942.73 mL	20 mL	1	
14-APR-2011	07:23	NS	MGLJM1AA 1101074 A1D060428-6 1	A-000029.	904.51 mL	20 mL	1	
14-APR-2011	08:08	NS	MGLJP1AC 1101074 A1D060428-7 1	A-000030.	814.65 mL	20 mL	1	
14-APR-2011	08:53	NS	MGLJR1AC 1101074 A1D060428-8 1	A-000031.	944.02 mL	20 mL	1	
14-APR-2011	09:38	NS	MGLJW1AC 1101074 A1D060428-9 1	A-000032.	865.83 mL	20 mL	1	
14-APR-2011	10:24	NS	MGLJX1AC 1101074 A1D060428-10	A-000033.	978.55 mL	20 mL	1	
14-APR-2011	11:09	NS	MGLJ01AC 1101074 A1D060428-11	A-000034.	872.07 mL	20 mL	1	
14-APR-2011	11:54	NS	QC CHECK	A-000035.	1000 mL	20 mL	1	
14-APR-2011	12:39	NS	MGLJ21AA 1101074 A1D060428-12	A-000036.	855.48 mL	20 mL	1	
14-APR-2011	13:24	NS	MGLJ71AA 1101074 A1D060428-13	A-000037.	899.68 mL	20 mL	1	
14-APR-2011	14:09	NS	STD_05 10GCSV0524 8330 100-200	A-000038.	0 g	0 mL	1	
14-APR-2011	14:54	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000039.	0 g	0 mL	1	2-NT & 4-NT
14-APR-2011	15:40	NS	MGLKA1AA 1101074 A1D060428-14	A-000040.	1008.87 mL	20 mL	1	
14-APR-2011	16:24	NS	MGLKA1AC 1101074 A1D060428-14	A-000041.	962.7 mL	20 mL	1	
14-APR-2011	17:09	NS	MGLKA1AD 1101074 A1D060428-14	A-000042.	995.11 mL	20 mL	1	
14-APR-2011	17:54	NS	MGLKH1AA 1101074 A1D060428-15	A-000043.	933.6 mL	20 mL	1	
14-APR-2011	18:39	NS	MGLKK1AA 1101074 A1D060428-16	A-000044.	829.6 mL	20 mL	1	
14-APR-2011	19:24	NS	MGV3E1AA 1102080 G1D120000-80	A-000045.	1000 mL	20 mL	1	
14-APR-2011	20:09	NS	MGV3E1AC 1102080 G1D120000-80	A-000046.	1000 mL	20 mL	1	
14-APR-2011	20:54	NS	MGT4M1AA 1102080 G1D110417-1 1	A-000047.	1010.44 mL	20 mL	1	
14-APR-2011	21:40	NS	MGT5C1AA 1102080 G1D110417-2 1	A-000048.	1011.98 mL	20 mL	1	
14-APR-2011	22:25	NS	MGT5D1AA 1102080 G1D110417-3 1	A-000049.	998.33 mL	20 mL	1	
14-APR-2011	23:10	NS	STD_05 10GCSV0524 8330 100-200	A-000050.	0 g	0 mL	1	

Sequence continued on next page

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page 2 of Batch 04132011 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
14-APR-2011	23:55	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000051.	0 g	0 mL	1	2,6-DNT N-3 NT
15-APR-2011	00:40	NS	MGT5E1AA 1102080 G1D110417-4 1	A-000052.	1003.33 mL	20 mL	1	
15-APR-2011	01:25	NS	MGT3L1AA 1101153 G1D110000-153	A-000053.	1000 mL	20 mL	1	
15-APR-2011	02:10	NS	MGT3L1AC 1101153 G1D110000-153	A-000054.	1000 mL	20 mL	1	
15-APR-2011	02:55	NS	MGPTV1AA 1101153 G1D070642-1 1	A-000055.	997.33 mL	20 mL	1	
15-APR-2011	03:40	NS	MGPTW1AA 1101153 G1D070642-2 1	A-000056.	993.38 mL	20 mL	1	
15-APR-2011	04:25	NS	MGPTX1AA 1101153 G1D070642-3 1	A-000057.	1001.06 mL	20 mL	1	
15-APR-2011	05:10	NS	MGPT01AA 1101153 G1D070642-4 1	A-000058.	986.42 mL	20 mL	1	
15-APR-2011	05:56	NS	MGPT11AA 1101153 G1D070642-5 1	A-000059.	990.99 mL	20 mL	1	
15-APR-2011	06:41	NS	MGPT21AA 1101153 G1D070642-6 1	A-000060.	1002.01 mL	20 mL	1	
15-APR-2011	07:26	NS	MGPT31AA 1101153 G1D070642-7 1	A-000061.	997.06 mL	20 mL	1	
15-APR-2011	08:11	NS	MGPT41AA 1101153 G1D070642-8 1	A-000062.	987.66 mL	20 mL	1	
15-APR-2011	08:56	NS	STD_05 10GCSV0524 8330 100-200	A-000063.	0 g	0 mL	1	

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC10 Batch ID: 01082011
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
08-JAN-2011	13:00	RN	8330 PRIMER	A-000001.	0 g	0 mL	1	
08-JAN-2011	13:34	RN	8330 PRIMER	A-000002.	0 g	0 mL	1	
08-JAN-2011	14:06	RN	8330 PRIMER	A-000003.	0 g	0 mL	1	
08-JAN-2011	14:36	RN	8330 PRIMER	A-000004.	0 g	0 mL	1	
08-JAN-2011	15:20	RN	8330 PRIMER	A-000005.	0 g	0 mL	1	
08-JAN-2011	16:03	RN	8330 PRIMER	A-000006.	0 g	0 mL	1	
08-JAN-2011	16:45	RN	8330 PRIMER	A-000007.	0 g	0 mL	1	
08-JAN-2011	17:28	RN	8330 PRIMER	A-000008.	0 g	0 mL	1	
08-JAN-2011	18:11	RN	8330 PRIMER	A-000009.	0 g	0 mL	1	
08-JAN-2011	18:54	RN	8330 PRIMER	A-000010.	0 g	0 mL	1	
08-JAN-2011	19:37	RN	Nitrobenzene	A-000011.	0 g	0 mL	1	
08-JAN-2011	20:20	RN	8330 PRIMER	A-000012.	0 g	0 mL	1	
08-JAN-2011	21:03	RN	8330 PRIMER	A-000013.	0 g	0 mL	1	
08-JAN-2011	21:47	RN	8330 PRIMER	A-000014.	0 g	0 mL	1	
08-JAN-2011	22:34	RN	8330 PRIMER	A-000015.	0 g	0 mL	1	
08-JAN-2011	23:14	RN	8330 PRIMER	A-000016.	0 g	0 mL	1	
08-JAN-2011	23:59	RN	8330 PRIMER	A-000017.	0 g	0 mL	1	
09-JAN-2011	00:41	RN	Tetryl Std	A-000018.	0 g	0 mL	1	
09-JAN-2011	01:26	RN	BLANK	A-000019.	0 g	0 mL	1	
09-JAN-2011	02:11	RN	ICAL L1 10GCSV0528 8330 5ng/mL	A-000020.	0 g	0 mL	1	
09-JAN-2011	02:56	RN	ICAL L2 10GCSV0527 8330 10ng/m	A-000021.	0 g	0 mL	1	
09-JAN-2011	03:41	RN	ICAL L3 10GCSV0526 8330 20ng/m	A-000022.	0 g	0 mL	1	
09-JAN-2011	04:26	RN	ICAL L4 10GCSV0525 8330 50ng/m	A-000023.	0 g	0 mL	1	
09-JAN-2011	05:11	RN	ICAL L5 10GCSV0524 8330 100ng/	A-000024.	0 g	0 mL	1	
09-JAN-2011	05:56	RN	ICAL L6 10GCSV0523 8330 200ng/	A-000025.	0 g	0 mL	1	
09-JAN-2011	06:42	RN	ICAL L7 10GCSV0522 8330 500ng/	A-000026.	0 g	0 mL	1	
09-JAN-2011	07:27	RN	ICAL L8 10GCSV0521 8330 1000ng	A-000027.	0 g	0 mL	1	
09-JAN-2011	08:12	RN	BLANK	A-000028.	0 g	0 mL	1	
09-JAN-2011	08:57	RN	MRL 10GCSV0528 8330 5ng/mL	A-000029.	0 g	0 mL	1	
09-JAN-2011	09:42	RN	MRL 10GCSV0526 8330 20ng/mL	A-000030.	0 g	0 mL	1	
09-JAN-2011	10:27	RN	ICV 10GCSV0502 8330 200ng/mL	A-000031.	0 g	0 mL	1	

printed before end of sequence.
RDN 1/9/11

TestAmerica West Sacramento

A-000015.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date:	4/13/2011 20:51	**Operator:**	NS
DataFile:	LC10.I\04132011.B\A-000015.D	**Vial Num:**	7
Instrument ID:	LC10		

Sample : **STD_MRL 11GCSV0086 8330 5-20ng/mL**

Method File: LC10.I\04132011.B\8330AB.M

Start Cal Date: 1/9/2011 2 11 **End Cal Date:** 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** 1_CAL.SUB **SpikeList:** 0

Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;

Misc. Info: MRL;9;;;;3,1_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	16.44	1072	19.4200<	20	-3%	Acceptable		16.44	2114	20.0600	20	0%	Acceptable		(±15)	
HMX	**5.27**	**760**	**5.8720<**	**5**	**17%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
RDX	**7.50**	**550**	**6.0390<**	**5**	**21%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
Picric ACID	8.61	4379	54.4000	50	9%	Acceptable		8.60	6606	55.6200<	50	11%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.74	827	5.2240<	5	4%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
1,3-Dinitrobenzene	12.33	857	5.5340<	5	11%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
TETRYL	13.35	511	5.5000<	5	10%	Acceptable	M				**5**	**-100%**	**Fails**		(±15)	45
Nitrobenzene	13.95	379	5.2940<	5	6%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2,4,6-Trinitrotoluene	15.40	474	5.0310<	5	1%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
4-AM-2,6-DNT	15.98	417	5.4780<	5	10%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2-AM-4,6-DNT	**16.97**	**498**	**5.9360<**	**5**	**19%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
2,6-Dinitrotoluene	18.41	331	5.6130<	5	12%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2,4-Dinitrotoluene	19.06	543	5.7200<	5	14%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2-Nitrotoluene	**22.11**	**272**	**6.5610<**	**5**	**31%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
4-Nitrotoluene	**23.83**	**320**	**6.4100<**	**5**	**28%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
3-Nitrotoluene	**25.55**	**310**	**6.2370<**	**5**	**25%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
Nitroglycerin				**20**	**-100%**	**Fails**		14.48	1543	22.4200<	20	12%	Acceptable		(±15)	45
PETN				**20**	**-100%**	**Fails**		27.40	858	22.9000<	20	15%	Acceptable		(±15)	45
3,5-Dinitroaniline	13.12	565	5.5710<	5	11%	Acceptable	M				**5**	**-100%**	**Fails**		(±15)	45
EGDN				**20**	**-100%**	**Fails**					**20**	**-100%**	**Fails**		(±15)	

>OK @ 30%

ok @ 30%. MB 4/18/11

>ok @ 30%

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 4/18/11

✓ 1LR 4-20-11

Printed: 4/18/2011 10:08 PM

TestAmerica West Sacramento

A-000027.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 4/14/2011 5:53 Operator: NS

DataFile: LC10 I\04132011.B\A-000027.D Vial Num: 8

Instrument ID: LC10

Sample : **STD_MRL 11GCSV0086 8330 5-20ng/mL**

Method File: LC10 I\04132011.B\8330AB.M

Start Cal Date: 1/9/2011 2:11 End Cal Date: 1/9/2011 7:27

Matrix: NONB SubList: 1_CAL.SUB SpikeList: 0

Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2,

Misc. Info: MRL;9;;,,3,1_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	16.42	1132	20.5100<	20	3%	Acceptable		16.41	2079	19.7300	20	-1%	Acceptable		(±15)	
HMX	5.26	746	5.7640<	5	15%	Fails					5	-100%	Fails		(±15)	45
RDX	7.50	583	6.4020<	5	28%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.60	4419	54.8900	50	10%	Acceptable		8.60	6535	55.0200<	50	10%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.73	906	5.7230<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.33	874	5.6440<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.32	504	5.4250<	5	9%	Acceptable	M				5	-100%	Fails		(±15)	45
Nitrobenzene	13.89	406	5.6710<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.39	486	5.1580<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.94	480	6.3050<	5	26%	Fails					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.94	515	6.1390<	5	23%	Fails					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.34	366	6.2060<	5	24%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	19.06	571	6.0150<	5	20%	Fails					5	-100%	Fails		(±15)	45
2-Nitrotoluene	22.00	272	6.5610<	5	31%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.78	323	6.4700<	5	29%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.50	363	7.3030<	5	46%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		14.42	1578	22.9300<	20	15%	Acceptable		(±15)	45
PETN				20	-100%	Fails		27.43	927	24.7400<	20	24%	Fails		(±15)	45
3,5-Dinitroaniline	13.10	588	5.7980<	5	16%	Fails	M				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%

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

MR 4/18/11

✓ KR 4.20.11

Printed: 4/18/2011 10:13 PM

TestAmerica West Sacramento

A-000039.D

Chromatography Summary

Injection Date: 4/14/2011 14:54 **Operator:** NS

DataFile: LC10.I\04132011.B\A-000039.D **Vial Num:** 8

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : STD_MRL 11GCSV0086 8330 5-20ng/mL

Method File: LC10.I\04132011.B\8330AB.M

Start Cal Date: 1/9/2011 2:11 **End Cal Date:** 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** I_CAL SUB **SpikeList:** 0

Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;

Misc. Info: MRL;9;;;;3;1_CAL.SUB;0,1;

Compound Name	Synergi Hydro-RP C18(250nm-265nm) RT	Response	PPB	Spike Level	%D	Result	Flag	Synergi Hydro-RP C18(358nm-205nm) RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.45	1143	20.7000<	20	4%	Acceptable		16.44	2145	20.3500	20	2%	Acceptable		(±15)	
HMX	**5.29**	**781**	**6.0350<**	**5**	**21%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
RDX	**7.51**	**548**	**6.0170<**	**5**	**20%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
Picric ACID	8.64	4380	54.4100	50	9%	Acceptable		8.63	6511	54.8200<	50	10%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.75	861	5.4380<	5	9%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
1,3-Dinitrobenzene	12.35	866	5.5920<	5	12%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
TETRYL	**13.38**	**542**	**5.8340<**	**5**	**17%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
Nitrobenzene	13.93	389	5.4340<	5	9%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2,4,6-Trinitrotoluene	15.40	485	5.1480<	5	3%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
4-AM-2,6-DNT	15.97	423	5.5560<	5	11%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2-AM-4,6-DNT	16.98	474	5.6500<	5	13%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2,6-Dinitrotoluene	**18.40**	**352**	**5.9690<**	**5**	**19%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
2,4-Dinitrotoluene	19.06	532	5.6040<	5	12%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
2-Nitrotoluene	**22.10**	**277**	**6.6820<**	**5**	**34%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
4-Nitrotoluene	**23.80**	**332**	**6.6500<**	**5**	**33%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
3-Nitrotoluene	**25.55**	**317**	**6.3780<**	**5**	**28%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
Nitroglycerin				**20**	**-100%**	**Fails**		14.48	1548	22.5000<	20	13%	Acceptable		(±15)	45
PETN				**20**	**-100%**	**Fails**		27.43	1085	28.9500<	**20**	**45%**	**Fails**		(±15)	45
3,5-Dinitroaniline	**13.10**	**613**	**6.0450<**	**5**	**21%**	**Fails**					**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%

Printed: 4/15/2011 8:34 AM

TestAmerica West Sacramento

A-000051.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 4/14/2011 23.55 Operator: NS

DataFile: LC10.I\04132011.B\A-000051.D Vial Num: 9

Instrument ID: LC10

Sample : **STD_MRL 11GCSV0086 8330 5-20ng/mL**

Method File: LC10 I\04132011.B\8330AB.M

Start Cal Date: 1/9/2011 2:11 End Cal Date: 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE SubList: 1_CAL.SUB SpikeList: 0

Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL,2;

Misc. Info: MRL,9;;;;3;1_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	16.45	1134	20.5400<	20	3%	Acceptable		16.45	2041	19.3600	20	-3%	Acceptable		(±15)	
HMX	5.27	746	5.7640<	5	15%	Fails					5	-100%	Fails		(±15)	45
RDX	7.49	569	6.2480<	5	25%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.63	4393	54.5700	50	9%	Acceptable		8 63	6591	55.4900<	60	11%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.76	905	5.7160<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.33	916	5.9150<	5	18%	Fails					5	-100%	Fails		(±15)	45
TETRYL	13.35	546	5.8770<	5	18%	Fails	M				5	-100%	Fails		(±15)	45
Nitrobenzene	13.94	420	5.8660<	5	17%	Fails					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15 39	517	5.4870<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.93	465	6.1080<	5	22%	Fails					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.98	492	5.8650<	5	17%	Fails					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.35	403	6.8340<	5	37%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	19.09	548	5.7720<	5	15%	Fails					5	-100%	Fails		(±15)	45
2-Nitrotoluene	22.05	266	6.4160<	5	28%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.84	320	6.4100<	5	28%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.58	337	6.7800<	5	36%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		14 44	1502	21.8300<	20	9%	Acceptable		(±15)	45
PETN				20	-100%	Fails		27.48	854	22.7900<	20	14%	Acceptable	M	(±15)	45
3,5-Dinitroaniline	13.09	610	6.0150<	5	20%	Fails	M				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%

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, RATED AND CODED

Printed: 4/20/2011 8:53 PM

TestAmerica West Sacramento

A-000016.D

Chromatography Summary

Injection Date: 4/15/2011 21:48 **Operator:** NS

DataFile: LC10.I\04152011.B\A-000016.D **Vial Num:** 7

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : STD_MRL 11GCSV0086 8330 5-20ng/mL

Method File: LC10.I\04152011.B\8330AB.M

Start Cal Date: 1/9/2011 2:11 **End Cal Date:** 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** 1_CAL.SUB **SpikeList:** 0

Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;

Misc. Info: MRL,9;,;;3;1_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	16.36	1138	20.6200<	20	3%	Acceptable		16.40	2179	20.6800	20	3%	Acceptable		(±15)	
HMX	5.26	775	5.9880<	5	20%	Fails					5	-100%	Fails		(±15)	45
RDX	7.49	575	6.3140<	5	26%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.62	4504	55.9500	50	12%	Acceptable		8.62	6732	56.6800<	50	13%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.70	868	5.4830<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.31	856	5.5280<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.29	532	5.7260<	5	15%	Acceptable					5	-100%	Fails		(±15)	45
Nitrobenzene	13.89	402	5.6150<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.37	505	5.3600<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.91	490	6.4360<	5	29%	Fails					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.94	535	6.3780<	5	28%	Fails					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.32	396	6.7150<	5	34%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	19.03	590	6.2150<	5	24%	Fails					5	-100%	Fails		(±15)	45
2-Nitrotoluene	22.02	253	6.1030<	5	22%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.71	294	5.8890<	5	18%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.46	335	6.7400<	5	35%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		14.41	1537	22.3400<	20	12%	Acceptable		(±15)	45
PETN				20	-100%	Fails		27.22	775	20.6800<	20	3%	Acceptable		(±15)	45
3,5-Dinitroaniline	13.10	580	5.7190<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				20	-100%	Fails					20	-100%	Fails		(±15)	

4/18/11

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-000004.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date:	4/15/2011 12:47	**Operator:**	NS
DataFile:	LC10.I\04152011.B\A-000004.D	**Vial Num:**	7
Instrument ID:	LC10		

Sample : **STD_MRL 11GCSV0086 8330 5-20ng/mL**

Method File: LC10.I\04152011.B\8330AB.M

Start Cal Date: 1/9/2011 2 11 **End Cal Date:** 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** 1_CAL.SUB **SpikeList:** 0

Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;

Misc. Info: MRL,9;;;;3,1_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	16.38	1166	21.1200<	20	6%	Acceptable		16.41	2138	20.2900	20	1%	Acceptable		(±15)	
HMX	**5.27**	**763**	**5.8960<**	**5**	**18%**	**Fails**	OK @ 30%				**5**	**-100%**	**Fails**		(±15)	45
RDX	7.47	442	4.8530<	5	-3%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
Picric ACID	8.62	4493	55 8100	50	12%	Acceptable		8.63	6609	55.6400<	50	11%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.72	884	5.5840<	5	12%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
1,3-Dinitrobenzene	12 35	849	5.4830<	5	10%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
TETRYL	13.31	527	5.6720<	5	13%	Acceptable	M				**5**	**-100%**	**Fails**		(±15)	45
Nitrobenzene	**13.93**	**447**	**6.2440<**	**5**	**25%**	**Fails**	OK @ 30%				**5**	**-100%**	**Fails**		(±15)	45
2,4,6-Trinitrotoluene	15.35	483	5.1260<	5	3%	Acceptable	M				**5**	**-100%**	**Fails**		(±15)	45
4-AM-2,6-DNT	**15.92**	**503**	**6.6070<**	**5**	**32%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
2-AM-4,6-DNT	**16.94**	**507**	**6.0440<**	**5**	**21%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
2,6-Dinitrotoluene	**18.32**	**343**	**5.8160<**	**5**	**16%**	**Fails**	OK @ 30%				**5**	**-100%**	**Fails**		(±15)	45
2,4-Dinitrotoluene	**19.02**	**582**	**6.1310<**	**5**	**23%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
2-Nitrotoluene	**21.97**	**256**	**6.1750<**	**5**	**24%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
4-Nitrotoluene	**23.72**	**331**	**6.6300<**	**5**	**33%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
3-Nitrotoluene	**25.41**	**292**	**5.8750<**	**5**	**18%**	**Fails**	OK @ 30%				**5**	**-100%**	**Fails**		(±15)	45
Nitroglycerin				**20**	**-100%**	**Fails**		14.44	1471	21.3800<	20	7%	Acceptable	NA	(±15)	45
PETN				**20**	**-100%**	**Fails**		27.29	888	23.7000<	**20**	**19%**	**Fails**		(±15)	45
3,5-Dinitroaniline	**13.08**	**611**	**6.0250<**	**5**	**21%**	**Fails**	M NA				**5**	**-100%**	**Fails**	NA	(±15)	45
EGDN				**20**	**-100%**	**Fails**					**20**	**-100%**	**Fails**	4/20/11	(±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

NA 4/18/11
VCR 4.20.11

Printed: 4/18/2011 11:07 PM

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 64

Inst ID: LC10 Batch ID: 04152011
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
15-APR-2011	10:32	NS	PRIMER	A-000001.	1000 mL	20 mL	1	
15-APR-2011	11:17	NS	PRIMER	A-000002.	1000 mL	20 mL	1	
15-APR-2011	12:02	NS	STD_06 11GCSV0170 8330 200-500	A-000003.	0 g	0 mL	1	
15-APR-2011	12:47	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000004.	0 g	0 mL	1	4A-2,6-DNT & 4NT
15-APR-2011	13:32	NS	MGLJCZAA 1101074 A1D060428-3 2	A-000005.	909.33 mL	20 mL	2	
15-APR-2011	14:17	NS	MGLJDBAA 1101074 A1D060428-4 2	A-000006.	863.58 mL	20 mL	2	
15-APR-2011	15:02	NS	MGV4M1AA 1102095 G1D120000-95	A-000007.	1000 mL	20 mL	1	
15-APR-2011	15:47	NS	MGV4M1AD 1102095 G1D120000-95	A-000008.	1000 mL	20 mL	1	
15-APR-2011	16:33	NS	MGV4M1AC 1102095 G1D120000-95	A-000009.	1000 mL	20 mL	1	
15-APR-2011	17:18	NS	MGNCW1AA 1102095 A1D070414-1 1	A-000010.	988.78 mL	20 mL	1	
15-APR-2011	18:03	NS	MGNC11AA 1102095 A1D070414-2 1	A-000011.	1015.83 mL	20 mL	1	
15-APR-2011	18:48	NS	MGNC21AA 1102095 A1D070414-3 1	A-000012.	1003.28 mL	20 mL	1	
15-APR-2011	19:33	NS	MGNC31AA 1102095 A1D070414-4 1	A-000013.	1002.35 mL	20 mL	1	
15-APR-2011	20:18	NS	MGNC41AA 1102095 A1D070414-5 1	A-000014.	996.36 mL	20 mL	1	
15-APR-2011	21:03	NS	STD_05 10GCSV0524 8330 100-200	A-000015.	0 g	0 mL	1	
15-APR-2011	21:48	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000016.	0 g	0 mL	1	2,6-DNT & 5NT
15-APR-2011	22:33	NS	MGNC61AA 1102095 A1D070414-6 1	A-000017.	983.71 mL	20 mL	1	
15-APR-2011	23:18	NS	MGNC71AA 1102095 A1D070414-7 1	A-000018.	1012.15 mL	20 mL	1	
16-APR-2011	00:03	NS	MGNC91AC 1102095 A1D070414-8 1	A-000019.	997.53 mL	20 mL	1	
16-APR-2011	00:48	NS	MGNC91AH 1102095 A1D070414-8 S	A-000020.	1017.57 mL	20 mL	1	
16-APR-2011	01:33	NS	MGNC91AJ 1102095 A1D070414-8 D	A-000021.	1023.48 mL	20 mL	1	
16-APR-2011	02:19	NS	MGNDC1AC 1102095 A1D070414-9 1	A-000022.	942.8 mL	20 mL	1	
16-APR-2011	03:04	NS	MGNDD1AC 1102095 A1D070414-10	A-000023.	952.61 mL	20 mL	1	
16-APR-2011	03:49	NS	MGNDG1AA 1102095 A1D070414-11	A-000024.	1018.2 mL	20 mL	1	
16-APR-2011	04:34	NS	MGNDJ1AA 1102095 A1D070414-12	A-000025.	924.73 mL	20 mL	1	
16-APR-2011	05:19	NS	MGNDL1AA 1102095 A1D070414-13	A-000026.	937.71 mL	20 mL	1	
16-APR-2011	06:04	NS	STD_05 10GCSV0524 8330 100-200	A-000027.	0 g	0 mL	1	
16-APR-2011	06:49	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000028.	0 g	0 mL	1	
16-APR-2011	07:35	NS	MGNDN1AA 1102095 A1D070414-14	A-000029.	1014.72 mL	20 mL	1	
16-APR-2011	08:20	NS	MGNDN1AC 1102095 A1D070414-14	A-000030.	975.67 mL	20 mL	1	
16-APR-2011	09:05	NS	MGNDN1AD 1102095 A1D070414-14	A-000031.	1016.77 mL	20 mL	1	
16-APR-2011	09:50	NS	MGNDP1AA 1102095 A1D070414-15	A-000032.	966.04 mL	20 mL	1	
16-APR-2011	10:35	NS	MGXKL1AA 1103098 G1D130000-98	A-000033.	1000 mL	20 mL	1	
16-APR-2011	11:20	NS	MGXKL1AC 1103098 G1D130000-98	A-000034.	1000 mL	20 mL	1	
16-APR-2011	12:05	NS	MGXKL1AD 1103098 G1D130000-98	A-000035.	1000 mL	20 mL	1	
16-APR-2011	12:51	NS	MGPCC1AE 1103098 A1D070566-11	A-000036.	931.65 mL	20 mL	1	
16-APR-2011	13:36	NS	MGP5R1AF 1103098 A1D080416-7 1	A-000037.	936.66 mL	20 mL	1	
16-APR-2011	14:21	NS	MGP531AF 1103098 A1D080416-9 1	A-000038.	941.31 mL	20 mL	1	
16-APR-2011	15:06	NS	STD_05 10GCSV0524 8330 100-200	A-000039.	0 g	0 mL	1	
16-APR-2011	15:51	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000040.	0 g	0 mL	1	
16-APR-2011	16:36	NS	MGX0X1AA 1103202 G1D130000-202	A-000041.	1000 mL	20 mL	1	
16-APR-2011	17:21	NS	MGX0X1AD 1103202 G1D130000-202	A-000042.	1000 mL	20 mL	1	
16-APR-2011	18:06	NS	MGX0X1AC 1103202 G1D130000-202	A-000043.	1000 mL	20 mL	1	
16-APR-2011	18:51	NS	MGP0L1AA 1103202 A1D080404-1 1	A-000044.	1012.12 mL	20 mL	1	
16-APR-2011	19:36	NS	MGP0L1AE 1103202 A1D080404-1 S	A-000045.	987.91 mL	20 mL	1	
16-APR-2011	20:22	NS	MGP0L1AF 1103202 A1D080404-1 D	A-000046.	1022.6 mL	20 mL	1	
16-APR-2011	21:07	NS	MGP0T1AA 1103202 A1D080404-2 1	A-000047.	985.75 mL	20 mL	1	
16-APR-2011	21:52	NS	MGP0X1AA 1103202 A1D080404-3 1	A-000048.	878.52 mL	20 mL	1	
16-APR-2011	22:37	NS	MGP011AA 1103202 A1D080404-4 1	A-000049.	837.26 mL	20 mL	1	
16-APR-2011	23:22	NS	MGP021AA 1103202 A1D080404-5 1	A-000050.	966.73 mL	20 mL	1	

Sequence continued on next page

WATER, Nitroguanidine

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 4, 2011

SDG: A1D060428 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 cooler temperatures were documented as being received from 1.9°C – 3.8°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?	✓				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: 1/24/11 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%?	✓			1/24/11 @ 1328	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
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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 4, 2011

SDG: A1D060428 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
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%?			✓	No detections above the reporting limit.	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.

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:

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 4, 2011

SDG: A1D060428 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?		✓			
2. Were samples preserved properly and received in good condition?	✓			Cooler was received between 1.9-3.8°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 3-9
6. Were all QAPP-specified target analytes reported?	✓				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?	✓				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, with recoveries 90-110%?	✓				Method EPA 353.2 Section 9.3.4
10. Was a method blank prepared and analyzed with each batch?	✓				Method EPA 353.2 Section 9.3.1, 9.3.4
11. Were target analytes detected in the method blank or calibration blank >1/2 the MRL?		✓		ADR checked section;	LCG Attachment A Section 11, *<5x = B*
12. Was a field blank (trip or equipment) collected and analyzed at the required frequency stated in the site-specific FSP?			✓		
13. Were target analytes reported in the field blank analyses (trip or equipment) >1/2 the MRL?			✓	ADR checked section;	*<5x=U*
14. Was a field duplicate analyzed? Were the RPDs acceptable?	✓				
15. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within 90-110%?	✓			Only a LCS is required.	Method EPA 353.2 Section 9.3.3 J/UJ; <50%= R
16. Was a MS/MSD pair prepared with each batch?	✓				*Method EPA 353.2 Section 9.4.1*

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 4, 2011

SDG: A1D060428 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
17. Was the MS/MSD parent sample a Ravenna sample?	✓				
18. Were MS/MSD recoveries and RPD within acceptance criteria?	✓			ADR checked section. The matrix spike and duplicate recovered below control limits at 87% and 88%. The nitrate-nitrite results were qualified as estimated, "UJ/J".	*Method EPA 353.2 Section 9.4.2* *Pj*
19. Were sample concentrations within calibration range?	✓				
20. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
21. Were lab comments included in report? If yes, summarize contents.	✓				

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: FWGB12mw-012C-1713-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-001 Work Order #...: MGLG71AD Matrix.....: WG
Date Sampled...: 04/05/11 09:11 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1720-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-002 Work Order #...: MGLH81AD Matrix.....: WG
Date Sampled...: 04/05/11 10:51 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1719-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-003 Work Order #...: MGLJC1AD Matrix.....: WG
Date Sampled...: 04/05/11 13:25 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1747-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-004 Work Order #...: MGLJD1AD Matrix.....: WG
Date Sampled...: 04/05/11 14:15 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-010C-1712-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-005 Work Order #...: MGLJH1AD Matrix.....: WG
Date Sampled...: 04/05/11 16:00 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-003C-1739-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-006 Work Order #...: MGLJM1AD Matrix.....: WG
Date Sampled...: 04/05/11 17:50 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1744-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-007 Work Order #...: MGLJP1AE Matrix.....: WG
Date Sampled...: 04/05/11 10:02 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1751-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-008 Work Order #...: MGLJR1AE Matrix.....: WG
Date Sampled...: 04/05/11 13:02 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1745-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-009 Work Order #...: MGLJW1AE Matrix.....: WG
Date Sampled...: 04/05/11 15:08 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1746-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-010 Work Order #...: MGLJX1AE Matrix.....: WG
Date Sampled...: 04/05/11 16:38 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1758-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-011 Work Order #...: MGLJ01AE Matrix.....: WQ
Date Sampled...: 04/05/11 18:22 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-004C-1740-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-012 Work Order #...: MGLJ21AD Matrix.....: WG
Date Sampled...: 04/04/11 18:00 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-082C-1718-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-013	Work Order #...: MGLJ71AD	Matrix.....: WG	
Date Sampled...: 04/05/11 09:23	Date Received..: 04/06/11		
Prep Date.....: 04/08/11	Analysis Date..: 04/19/11		
Prep Batch #...: 1098288			
Dilution Factor: 1	Method.....: SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-081C-1716-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-014 Work Order #...: MGLKA1AH Matrix.....: WG
Date Sampled...: 04/05/11 11:23 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1715-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-015 Work Order #...: MGLKH1AD Matrix.....: WG
Date Sampled...: 04/05/11 14:23 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-010C-1708-GW

Dissolved HPLC

Lot-Sample #...: A1D060428-016 Work Order #...: MGLKK1AD Matrix.....: WG
Date Sampled...: 04/05/11 17:03 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

METHOD BLANK REPORT

HPLC

Client Lot #...: A1D060428 Work Order #...: MGQ9V1AA Matrix.....: WATER
MB Lot-Sample #: G1D080000-288
Prep Date.....: 04/08/11
Analysis Date..: 04/19/11 Prep Batch #...: 1098288
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 #...: A1D060428 Work Order #...: MGQ9V1AC Matrix.....: WATER
LCS Lot-Sample#: G1D080000-288
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	102	(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 #...: A1D060428 Work Order #...: MGLKA1AJ-MS Matrix.....: WG
MS Lot-Sample #: A1D060428-014 MGLKA1AK-MSD
Date Sampled...: 04/05/11 11:23 Date Received..: 04/06/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098288
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	103	(73 - 117)			SW846 8330 (Modified
	104	(73 - 117)	1.4	(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

General Chemistry - Various Methods

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 4, 2011

SDG: A1D060428 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?		✓			
2. Were samples preserved properly and received in good condition?	✓			Cooler was received between 1.9-3.8°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 3-9
6. Were all QAPP-specified target analytes reported?	✓				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?	✓				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, with recoveries 90-110%?	✓				Method EPA 353.2 Section 9.3.4
10. Was a method blank prepared and analyzed with each batch?	✓				Method EPA 353.2 Section 9.3.1, 9.3.4
11. Were target analytes detected in the method blank or calibration blank >1/2 the MRL?		✓		ADR checked section;	LCG Attachment A Section 11, *<5x = B*
12. Was a field blank (trip or equipment) collected and analyzed at the required frequency stated in the site-specific FSP?			✓		
13. Were target analytes reported in the field blank analyses (trip or equipment) >1/2 the MRL?			✓	ADR checked section;	*<5x=U*
14. Was a field duplicate analyzed? Were the RPDs acceptable?	✓				
15. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within 90-110%?	✓			Only a LCS is required.	Method EPA 353.2 Section 9.3.3 J/UJ; <50%= R
16. Was a MS/MSD pair prepared with each batch?	✓				*Method EPA 353.2* *Section 9.4.1*

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 4, 2011

SDG: A1D060428 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
17. Was the MS/MSD parent sample a Ravenna sample?	✓				
18. Were MS/MSD recoveries and RPD within acceptance criteria?	✓			ADR checked section. The matrix spike and duplicate recovered below control limits at 87% and 88%. The nitrate-nitrite results were qualified as estimated, "UJ/J".	*Method EPA 353.2 Section 9.4.2* *Pj*
19. Were sample concentrations within calibration range?	✓				
20. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
21. Were lab comments included in report? If yes, summarize contents.	✓				

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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 4, 2011

SDG: A1D060428 Rev 0
Analysis: TAL SOP WS-WC-0050

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 cooler temperatures were documented as being received from 1.9°C – 3.8°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 4/13/11 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
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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 4, 2011

SDG: A1D060428 Rev 0
Analysis: TAL SOP WS-WC-0050

Review Questions:	Yes	No	N/A	Comments	Qualifier
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?	✓				
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

Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-012C-1713-GW

General Chemistry

Lot-Sample #...: A1D060428-001 Work Order #...: MGLG7 Matrix.....: WG
Date Sampled...: 04/05/11 09:11 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-085C-1720-GW

General Chemistry

Lot-Sample #...: A1D060428-002 Work Order #...: MGLH8 Matrix.....: WG
Date Sampled...: 04/05/11 10:51 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1719-GW

General Chemistry

Lot-Sample #...: A1D060428-003 Work Order #...: MGLJC Matrix.....: WG
Date Sampled...: 04/05/11 13:25 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1747-GW

General Chemistry

Lot-Sample #...: A1D060428-004 Work Order #...: MGLJD Matrix.....: WG
Date Sampled...: 04/05/11 14:15 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-010C-1712-GW

General Chemistry

Lot-Sample #...: A1D060428-005 Work Order #...: MGLJH Matrix.....: WG
Date Sampled...: 04/05/11 16:00 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-003C-1739-GW

General Chemistry

Lot-Sample #...: A1D060428-006 Work Order #...: MGLJM Matrix.....: WG
Date Sampled...: 04/05/11 17:50 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1744-GW

General Chemistry

Lot-Sample #...: A1D060428-007 Work Order #...: MGLJP Matrix.....: WG
Date Sampled...: 04/05/11 10:02 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1		MDL.....: 0.005		
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167
		Dilution Factor: 1		MDL.....: 0.48		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1751-GW

General Chemistry

Lot-Sample #...: A1D060428-008 Work Order #...: MGLJR Matrix.....: WG
Date Sampled...: 04/05/11 13:02 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1		MDL.....: 0.005		
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167
		Dilution Factor: 1		MDL.....: 0.48		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1745-GW

General Chemistry

Lot-Sample #...: A1D060428-009 Work Order #...: MGLJW Matrix.....: WG
Date Sampled...: 04/05/11 15:08 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1		MDL.....: 0.005		
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167
		Dilution Factor: 1		MDL.....: 0.48		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1746-GW

General Chemistry

Lot-Sample #...: A1D060428-010 Work Order #...: MGLJX Matrix.....: WG
Date Sampled...: 04/05/11 16:38 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	0.02 B	0.1	mg/L	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1		MDL.....: 0.005		
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167
		Dilution Factor: 1		MDL.....: 0.48		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1758-GW

General Chemistry

Lot-Sample #...: A1D060428-011 Work Order #...: MGLJ0 Matrix.....: WQ
Date Sampled...: 04/05/11 18:22 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1		MDL.....: 0.005		
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167
		Dilution Factor: 1		MDL.....: 0.48		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-004C-1740-GW

General Chemistry

Lot-Sample #...: A1D060428-012 Work Order #...: MGLJ2 Matrix.....: WG
Date Sampled...: 04/04/11 18:00 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1718-GW

General Chemistry

Lot-Sample #...: A1D060428-013 Work Order #...: MGLJ7 Matrix.....: WG
Date Sampled...: 04/05/11 09:23 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1716-GW

General Chemistry

Lot-Sample #...: A1D060428-014 Work Order #...: MGLKA Matrix.....: WG
Date Sampled...: 04/05/11 11:23 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1715-GW

General Chemistry

Lot-Sample #...: A1D060428-015 Work Order #...: MGLKH Matrix.....: WG
Date Sampled...: 04/05/11 14:23 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-010C-1708-GW

General Chemistry

Lot-Sample #...: A1D060428-016 Work Order #...: MGLKK Matrix.....: WG
Date Sampled...: 04/05/11 17:03 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

Dilution Factor: 1 MDL.....: 0.48

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1D060428 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite		Work Order #: MGXCM1AA		MB Lot-Sample #:	G1D120000-390	
	ND	0.1	mg/L	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1				
Nitrocellulose		Work Order #: MGWA31AA		MB Lot-Sample #:	G1D120000-167	
	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/12-04/13/11	1102167
		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 #...: A1D060428 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite		Work Order #: MGXCM1AC LCS Lot-Sample#: G1D120000-390			
	100	(90 - 110)	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1			
Nitrocellulose		Work Order #: MGWA31AC LCS Lot-Sample#: G1D120000-167			
	90	(26 - 144)	TAL-SOP WS-WC-005	04/12-04/13/11	1102167
		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 #...: A1D060428 Matrix.....: WG
Date Sampled...: 04/05/11 11:23 Date Received..: 04/06/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: MGLKA1AF-MS/MGLKA1AG-MSD			MS Lot-Sample #: A1D060428-014		
	80	(26 - 144)			TAL-SOP WS-WC-005	04/12-04/13/11	1102167
	79	(26 - 144)	0.99	(0-45)	TAL-SOP WS-WC-005	04/12-04/13/11	1102167

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 #...: A1D060428 Matrix.....: WATER
Date Sampled...: 04/06/11 09:22 Date Received..: 04/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite		WO#: MGNC91AF-MS/MGNC91AG-MSD				MS Lot-Sample #: A1D070414-008	
	87 N	(90 - 110)			MCAWW 353.2	04/12/11	1102390
	88 N	(90 - 110)	0.78	(0-20)	MCAWW 353.2	04/12/11	1102390

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.

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 07-0121915
NCM Initiated By: Kathryn Lopez
Date Opened: 04/12/2011
Date Closed:

Classification: **Anomaly**
Status: **PMREVIEW**
Production Area: General Chemistry
Tests: 353.2
Lot #'s (Sample #'s): A1D060428 (10,11,7,8,9), A1D070414 (10,8,9), A1D070566 (11), A1D080416 (7,9), G1D060455 (3), G1D120000 (390,391),
QC Batches: 1102390, 1102391,

Nonconformance: QC data exceeded criteria
Subcategory: MS/MSD accuracy out of control

Problem Description / Root Cause

Name	Date	Description
Kathryn Lopez	04/12/2011	The matrix spike/matrix spike duplicate (MS/MSD) associated with these extraction batches have recoveries outside the established control limits for the compounds listed below. Acceptable laboratory control sample (LCS) data demonstrate that the analytical system is in control. This anomaly is most likely matrix related. [NO2+N03]

Corrective Action

Name	Date	Corrective Action
Kathryn Lopez	04/12/2011	na

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
	Response	Response Note			

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position
04/12/2011	Kathryn Lopez	Chemist

Date Printed: 4/12/2011

Appendix 1

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1D060428										
353.2	FWGEQUIPRINSE2-1758-GW	AQ	EB							
				Nitrate as N (NO3-N)	0.1	0.1U		UJ	mg/L	Ms
353.2	FWGSCFmw-004-1744-GW	AQ	N							
				Nitrate as N (NO3-N)	0.1	0.1U		UJ	mg/L	Ms
353.2	FWGSCFmw-005-1745-GW	AQ	N							
				Nitrate as N (NO3-N)	0.1	0.1U		UJ	mg/L	Ms
353.2	FWGSCFmw-006-1746-GW	AQ	N							
				Nitrate as N (NO3-N)	0.1	0.02B		J	mg/L	Ms, RI
353.2	FWGSCFmw-DUP1-1751-GW	AQ	FD							
				Nitrate as N (NO3-N)	0.1	0.1U		UJ	mg/L	Ms
8330	FWGDETmw-004C-1740-GW	AQ	N							
				4-Amino-2,6-Dinitrotoluene	0.12	0.10J		J	ug/L	RI
8330	FWGLL1mw-081C-1716-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.099	0.11PG		J	ug/L	ProfJudg
				2,4,6-TNT	0.099	0.057J		J	ug/L	RI
				2,4-Dinitrotoluene	0.099	0.058J		J	ug/L	RI

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: A1D060428										
8330	FWGLL1mw-084C-1719-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.11	3.3PG		J	ug/L	Surr, ProfJ
				1,3-Dinitrobenzene	0.11	0.41		J	ug/L	Surr
				2,4,6-TNT	0.11	8.4		J	ug/L	Surr
				2,4-Dinitrotoluene	0.11	1.7		J	ug/L	Surr
				2,6-Dinitrotoluene	0.11	0.69		J	ug/L	Surr
				2-Amino-4,6-dinitrotoluene	0.11	13		J	ug/L	Surr
				4-Amino-2,6-Dinitrotoluene	0.22	26		J	ug/L	Surr
				HMX	0.11	0.79PG		J	ug/L	Surr, ProfJ
				Nitrobenzene	0.11	0.096J		J	ug/L	Surr, RI
				RDX	0.11	0.42		J	ug/L	Surr
8330	FWGLL1mw-DUP2-1747-GW	AQ	FD							
				1,3,5-Trinitrobenzene	0.12	3.8PG		J	ug/L	Surr, ProfJ
				1,3-Dinitrobenzene	0.12	0.56		J	ug/L	Surr
				2,4,6-TNT	0.12	9.8		J	ug/L	Surr
				2,4-Dinitrotoluene	0.12	2.0		J	ug/L	Surr
				2,6-Dinitrotoluene	0.12	0.81		J	ug/L	Surr
				2-Amino-4,6-dinitrotoluene	0.12	13		J	ug/L	Surr
				4-Amino-2,6-Dinitrotoluene	0.23	27		J	ug/L	Surr
				HMX	0.12	0.85PG		J	ug/L	Surr, ProfJ
				RDX	0.12	0.49		J	ug/L	Surr

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Data Qualifier Summary

Lab Reporting Batch ID: A1D060428 **Laboratory: TALCAN**

EDD Filename: PrepA1D060428 **eQAPP Name: Ravenna 111810**

Method Category: GENCHEM

Method: 353.2 *Matrix:* AQ

Sample ID: FWGEQUIPRINSE2-1758-GW *Collected:* 4/5/2011 6:22:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE AS N (NO3-N)	0.1	U	0.005	MDL	0.1	PQL	mg/L	UJ	Ms

Sample ID: FWGSCFmw-004-1744-GW *Collected:* 4/5/2011 10:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE AS N (NO3-N)	0.1	U	0.005	MDL	0.1	PQL	mg/L	UJ	Ms

Sample ID: FWGSCFmw-005-1745-GW *Collected:* 4/5/2011 3:08:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE AS N (NO3-N)	0.1	U	0.005	MDL	0.1	PQL	mg/L	UJ	Ms

Sample ID: FWGSCFmw-006-1746-GW *Collected:* 4/5/2011 4:38:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE AS N (NO3-N)	0.02	B	0.005	MDL	0.1	PQL	mg/L	J	RI, Ms

Sample ID: FWGSCFmw-DUP1-1751-GW *Collected:* 4/5/2011 1:02:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE AS N (NO3-N)	0.1	U	0.005	MDL	0.1	PQL	mg/L	UJ	Ms

Sample ID: FWGDETmw-004C-1740-GW *Collected:* 4/4/2011 6:00:00 PM *Analysis Type:* DL *Dilution:* 1.16

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-Amino-2,6-Dinitrotoluene	0.10	J	0.058	MDL	0.12	PQL	ug/L	J	RI

Sample ID: FWGLL1mw-081C-1716-GW *Collected:* 4/5/2011 11:23:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	0.11	PG	0.030	MDL	0.099	PQL	ug/L	J	ProfJudg

Data Qualifier Summary

Lab Reporting Batch ID: A1D060428 **Laboratory: TALCAN**

EDD Filename: PrepA1D060428 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8330 **Matrix: AQ**

Sample ID: **FWGLL1mw-081C-1716-GW** ***Collected:*** **4/5/2011 11:23:00** ***Analysis Type:*** **DL** ***Dilution:*** **0.99**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,6-TNT	0.057	J	0.050	MDL	0.099	PQL	ug/L	J	RI
2,4-DINITROTOLUENE	0.058	J	0.050	MDL	0.099	PQL	ug/L	J	RI

Sample ID: **FWGLL1mw-084C-1719-GW** ***Collected:*** **4/5/2011 1:25:00 PM** ***Analysis Type:*** **DL-BASE/NEUTRAL** ***Dilution:*** **1.1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	3.3	PG	0.033	MDL	0.11	PQL	ug/L	J	Surr, ProfJudg
1,3-DINITROBENZENE	0.41		0.055	MDL	0.11	PQL	ug/L	J	Surr
2,4,6-TNT	8.4		0.055	MDL	0.11	PQL	ug/L	J	Surr
2,4-DINITROTOLUENE	1.7		0.055	MDL	0.11	PQL	ug/L	J	Surr
2,6-DINITROTOLUENE	0.69		0.055	MDL	0.11	PQL	ug/L	J	Surr
2-AMINO-4,6-DINITROTOLUENE	13		0.11	MDL	0.11	PQL	ug/L	J	Surr
HMX	0.79	PG	0.040	MDL	0.11	PQL	ug/L	J	Surr, ProfJudg
NITROBENZENE	0.096	J	0.055	MDL	0.11	PQL	ug/L	J	RI, Surr
RDX	0.42		0.040	MDL	0.11	PQL	ug/L	J	Surr

Sample ID: **FWGLL1mw-084C-1719-GW** ***Collected:*** **4/5/2011 1:25:00 PM** ***Analysis Type:*** **RE** ***Dilution:*** **2.19**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-Amino-2,6-Dinitrotoluene	26		0.11	MDL	0.22	PQL	ug/L	J	Surr

Sample ID: **FWGLL1mw-DUP2-1747-GW** ***Collected:*** **4/5/2011 2:15:00 PM** ***Analysis Type:*** **DL-BASE/NEUTRAL** ***Dilution:*** **1.15**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	3.8	PG	0.034	MDL	0.12	PQL	ug/L	J	Surr, ProfJudg
1,3-DINITROBENZENE	0.56		0.058	MDL	0.12	PQL	ug/L	J	Surr
2,4,6-TNT	9.8		0.058	MDL	0.12	PQL	ug/L	J	Surr
2,4-DINITROTOLUENE	2.0		0.058	MDL	0.12	PQL	ug/L	J	Surr
2,6-DINITROTOLUENE	0.81		0.058	MDL	0.12	PQL	ug/L	J	Surr
2-AMINO-4,6-DINITROTOLUENE	13		0.12	MDL	0.12	PQL	ug/L	J	Surr
HMX	0.85	PG	0.041	MDL	0.12	PQL	ug/L	J	Surr, ProfJudg
RDX	0.49		0.041	MDL	0.12	PQL	ug/L	J	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D060428 **Laboratory: TALCAN**

EDD Filename: PrepA1D060428 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8330 *Matrix:* AQ

Sample ID: FWGLL1mw-DUP2-1747-GW *Collected:* 4/5/2011 2:15:00 PM *Analysis Type:* RE *Dilution:* 2.31

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-Amino-2,6-Dinitrotoluene	27		0.12	MDL	0.23	PQL	ug/L	J	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D060428 **Laboratory: TALCAN**

EDD Filename: PrepA1D060428 **eQAPP Name: Ravenna 111810**

Reason Code Legend

Reason Code	*Description*
Cb	Calibration Blank Contamination
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
Ccv	Continuing Calibration Verification Percent Difference Lower Rejection
Ccv	Continuing Calibration Verification Percent Difference Upper Estimation
Ccv	Continuing Calibration Verification Percent Difference Upper Rejection
Ccv	Continuing Calibration Verification Percent Recovery Lower Estimation
Ccv	Continuing Calibration Verification Percent Recovery Lower Rejection
Ccv	Continuing Calibration Verification Percent Recovery Upper Estimation
Ccv	Continuing Calibration Verification Percent Recovery Upper Rejection
CcvCC	Continuing Calibration Verification Correlation Coefficient
CcvRrf	Continuing Calibration Verification Relative Response Factor
ContTune	Continuing Tune
Dup=0	Duplicate Sample Count = 0
Dup>1	Duplicate Sample Count > 1
Eb	Equipment Blank Contamination
EtoA	Extraction to Analysis Estimation
EtoA	Extraction to Analysis Rejection
Fb	Field Blank Contamination
Fd	Field Duplicate Precision
IcCC	Initial Calibration Correlation Coefficient
IcRrf	Initial Calibration Relative Response Factor
IcRsd	Initial Calibration Percent Relative Standard Deviation
Icv	Initial Calibration Verification Percent Difference Lower Estimation
Icv	Initial Calibration Verification Percent Difference Lower Rejection
Icv	Initial Calibration Verification Percent Difference Upper Estimation
Icv	Initial Calibration Verification Percent Difference Upper Rejection
Icv	Initial Calibration Verification Percent Recovery Lower Estimation
Icv	Initial Calibration Verification Percent Recovery Lower Rejection
Icv	Initial Calibration Verification Percent Recovery Upper Estimation

Data Qualifier Summary

Lab Reporting Batch ID: A1D060428 **Laboratory: TALCAN**

EDD Filename: PrepA1D060428 **eQAPP Name: Ravenna 111810**

Icv	Initial Calibration Verification Percent Recovery Upper Rejection
IcvCC	Initial Calibration Verification Correlation Coefficient
IcvRrf	Initial Calibration Verification Relative Response Factor
IllogicalFraction	Illogical Fraction
InitTune	Initial Tune
Is	Internal Standard Estimation
Is	Internal Standard Rejection
Lcs	Laboratory Control Precision
Lcs	Laboratory Control Spike Lower Estimation
Lcs	Laboratory Control Spike Lower Rejection
Lcs	Laboratory Control Spike Upper Estimation
Lcs	Laboratory Control Spike Upper Rejection
Lcs=0	Laboratory Control Sample Count = 0
Lcs>1	Laboratory Control Sample Count > 1
Ld	Laboratory Duplicate Precision
Mb	Method Blank Contamination
Mb=0	Method Blank Sample Count = 0
Mb>1	Method Blank Sample Count > 1
Moist	Percent Moisture
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Lower Rejection
Ms	Matrix Spike Precision
Ms	Matrix Spike Upper Estimation
Ms	Matrix Spike Upper Rejection
Ms=0	Matrix Spike Sample Count = 0
Ms>1	Matrix Spike Sample Count > 1
PEM	Performance Evaluation Mixture
Preservation	Preservation
ProfJudg	Professional Judgment
REM	Resolution Check Mixture
RI	Reporting Limit

Data Qualifier Summary

Lab Reporting Batch ID: A1D060428 **Laboratory: TALCAN**

EDD Filename: PrepA1D060428 **eQAPP Name: Ravenna 111810**

RI	Reporting Limit > Project Maximum Contamination Limit
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoA	Sampling to Analysis Rejection
StoE	Sampling to Extraction Estimation
StoE	Sampling to Extraction Rejection
StoL	Sampling to Leaching Estimation
StoL	Sampling to Leaching Rejection
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Lower Rejection
Surr	Surrogate/Tracer Recovery Upper Estimation
Surr	Surrogate/Tracer Recovery Upper Rejection
Tb	Trip Blank Contamination
TempEst	Temperature Estimation
TempRej	Temperature Rejection

Surrogate Outlier Report

Lab Reporting Batch ID: A1D060428

Laboratory: TALCAN

EDD Filename: A1D060428

eQAPP Name: Ravenna 111810

Method: 8330
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
FWGLL1mw-084C-1719-GW	3,4-DINITROTOLUENE 3,4-DINITROTOLUENE	415 412	50.00-150.00 50.00-150.00	All Target Analytes	J (all detects)
FWGLL1mw-DUP2-1747-GW	3,4-DINITROTOLUENE 3,4-DINITROTOLUENE	400 389	50.00-150.00 50.00-150.00	All Target Analytes	J(all detects)

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 18, 2011
Sample Delivery Group: A1D060402 **Revision:** 0

Data Validator: Angye Dragotta /Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On April 5, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1D060402.

Field Sample ID	Analytes	Method
FWGLL1mw-085c-1720-GW	VOCs SVOCs Pesticides PCBs Cyanide	SW846 8260B SW846 8270C SW846 8081A SW846 8082 SW846 9012
FWGLL1mw-084c-1719-GW		
FWGLL1mw-DUP2-1747-GW		
FWGB12mw-010c-1712-GW		
FWGDETmw-003c-1739-GW		
FWGDETmw-004c-1740-GW		
FWGSCFmw-004-1744-GW		
FWGSCFmw-DUP1-1751-GW		
FWGSCFmw-005-1745-GW		
FWGSCFmw-006-1746-GW		
FWGEQUIPRinse2-1758-GW		
FWGLL1mw-082c-1718-GW		
FWGLL1mw-081c-1716-GW		
FWGLL1mw-067c-1715-GW		
FWGBKGmw-010c-1708-GW		
FWGB12mw-012c-1713-GW	VOCs SVOCs PCBs Cyanide	SW846 8260B SW846 8270C SW846 8082 SW846 9012
FWGRQLmw-017c-1638-GW	VOCs SVOCs	SW846 8260B SW846 8270C
FWGEQUIPRinse2-1758-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGB12mw-012c-1713-GF	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGLL1mw-085c-1720-GF		
FWGLL1mw-084c-1719-GF		
FWGLL1mw-DUP2-1747-GF		
FWGB12mw-010c-1712-GF		
FWGDETmw-003c-1739-GF		
FWGDETmw-004c-1740-GF		
FWGSCFmw-004-1744-GF		
FWGSCFmw-DUP1-1751-GF		
FWGSCFmw-005-1745-GF		
FWGSCFmw-006-1746-GF		
FWGLL1mw-082c-1718-GF		
FWGLL1mw-081c-1716-GF		
FWGLL1mw-067c-1715-GF		
FWGBKGmw-010c-1708-GF		
FWGTEAM1-Trip	VOCs	SW846 8260B
FWGTEAM2-Trip		
FWGTEAM3-Trip		

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 18, 2011
Sample Delivery Group: A1D060402 **Revision:** 0

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 1.9°C – 3.8°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, 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/ MRL verification criteria
- Method/Field/Trip blank Criteria
- Surrogate recoveries
- Field duplicate RPD criteria
- Laboratory Control Sample criteria
- Matrix Spike Recovery Criteria and RPD

MRL Recovery
4/13/11- Documentation in SDG A1D050458.

- The opening MRL check analyzed 4/13/11, recovered above control limits of 70-130% for carbon disulfide at 131%, methylene chloride at 230% and bromoform at 134%.
- The closing MRL check analyzed 4/13/11, recovered above control limits of 70-130% for acetone at 171%, carbon disulfide at 133%, chloromethane at 164%, bromomethane at 144%, vinyl chloride at 135%, chloroethane at 173%, methylene chloride at 176% and bromoform at 140%.

The methylene chloride result for FWGTEAM1-Trip was qualified as estimated, "J". No additional qualifications were made as the bracketed samples were nondetect for the other MRL outliers.
4/14/2011 - Documentation in SDG A1D070402.

- The opening MRL check recovered above control limits of 70-130% for chloromethane at 132%, vinyl chloride at 133%, chloroethane at 135%, methylene chloride at 198% and bromoform at 133%.
- The closing MRL check recovered above control limits of 70-130% for 1,1,-dichloroethene at 132%, acetone at 144%, chloromethane at 141%, vinyl chloride at 146%, chloroethane at 180% and methylene chloride at 255%.

The methylene chloride results for FWGTEAM3-Trip, FWGEQUIPRinse2-1758-GW, FWGSCFmw-004-1744-GW, FWGSCFmw-005-1745-GW, FWGSCFmw-DUP1-1751-GW and FWGBKGmw-010c-1708-GW were qualified as estimated, "J". No additional qualifications were made as the bracketed samples were nondetect for the other MRL outliers.

Blanks
Methylene chloride was detected in the method blanks 0.99ug/L (4/13/11) and at 1.3ug/L (4/14/11). The methylene chloride results for FWGTEAM1-Trip, FWGTEAM3-Trip, FWGEQUIPRinse2-1758-GW, FWGSCFmw-004-1744-GW, FWGSCFmw-005-1745-GW, FWGSCFmw-DUP1-1751-GW and FWGBKGmw-010c-1708-GW were qualified "B".

- FWGTEAM1-Trip had chloroform detected at 0.22ug/L and methylene chloride detected at 0.35ug/L.
- FWGTEAM3-Trip had chloroform detected at 0.27ug/L and methylene chloride detected at 0.35ug/L.

- FWGTEAM2-Trip had chloroform detected at 0.22ug/L.
- 2-butanone was detected in FWGEQUIPRinse2-1758-GW at 2.3ug/L, acetone at 4.7ug/L, chloroform at 0.84ug/L, toluene at 0.2ug/L and methylene chloride at 2.2ug/L.

The chloroform result for FWGEQUIPRinse2-1758-GW was qualified, "B". The methylene chloride results for FWGSCFmw-004-1744-GW, FWGSCFmw-005-1745-GW, FWGSCFmw-DUP1-1751-GW and FWGBKGmw-010c-1708-GW, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.

LCS Recovery
The LCS analyzed on 4/13/11 recovered above limits at 137% for carbon disulfide and at 128% for methylene chloride. The methylene chloride result for FWGTEAM1-Trip was qualified as estimated, "J".

Matrix Spike Recovery Criteria
The matrix spike duplicate analyzed on sample FWGLL1mw-081c-1716-GW recovered above control limits for carbon disulfide at 140%. No qualification was made for the carbon disulfide outliers as carbon disulfide was not detected in sample FWGLL1mw-081c-1716-GW.

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

MRL Recovery

- The closing MRL analyzed 4/13/11 @ 1624 recovered below control limits for 2,4-dinitrophenol at 51%. No qualifications were made as there were no field samples bracketed by this MRL check.
- The closing MRL analyzed 4/14/11 @ 2006 recovered below control limits for 2,4-dinitrophenol and 4-nitrophenol at 55%. The 2,4-dinitrophenol and 4- nitrophenol results for all samples except for FWGDET3mw-003c-1739-GW were qualified as estimated, "UJ".
- The closing MRL analyzed 4/20/11 @ 1603 recovered below control limits for 4,6-dinitro-2-methylphenol at 61%, pentachlorophenol at 55%, 2,4-dinitrophenol at 43% and 4-nitrophenol at 51%. An MDL check was analyzed following the closing MRL with detected results for all targets except 2,4-dinitrophenol. The 4,6-dinitro-2-methylphenol, pentachlorophenol and 4-nitrophenol results for FWGDET3mw-003c-1739-GW were qualified as estimated, "UJ". The 2,4-dinitrophenol result for sample was FWGDET3mw-003c-1739-GW was reanalyzed with acceptable MRL recoveries on 4/27/11. Documentation provided in SDG A1D080405.

Method Blank
The method blank analyzed 4/13/11 @ 1217 had bis2-ethylhexylphthalate detected at 0.87ug/L. The bis(2-ethylhexyl)phthalate results for samples FWGB12mw-012c-1713-GW, FWGDETmw-004c-1740-GW, FWGLL1mw-082c-1718-GW, FWGLL1mw-084c-1719-GW, FWGLL1mw-DUP2-1747-GW and FWGSCFmw-006-1747-GW were qualified, "B" as the detected results were <10x method blank contamination.

LCS Recovery
The LCS associated with batch 1097066 recovered below control limits for pentachlorophenol at 39%. The pentachlorophenol results for samples FWGBKGmw-010c-1708-GW, FWGLL1mw-067c-1715-GW, FWGLL1mw-081c-1716-GW and FWGRQLmw-017c-1638-GW were qualified as estimated, "UJ".

Matrix Spike Recovery
The MS and MSD associated with batch 1097066 (sample FWGLL1mw-081c-1716-GW) recovered below control limits for hexachlorocyclopentadiene at 25% and 27%, 2,4-dinitrophenol at 40% and 415, 3,3'dichlorobenzidine at

28% and 29% and 4-chloroaniline at 39% and 44%. The 2,4-dinitrophenol result for sample FWGLL1mw-081c-1716-GW was qualified as estimated,"UJ". No additional qualifications were made for the matrix spike outliers as the other targets had no additional QC outliers.

Surrogate Recovery
The following samples had associated surrogate outliers;

- FWGB12mw-010c-1712-GW; 2-fluorobiphenyl recovered at 44% and phenol- d5 at 47%
- FWGB12mw-012c-1713-GW; phenol- d5 recovered at 48%
- FWGDETmw-004c-1740-GW; 2-fluorobiphenyl recovered at 47% and phenol- d5 at 49%
- FWGEQUIPRinse2-1758-GW; phenol- d5 recovered at 49%
- FWGLL1mw-081c-1716-GW; nitrobenzene-d5 recovered at 47%
- FWGLL1mw-082c-1718-GW; 2-fluorobiphenyl recovered at 48% and phenol- d5 at 49%
- FWGLL1mw-085c-1720-GW; phenol- d5 recovered at 49%
- FWGSCFmw-004-1744-GW; 2-fluorobiphenyl recovered at 49% and phenol- d5 at 49%
- FWGSCFmw-DUP1-1751-GW; 2-fluorobiphenyl recovered at 47% and phenol- d5 at 48%

No qualifiers were applied to the sample results, as LCG allows for one surrogate per fraction to be outside control limits 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
- Method/Field blank Criteria
- LCS Recoveries
- Field Duplicate Criteria
- MDL/MRL verification criteria
- Matrix Spike Recovery Criteria and RPD
- Surrogate Recoveries
- Second Column confirmation criteria

Matrix Spike Recovery
The matrix spike analyzed on sample FWGLL1mw-081c-1716-GW recovered below limits at 49% for endosulfan I. No qualifications were made as Endosulfan I recovered within control limits in the LCS.

Surrogate Recovery
The surrogate, DCB, recovered below control limits for sample FWGB12mw-010c-1712-GW at 44%, FWGLL1mw-081c-1716-GW at 37%, FWGLL1mw-084c-1719-GW at 39%, FWGLL1mw-DUP2-1747-GW at 48% and FWSCFmw-005-1745-GW at 43%. The results for samples FWGB12mw-010c-1712-GW, FWGLL1mw-081c-1716-GW, FWGLL1mw-084c-1719-GW, FWGLL1mw-DUP2-1747-GW and FWSCFmw-005-1745-GW 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
- Method/Field blank Criteria
- LCS/ LCSD percent recoveries and RPD value criteria
- Second Column confirmation criteria
- Field Duplicate RPD criteria
- Matrix Spike Recovery Criteria and RPD
- Surrogate Recoveries

Holding Time
Due to surrogate outliers, sample FWGSCFmw-DUP1-1751-GW was reextracted. The reextraction was completed at 16 days after collection, which is greater than 2x the holding time specified in LCG. The sample results for FWGSCFmw-DUP1-1751-GW were qualified as estimated, "UJ", since the associated analytical method has a hold time of up to one year.

Surrogate Recovery
The surrogate, DCB, recovered below control limits for sample FWGB12mw-010c-1712-GW at 32%, FWGB12mw-012c-1713-GW at 24%, FWGDETmw-003c-1739-GW at 42%, FWGDETmw-004c-1740-GW at 48%, FWGLL1mw-081c-1716-GW at 32%, FWGLL1mw-084c-1719-GW at 30%, FWGLL1mw-085c-1720-GW at 45%, FWGLL1mw-DUP2-1747-GW at 35% and FWSCFmw-005-1745-GW at 35%. The results for samples FWGB12mw-010c-1712-GW, FWGB12mw-012c-1713-GW, FWGDETmw-003c-1739-GW, FWGDETmw-004c-1740-GW, FWGLL1mw-081c-1716-GW, FWGLL1mw-084c-1719-GW, FWGLL1mw-085c-1720-GW, FWGLL1mw-DUP2-1747-GW and FWSCFmw-005-1745-GW were qualified as estimated, "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 criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

Blanks

- The CCB analyzed 4/14/11 at 1650 had arsenic detected at 5.2ug/L, chromium at 2.2ug/L, cobalt at 2.3ug/L, nickel at 3.1ug/L, silver at 2.9ug/L and vanadium at 2.6ug/L. No qualifications were made as the detected results bracketed by this CCB 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.

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 criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

Blanks

- The ICB analyzed 4/11/11 had sodium detected at 34.5ug/L and thallium detected at 0.2ug/L. The thallium result for samples FWGB12mw-012c-1713-GF, FWGLL1mw-084c-1719-GF, FWGLL1mw-DUP2-1747-GF and FWGLL1mw-067c-1715-GF and the sodium result for sample FWGEQUIPRinse2-1758-GF were qualified "U" as the detected concentrations were <5x the blank contamination.
- The CCBs analyzed 4/11/11 had detected thallium from 0.18ug/L to 0.25ug/L and sodium from 52.9ug/L to 93ug/L. No additional qualifications were made other than those made for the ICB contamination.
- Sodium was detected in the method blank at 74.1ug/L and zinc at 19ug/L. The zinc results for samples FWGB12mw-012c-1713-GF, FWGLL1mw-085c-1720-GF, FWGSCFmw-005-1745-GF, FWGBKGmw-010c-

1708-GF and the sodium result for FWGEQUIPRinse2-1758-GF were qualified "B" as the detected concentrations were <5x the method blank contamination.
- Sodium was detected in FWGEQUIPRinse2-1758-GW at 8.7ug/L. No qualifications were made as the detected sodium results in the associated field samples were >5x 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 zinc LCS from prep batch 1097020 recovered above control limits at 122%. The zinc results for samples FWGB12mw-012c-1713-GF, FWGLL1mw-085c-1720-GF, FWGSCFmw-005-1745-GF and FWGBKGmw-010c-1708-GF were qualified as estimated, "J".

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 criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

Mercury was detected in the method blank at 0.18ug/L, but no qualifications were made as there were no reported mercury concentrations in the associated field samples.

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
- ICB /CCBs criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria and RPD

The matrix spike from batch 1097302 recovered below control limits at 72%. The cyanide results for samples FWGB12mw-012c-1713-GW, FWGLL1mw-085c-1720-GW, FWGLL1mw-084c-1719-GW and FWGLL1mw-DUP2-1747-GW were qualified as estimated, "UJ".

SAMPLE SUMMARY

A1D060402

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MGK2G	001	FWGTEAM1-TRIP	04/05/11	08:00
MGK2H	002	FWGB12mw-012C-1713-GW	04/05/11	09:11
MGK2J	003	FWGB12mw-012C-1713-GF	04/05/11	09:11
MGK2K	004	FWGLL1mw-085C-1720-GW	04/05/11	10:51
MGK2L	005	FWGLL1mw-085C-1720-GF	04/05/11	10:51
MGK2M	006	FWGLL1mw-084C-1719-GW	04/05/11	13:25
MGK2N	007	FWGLL1mw-084C-1719-GF	04/05/11	13:25
MGK2P	008	FWGLL1mw-DUP2-1747-GW	04/05/11	14:15
MGK2Q	009	FWGLL1mw-DUP2-1747-GF	04/05/11	14:15
MGK2R	010	FWGB12mw-010C-1712-GW	04/05/11	16:00
MGK2T	011	FWGB12mw-010C-1712-GF	04/05/11	16:00
MGK2V	012	FWGDETmw-003C-1739-GW	04/05/11	17:50
MGK2W	013	FWGDETmw-003C-1739-GF	04/05/11	17:50
MGK2X	014	FWGTEAM2-TRIP	04/04/11	18:00
MGK20	015	FWGSCFmw-004-1744-GW	04/05/11	10:02
MGK21	016	FWGSCFmw-004-1744-GF	04/05/11	10:02
MGK22	017	FWGSCFmw-DUP1-1751-GW	04/05/11	13:02
MGK23	018	FWGSCFmw-DUP1-1751-GF	04/05/11	13:02
MGK24	019	FWGSCFmw-005-1745-GW	04/05/11	15:08
MGK25	020	FWGSCFmw-005-1745-GF	04/05/11	15:08
MGK26	021	FWGSCFmw-006-1746-GW	04/05/11	16:38
MGK27	022	FWGSCFmw-006-1746-GF	04/05/11	16:38
MGK28	023	FWGEQUIPRINSE2-1758-GW	04/05/11	18:22
MGK29	024	FWGDETmw-004C-1740-GW	04/04/11	18:00
MGK3A	025	FWGDETmw-004C-1740-GF	04/04/11	18:00
MGK3D	026	FWGTEAM3-TRIP	04/05/11	08:00
MGK3E	027	FWGLL1mw-082C-1718-GW	04/05/11	09:23
MGK3F	028	FWGLL1mw-082C-1718-GF	04/05/11	09:23
MGK3H	029	FWGLL1mw-081C-1716-GW	04/05/11	11:23
MGK3L	030	FWGLL1mw-081C-1716-GF	04/05/11	11:23
MGK3N	031	FWGLL1mw-067C-1715-GW	04/05/11	14:23
MGK3Q	032	FWGLL1mw-067C-1715-GF	04/05/11	14:23
MGK3T	033	FWGBKGmw-010C-1708-GW	04/05/11	17:03
MGK3V	034	FWGBKGmw-010C-1708-GF	04/05/11	17:03
MGK3W	035	FWGRQLmw-017C-1638-GW	04/05/11	15:43

(Continued on next page)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

27

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/5/11	Chain of Custody Number: 000491
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513-825-7500	Lab Number:	Page 1 of 2
City: Cincinnati / State: OH / Zip Code: 45240	Site Contact: E. Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP OH	Carrier/Waybill Number: Lab pick-up		
Contract/Purchase Order/Quote No.: 030240.0006 PO# 16726			

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 8260	SVOC 8270	Pest 8081	PCB 8082	Explosive 8330	Propellants	Cyanide 9012	Total Metals 6010B/7470A	Special Instructions/ Conditions of Receipt
FWGTeam1-Trip	4/5/11	08:00		X						3			X								Cooler ID
FWGB12mw-012C-1713-GW	4/5/11	09:11		X			4			3	1		X	X		X	X	X	X		13
FWGB12mw-012C-1713-GF	4/5/11	09:11		X					1											X	13 Minimum Volumes
FWGLL1mw-085C-1720-GW	4/5/11	10:51		X			9			3	1		X	X	X	X	X	X	X		13 Min Volume
FWGLL1mw-085C-1720-GF	4/5/11	10:51		X					1											X	PH4
FWGLL2mw-084C-1719-GW		13:25		X			9			3	1		X	X	X	X	X	X	X		PH4
~~FWGLL1mw-DUP2~~																					AD7
FWGLL1mw-084C-1719-GF	4/5/11	13:25		X					1											X	
FWGLL1mw-DUP2-1747-GW	4/5/11	14:15		X			9			3	1		X	X	X	X	X	X	X		AD7
FWGLL1mw-DUP2-1747-GF	4/5/11	14:15		X					1											X	M12
FWGB12mw-010C-1712-GW	4/5/11	16:00		X			9			3	1		X	X	X	X	X	X	X		M12
FWGB12mw-010C-1712-GF	4/5/11	16:00		X					1											X	219
																					219

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 [ ] 21 Days [ ] Other per SOW

QC Requirements (Specify): metals are field filtered

1. Relinquished By: Gabe Corbin EQ	Date: 4/5/11	Time: 18:45	1. Received By: TC	Date: 4/5/11	Time: 1845
2. Relinquished By: TC	Date: 4/5/11	Time: 1952	2. Received By:	Date: 4/6/11	Time: 0700
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: Temps may not meet requirements if sample collection close to lab pickup

All VOCs in Cooler 13

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

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/5/11	Chain of Custody Number: 000492
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513-825-7500	Lab Number:	Page 2 of 2
City: Cincinnati / State: OH / Zip Code: 45240	Site Contact: E. Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP OH	Carrier/Waybill Number: Lab pickup		
Contract/Purchase Order/Quote No.: 03240.0006 PO# 16726			

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 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/7470/7471	Special Instructions/ Conditions of Receipt
FWGDETmw-003C-1739-GW	4/5/11	17:50		X			9			3	1		X	X	X	X	X	X	X		Cooler ID A503
FWGDETmw-003C-1739-GF	4/5/11	17:50		X					1											X	A503

4/5/11 EC

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 [ ] 21 Days [ ] Other Per SOW

QC Requirements (Specify): metals are field filtered

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	4/5/11	18:45	1. Received By: FC Fedex	4/5/11	1845
2. Relinquished By: FC Fedex	4/5/11	1952	2. Received By: [signature]	4/6/11	0700
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments: Temps may not meet requirements if sample collection close to lab pickup
All VOCs in cooler 13

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica Laboratory location: Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica 29
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Page 2 = 019326

COC No: 019329
1 of 2 COCs

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:
Company Name: EQM	John Miller	E Corbin	M. Loeb
Address: 1800 CARILLON	Telephone: 8257500	Telephone: 513 825-7500	Telephone: 330 4979396
City/State/Zip: CINCINNATI, OH 45240	Email: ecorbin@eqm.com		
Phone: 513 325 7500			
Project Name: RVAAP Ravenna OH	Method of Shipment/Carrier: lab Pick up		
Project Number: 30240.0006,	Shipping/Tracking No: N/A		
PO#			

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:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Analyses: VOC	SVOC	TCL PEST	PCB	Expd PCB/Pest	Chlorinated Herbicides	NO2 NO3	Metals	Sample Specific Notes / Special Instructions:
FWG Trip 2 - Trip - 040511	4-4-11	1800		✓				1		2					X								180
FWGSCFmw-004-1744-GW	4-5-11	1002		✓				1		3	1		9		X	X	X	X	X	X	X	X	313
FWGSCFmw-004-1744-GF	"	1002		✓					1													X	313
FWGSCFmw-DUP1-1751-GW	"	1302		✓				1		3	1		9		X	X	X	X	X	X	X		183
FWGSCFmw-DUP1-1751-GF	"	1302		✓					1													X	182
FWGSCFmw-005-1745-GW	"	1508		✓				1		3	1		9		X	X	X	X	X	X	X		180
FWGSCFmw-005-1745-GF	"	1508		✓					1													X	180
FWGSCFmw-006-1746-GW	"	1638		✓				1		3	1		9		X	X	X	X	X	X	X		C222
FWGSCFmw-006-1746-GF	"	1638		✓					1													X	C222
FWGEQUIPRinse2-1758-GW	"	1822		✓				1	1	3	1		9		X	X	X	X	X	X	X	X	5TL

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 be w/in limits if w/in hour to sample pickup time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Eric Corbin	EQ	4/5/11 1845		TAL-NC	4/5/11 1845
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL-NC	4/5/11 1952			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TANC	4/6/11 0700

Metals field filtered

All VOAs in cooler 180

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North Canton

Chain of Custody Record

TestAmerica Laboratory location: Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

Pace = 19329

TestAmerica Laboratories, Inc.

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Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	E Corbin	M. Loeb	019326
Address: 1800 CARNEGIE	Telephone: 5138257500	Telephone: 5138257500	Telephone: 3304979396	2 of 2 COCs
City/State/Zip: Cincinnati OH 45246	Email: ecorbin@eqm.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 5138257500		TAT if different from below _____		Walk-in client: ☐
Project Name: RVAAP	Method of Shipment/Carrier: FC Labpickup	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab sampling: ☐
Project Number: 30240.0006	Shipping/Tracking No:			Job/SDG No.:
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation Code: H2SO4	HNO3	HCl	NaOH	ZnAcf NaOH	Unpres	Other:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOC	SVOC	Pest	PCB	Explosives	Propellants	Cyanide	Metals	Sample Specific Notes / Special Instructions:
FWGDETMW-004C-1740-GW	4-4-11	1800		✓						3	1		9				X	X	X	X	X	X			317
FWG DETMW-004C-1740 GF	↓	↓		✓					1															X	317

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 were feltered. temps were not metal requirements if close to lab pick up. all VOA's in cooler 180.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Eric Corbin	EQ	4/5/11 1845	FC Labpickup	TAL-NC	4/5/11 1845
FC Labpickup	TAL-NC	4/5/11 1952	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA NC	4/6/11 0700

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North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/5/11	Chain of Custody Number: 000464
Address: 1800 Carillon	Telephone Number (Area Code)/Fax Number: 5138257500	Lab Number: 3304979396	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	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 30240.0002			

Analysis (Attach list if more space is needed)

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 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020	Special Instructions/ Conditions of Receipt: Cooler ID
FWG Team 3 - Trip	4-5-11	0800		X									X								T52
FWGLLImw-082C-1718-GW		0923		X			9			3	1		X	X	X	X	X	X	X		T52
FWGLLImw-082C-1718-GF		↓		X					1											X	T52
FWGLLImw-081C-1716-GW		1123		X			27			9	3		X	X	X	X	X	X	X		0411, 176, 316
FWGLLImw-081C-1716-GF		↓		X					3											X	0411, 176, 316
FWGLLImw-067C-1715-GW		1423		X			9			3	1		X	X	X	X	X	X	X		8
FWGLLImw-067C-1715-GF		↓		X					1											X	8
FWGBKGmw-010C-1708-GW		1703		X			9			3	1		X	X	X	X	X	X	X		12009
FWGBKGmw-010C-1708-GF		↓		X					1											X	12009
FWGRQLmw-017C-1638-GW		1543		X			1			3			X	X							8

~~AD 4/5/11~~

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 [X] Other SOW

QC Requirements (Specify): RC

	Date	Time		Date	Time
1. Relinquished By: [signature]	4/5/11	1845	1. Received By: RC [signature]	4/5/11	1845
2. Relinquished By: RC [signature]	4/5/11	1952	2. Received By: [signature]	4/6/11	0700
3. Relinquished By:			3. Received By:		

Comments: Metals (GF) were field filtered
Temps may not meet requirements if sample collection time is close to lab pickup time.
All VOAs in cooler T52

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Lot Number: ATD0604/02

Client EQM Project RVAAP By: (Signature)
Cooler Received on 4/6/11 Opened on 4/6/11
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 3
   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#* 100110-HNO_3; *Sulfuric Acid Lot#* 110410-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
1713	<2 >12	4/6/11	
1720	<2 >12		
1719	<2 >12		
1747	<2 >12		
1712	<2 >12		
1739	<2 >12		
1744	<2 <2 >12		
1751	<2 <2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1745	<2 <2 >12	4/6/11	9
1746	<2 <2 >12		
1758	<2 <2 >12		
1740	<2 >12		
1718	<2 >12		
1716	<2 >12		
1715	<2 >12		
1708	<2 >12		

Cooler #	Temp. °C	Cooler #	Temp.	Method	Coolant
13	1.9	T52	2.2	IR	Ice
PH4	3.8	0411	3.4		
AD7	3.6	176	2.2		
M12	3.2	316	3.2		
219	2.9	8	3.1		
ASD3	2.3	12009	2.1		
313	3.8				
182	3.0				
180	2.5				
C222	2.7				
STL-1	2.7				
317	3.3				

Discrepancies Cont'd:

ANALYTICAL METHODS SUMMARY

A1D060402

PARAMETER	ANALYTICAL METHOD
Cyanide, Total	SW846 9012A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
ICP-MS (6020)	SW846 6020
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Organochlorine Pesticides	SW846 8081A
PCBs by SW-846 8082	SW846 8082
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B
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.

CASE NARRATIVE

A1D060402

The following report contains the analytical results for thirty-two 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 April 06, 2011, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods and Louisville Corps Guidelines version 5, where applicable, in all analytical reports. 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 May 02, 2011. 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. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

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 1.9 to 3.8° 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 FWGLL1mw-081C-1716-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 matrix spike/matrix spike duplicate(s) for batch(es) 1103146 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 batches 1103146 and 1104189 was recovered high and outside of criteria for Methylene Chloride and Carbon Disulfide. Since the analytes were not detected in any of the samples above reporting limits, the results were accepted. Slight positive bias is not believed to have impacted data quality.

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.

CASE NARRATIVE (continued)

GC/MS SEMIVOLATILES (cont)

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-081C-1716-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 matrix spike/matrix spike duplicate(s) for batch(es) 1097067 had RPD's outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

3-Methylphenol (m-Cresol) and 4-Methylphenol (p-Cresol) co-elute and cannot be reported as separate analytes. When these analytes are requested, the reported result represents a probable combination of the two analytes.

Insufficient sample volume was provided to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 1096079.

For sample(s) FWGB12mw-012C-1713-GW, FWGLL1mw-085C-1720-GW, FWGB12mw-010C-1712-GW, FWGSCFmw-004-1744-GW, FWGSCFmw-DUP1-1751-GW, FWGSCFmw-005-1745-GW, FWGSCFmw-006-1746-GW, FWGEQUIPRINSE2-1758-GW, FWGDETmw-004C-1740-GW, FWGLL1mw-082C-1718-GW, FWGLL1mw-081C-1716-GW, FWGLL1mw-067C-1715-GW, FWGBKGmw-010C-1708-GW, and FWGRQLmw-017C-1638-GW the recovery for surrogate compound(s) are outside acceptance criteria. Since LCG criterion is that all surrogates be above 10%, no corrective action is required.

Sample FWGSCFmw-006-1746-GW had elevated reporting limits due to limited initial sample volume.

The QCMRLCL for sample FWGDETmw-003C-1739-GW did not pass for the following compounds. Since the compounds were greater than 50% but less than 70% they were acceptable: 4,6-Dinitro-2-methylphenol 60.97%, 2,4-Dinitrophenol 43.07%, 4-Nitrophenol 51.12%, Pentachlorophenol 55.09%. The MDL Check sample was non-detect for 4,6-Dinitro-2-methylphenol, 2,4-Dinitrophenol, 4-Nitrophenol, Pentachlorophenol and Benzoic Acid. Sample FWGDETmw-003C-1739-GW was reanalyzed for 2,4-Dinitrophenol with and reported with an acceptable MRL closer.

CASE NARRATIVE (continued)

GC/MS SEMIVOLATILES (cont)

The LCS associated with samples FWGLL1mw-081C-1716-GW, FWGLL1mw-067C-1715-GW, FWGBKGmw-010C-1708-GW, and FWGRQLmw-017C-1638-GW in batch 1097066 had Hexachlorocyclopentadiene out of control at 29.43%.

The QCMRL closer for samples FWGLL1mw-081C-1716-GW, FWGLL1mw-067C-1715-GW, FWGBKGmw-010C-1708-GW, FWGRQLmw-017C-1638-GW, FWGB12mw-012C-1713-GW, FWGLL1mw-085C-1720-GW, FWGLL1mw-084C-1719-GW, FWGLL1mw-DUP2-1747-GW, FWGB12mw-010C-1712-GW, FWGSCFmw-004-1744-GW, FWGSCFmw-DUP1-1751-GW, FWGSCFmw-005-1745-GW, FWGSCFmw-006-1746-GW, FWGEQUIPRINSE2-1758-GW, FWGDETmw-004C-1740-GW, and FWGLL1mw-082C-1718-GW did not pass the following compounds. Since the compounds where greater than 50% and below 70% they data was reported: 2,4-Dinitrophenol 55.04% and 4-Nitrophenol 52.26%.

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 matrix spike/matrix spike duplicate(s) for FWGLL1mw-081C-1716-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.

For sample(s) FWGLL1mw-084C-1719-GW, FWGLL1mw-DUP2-1747-GW, FWGB12mw-010C-1712-GW, FWGSCFmw-005-1745-GW, and FWGLL1mw-081C-1716-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%)

POLYCHLORINATED BIPHENYLS-8082

There was no client requested matrix spike / matrix spike duplicate (MS/MSD) in batch 1112028.

DCB surrogate recovery for sample FWGSCFmw-DUP1-1751-GW failed below 10%. The client was contacted and requested the sample be reextracted and reanalyzed. Only the results for the reanalysis are included in this report.

CASE NARRATIVE (continued)

POLYCHLORINATED BIPHENYLS-8082 (cont)

For sample(s) FWGB12mw-012C-1713-GW, FWGLL1mw-085C-1720-GW, FWGLL1mw-084C-1719-GW, FWGLL1mw-DUP2-1747-GW, FWGB12mw-010C-1712-GW, FWGDETmw-003C-1739-GW, FWGSCFmw-005-1745-GW, FWGDETmw-004C-1740-GW, FWGLL1mw-082C-1718-GF, FWGLL1mw-081C-1716-GW, FWGLL1mw-081C-1716-GWMS and FWGLL1mw-081C-1716-GWMSD 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%)

Sample FWGSCF-MW-DUP1-1751-GW was re-extracted due to surrogate failure. Only the re-extract is report as per the Client's request of accepting a one (1) year hold time for these samples.

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).

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes for FWGLL1mw-081C-1716-GF due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which will be flagged with "NC, MSB".

The LCS associated with batch 1097020 was recovered high and outside of criteria for zinc. Since the analyte was not detected in any of the samples the result(s) was/were accepted. Slight positive bias is not believed to have impacted data quality.

The CCB associated with batch 1097020 was greater than or equal to the requested reporting for Arsenic. Since the sample result(s) was/were below the requested reporting limit the result(s) was/were accepted.

CASE NARRATIVE (continued)

GENERAL CHEMISTRY

The matrix spike/matrix spike duplicate(s) for batch(es) 1097302 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.

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, a Matrix Spike/Matrix Spike Duplicate (MS/MSD) pair or a Matrix Spike/Sample Duplicate (MS/DU) pair.
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. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch, with the exception of poor performing analytes. A list of these analytes is listed below. No corrective action is taken if these analytes do not meet criteria.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.

Poor performers

Method 8270 Water and Solid:	
4-Nitrophenol	3,3' – Dichlorobenzidine
Benzoic Acid	2,4,6 - Tribromophenol
Phenol	2,4-Dinitrophenol
Phenol-d5	Pentachlorophenol
4,6-Dinitro-2-methylphenol	Hexachlorocyclopentadiene (LCG only)
Benzyl Alcohol	4-Chloroaniline
Method 8151 Solid	
Dinoseb	
Method 8260 Water and Solid	
Dichlorodifluoromethane	Hexachlorobutadiene
Trichlorofluoromethane	Naphthalene
Chloroethane	1,2,3-Trichlorobenzene
Acetone	1,2,4-Trichlorobenzene
Bromomethane	2,2-Dichloropropane
Bromoform	Chloromethane

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 ten 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 do 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 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 or Matrix Spike/Sample Duplicate.

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, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, 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), DoD ELAP (ADE-1437) USDA Soil Permit (P33-08-00123)

MANUAL INTEGRATION SUMMARY

Lot A1D060402

Client ID: FWGSCFmw-004-1744-G
Compound Name: Tetrachloro-m-xylene
Instrument ID: a2hp9.i
File Name: P9418013.D
Inj. Date and Time: 18-APR-2011 05:52
Manual Integration Reason: Baseline Event

Client ID: FWGLL1mw-081C-1716-
Compound Name: 4,4'-DDT
Instrument ID: a2hp9.i
File Name: P9418022.D
Inj. Date and Time: 18-APR-2011 09:19
Manual Integration Reason: Poor Chromatography

Client ID: FWGLL1mw-081C-1716-
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: P1341546.D
Inj. Date and Time: 15-APR-2011 19:06
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGLL1mw-081C-1716-
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: P1341546.D
Inj. Date and Time: 15-APR-2011 19:06
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGLL1mw-081C-1716-
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: P1341547.D
Inj. Date and Time: 15-APR-2011 19:22
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGLL1mw-081C-1716-
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: P1341547.D
Inj. Date and Time: 15-APR-2011 19:22
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGLL1mw-081C-1716-
Compound Name: Benzoic Acid
Instrument ID: a4hp10.i
File Name: MGK3H1AF.D
Inj. Date and Time: 14-APR-2011 12:56
Manual Integration Reason: Poor Chromatography

MANUAL INTEGRATION SUMMARY

Lot A1D060402 (Continued)

Client ID: FWGLL1mw-081C-1716-
Compound Name: Benzoic Acid
Instrument ID: a4hp10.i
File Name: MGK3H1AF.D
Inj. Date and Time: 14-APR-2011 12:56
Manual Integration Reason: Poor Chromatography

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 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 1.9 and 3.8 °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–March 8, 2011 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 and bromoform used a weighted linear curve.	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?	✓			4/14/11 @ 2017	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Were the QC/MRL recoveries 70-130%?		✓		**4/13/11**- Documentation in SDG A1D050458. • The opening MRL check analyzed 4/13/11, recovered above control limits of 70-130% for carbon disulfide at 131%, methylene chloride at 230% and bromoform at 134%. • The closing MRL check analyzed 4/13/11, recovered above control limits of 70-130% for acetone at 171%, carbon disulfide at 133%, chloromethane at 164%, bromomethane at 144%, vinyl chloride at 135%, chloroethane at 173%, methylene chloride at 176% and bromoform at 140%. The methylene chloride result for FWGTEAM1-Trip was qualified as estimated, "J". No additional qualifications were made as the bracketed samples were nondetect for the other MRL outliers. **4/14/2011** - Documentation in SDG A1D070402. • The opening MRL check recovered above control limits of 70-130% for chloromethane at 132%, vinyl chloride at 133%, chloroethane at 135%, methylene chloride at 198% and bromoform at 133%. • The closing MRL check recovered above control limits of 70-130% for 1,1,-dichloroethene at 132%, acetone at 144%, chloromethane at 141%, vinyl chloride at 146%, chloroethane at 180% and methylene chloride at 255%. The methylene chloride results for FWGTEAM3-Trip, FWGEQUIPRinse2-1758-GW, FWGSCFmw-004-1744-GW, FWGSCFmw-005-1745-GW, FWGSCFmw-DUP1-1751-GW and FWGBKGmw-010c-1708-GW were qualified as estimated, "J". No additional qualifications were made as the bracketed samples were nondetect for the other MRL outliers.	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed? Were results 80-120%?	✓			3/8/2011 @1059	LCG Table 1, <60%=J/R >120%=J; 60-80%=J/UJ
18. Was a CCV run every 12 hours?	✓			4/13/11 @ 1010, 4/14/111 @ 1041	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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓			4/13/11-Carbon disulfide had a %D above control limits at 21%, No qualifications were made as the avg %D was <20%. 4/14/11-Carbon disulfide had a %D above control limits at 22.5%. No qualifications were made as the avg %D was <20%.	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 blanks 0.99ug/L (4/13/11) and at 1.3ug/L (4/14/11). The methylene chloride results for FWGTEAM1-Trip, FWGTEAM3-Trip, FWGEQUIPRinse2-1758-GW, FWGSCFmw-004-1744-GW, FWGSCFmw-005-1745-GW, FWGSCFmw-DUP1-1751-GW and FWGBKGmw-010c-1708-GW were qualified "B".	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse2-1758-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGTEAM1-Trip had chloroform detected at 0.22ug/L and methylene chloride detected at 0.35ug/L. • FWGTEAM3-Trip had chloroform detected at 0.27ug/L and methylene chloride detected at 0.35ug/L. • FWGTEAM2-Trip had chloroform detected at 0.22ug/L. • 2-butanone was detected in FWGEQUIPRinse2-1758-GW at 2.3ug/L, acetone at 4.7ug/L, chloroform at 0.84ug/L, toluene at 0.2ug/L and methylene chloride at 2.2ug/L. The chloroform result for FWGEQUIPRinse2-1758-GW was qualified, "B". The methylene chloride results for FWGSCFmw-004-1744-GW, FWGSCFmw-005-1745-GW, FWGSCFmw-DUP1-1751-GW and FWGBKGmw-010c-1708-GW, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x	<5/10X =B

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
				contamination reported for the associated field samples.	
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; The LCS analyzed on 4/13/11 recovered above limits at 137% for carbon disulfide and at 128% for methylene chloride. The methylene chloride result for FWGTEAM1-Trip 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?	✓				
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?		✓		The matrix spike duplicate analyzed on sample FWGLL1mw-081c-1716-GW recovered above control limits for carbon disulfide at 140%. No qualification was made for the carbon disulfide outliers as carbon disulfide was not detected in sample FWGLL1mw-081c-1716-GW.	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

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 R0
Analysis: SW846 8260B

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 #...: A1D060402-001 **Work Order #...:** MGK2G1AA **Matrix.....:** WQ
Date Sampled...: 04/05/11 08:00 **Date Received..:** 04/06/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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	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	**0.22 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	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 #...: A1D060402-001 Work Order #...: MGK2G1AA 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	82	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	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: FWGB12mw-012C-1713-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-002 Work Order #...: MGK2H1AA Matrix.....: WG
Date Sampled...: 04/05/11 09:11 Date Received..: 04/06/11
Prep Date.....: 04/13/11 Analysis Date..: 04/13/11
Prep Batch #...: 1103146
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: FWGB12mw-012C-1713-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-002 Work Order #...: MGK2H1AA 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	84	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1720-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-004 **Work Order #...:** MGK2K1AA **Matrix.....:** WG
Date Sampled...: 04/05/11 10:51 **Date Received..:** 04/06/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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-1720-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-004 Work Order #...: MGK2K1AA 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	84	(50 - 150)
1,2-Dichloroethane-d4	85	(50 - 150)
Toluene-d8	80	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1719-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-006 **Work Order #...:** MGK2M1AA **Matrix.....:** WG
Date Sampled...: 04/05/11 13:25 **Date Received..:** 04/06/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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-1719-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-006 **Work Order #...:** MGK2M1AA **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	84	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1747-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-008 Work Order #...: MGK2P1AA Matrix.....: WG
Date Sampled...: 04/05/11 14:15 Date Received..: 04/06/11
Prep Date.....: 04/13/11 Analysis Date..: 04/13/11
Prep Batch #...: 1103146
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-DUP2-1747-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-008 **Work Order #...:** MGK2P1AA **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	85	(50 - 150)
1,2-Dichloroethane-d4	87	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-010C-1712-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-010 **Work Order #...:** MGK2R1AA **Matrix.....:** WG
Date Sampled...: 04/05/11 16:00 **Date Received..:** 04/06/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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: FWGB12mw-010C-1712-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-010 Work Order #...: MGK2R1AA 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	84	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
Toluene-d8	80	(50 - 150)
4-Bromofluorobenzene	80	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-003C-1739-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-012 **Work Order #...:** MGK2V1AA **Matrix.....:** WG
Date Sampled...: 04/05/11 17:50 **Date Received..:** 04/06/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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: FWGDETmw-003C-1739-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-012 **Work Order #...:** MGK2V1AA **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	85	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	77	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1D060402-014 **Work Order #...:** MGK2X1AA **Matrix.....:** WQ
Date Sampled...: 04/04/11 18:00 **Date Received..:** 04/06/11
Prep Date.....: 04/13/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1103146
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	**0.22 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	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 #...: A1D060402-014 Work Order #...: MGK2X1AA 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	84	(50 - 150)
1,2-Dichloroethane-d4	85	(50 - 150)
Toluene-d8	80	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1744-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-015 **Work Order #...:** MGK201AA **Matrix.....:** WG
Date Sampled...: 04/05/11 10:02 **Date Received..:** 04/06/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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	**0.34 J,B**	**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-004-1744-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-015 Work Order #...: MGK201AA 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	85	(50 - 150)
1,2-Dichloroethane-d4	81	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	80	(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-DUP1-1751-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-017 **Work Order #...:** MGK221AA **Matrix.....:** WG
Date Sampled...: 04/05/11 13:02 **Date Received..:** 04/06/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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	**0.38 J,B**	**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-DUP1-1751-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-017 Work Order #...: MGK221AA 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	82	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	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: FWGSCFmw-005-1745-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-019 **Work Order #...:** MGK241AA **Matrix.....:** WG
Date Sampled...: 04/05/11 15:08 **Date Received..:** 04/06/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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	**0.36 J,B**	**2.0**	**ug/L**	**0.33**
Acetone	ND	10	ug/L	1.1
Carbon disulfide	**1.5**	**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-005-1745-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-019 Work Order #...: MGK241AA 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	85	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	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: FWGSCFmw-006-1746-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-021 **Work Order #...:** MGK261AA **Matrix.....:** WG
Date Sampled...: 04/05/11 16:38 **Date Received..:** 04/06/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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-006-1746-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-021 **Work Order #...:** MGK261AA **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	84	(50 - 150)
1,2-Dichloroethane-d4	81	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1758-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-023 Work Order #...: MGK281AA Matrix.....: WQ
Date Sampled...: 04/05/11 18:22 Date Received..: 04/06/11
Prep Date.....: 04/14/11 Analysis Date..: 04/14/11
Prep Batch #...: 1104189
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	**2.2 B**	**2.0**	**ug/L**	**0.33**
Acetone	**4.7 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	**0.84 J**	**1.0**	**ug/L**	**0.16**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**2.3 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	**0.20 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: FWGEQUIPRINSE2-1758-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-023 Work Order #...: MGK281AA 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	79	(50 - 150)
4-Bromofluorobenzene	77	(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: FWGDETmw-004C-1740-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-024 **Work Order #...:** MGK291AA **Matrix.....:** WG
Date Sampled...: 04/04/11 18:00 **Date Received..:** 04/06/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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: FWGDETmw-004C-1740-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-024 Work Order #...: MGK291AA 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	84	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A1D060402-026 **Work Order #...:** MGK3D1AA **Matrix.....:** WQ
Date Sampled...: 04/05/11 08:00 **Date Received..:** 04/06/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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	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	**0.27 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	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 #...: A1D060402-026 **Work Order #...:** MGK3D1AA **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	89	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	80	(50 - 150)
4-Bromofluorobenzene	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: FWGLL1mw-082C-1718-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-027 Work Order #...: MGK3E1AA Matrix.....: WG
Date Sampled...: 04/05/11 09:23 Date Received..: 04/06/11
Prep Date.....: 04/14/11 Analysis Date..: 04/14/11
Prep Batch #...: 1104189
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-1718-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-027 **Work Order #...:** MGK3E1AA **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	86	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1716-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-029 **Work Order #...:** MGK3H1AA **Matrix.....:** WG
Date Sampled...: 04/05/11 11:23 **Date Received..:** 04/06/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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-1716-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-029 **Work Order #...:** MGK3H1AA **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	85	(50 - 150)
1,2-Dichloroethane-d4	85	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1715-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-031 **Work Order #...:** MGK3N1AA **Matrix.....:** WG
Date Sampled...: 04/05/11 14:23 **Date Received..:** 04/06/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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-1715-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-031 **Work Order #...:** MGK3N1AA **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	89	(50 - 150)
1,2-Dichloroethane-d4	85	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-010C-1708-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-033 **Work Order #...:** MGK3T1AA **Matrix.....:** WG
Date Sampled...: 04/05/11 17:03 **Date Received..:** 04/06/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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	**0.39 J,B**	**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: FWGBKGmw-010C-1708-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-033 **Work Order #...:** MGK3T1AA **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	85	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	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: FWGRQLmw-017C-1638-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-035 Work Order #...: MGK3W1AA Matrix.....: WG
Date Sampled...: 04/05/11 15:43 Date Received..: 04/06/11
Prep Date.....: 04/14/11 Analysis Date..: 04/14/11
Prep Batch #...: 1104189
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: FWGRQLmw-017C-1638-GW

GC/MS Volatiles

Lot-Sample #...: A1D060402-035 **Work Order #...:** MGK3W1AA **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	84	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1D060402 **Work Order #...:** MGXP51AA **Matrix.....:** WATER
MB Lot-Sample #: A1D130000-146

Prep Date.....: 04/13/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/13/11 **Prep Batch #...:** 1103146
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	**0.99 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 #...: A1D060402 **Work Order #...:** MGXP51AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	83	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	78	(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 #...: A1D060402 **Work Order #...:** MG1FL1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D140000-189

Prep Date.....: 04/14/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/14/11 **Prep Batch #...:** 1104189
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
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
Bromochloromethane	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	**1.3 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 #...: A1D060402 **Work Order #...:** MG1FL1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	83	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	79	(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 #...: A1D060402 Work Order #...: MGXP51AC Matrix.....: WATER
LCS Lot-Sample#: A1D130000-146
Prep Date.....: 04/13/11 Analysis Date..: 04/13/11
Prep Batch #...: 1103146
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Bromochloromethane	106	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	104	(75 - 122)	SW846 8260B
o-Xylene	106	(75 - 118)	SW846 8260B
cis-1,2-Dichloroethene	102	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	103	(75 - 134)	SW846 8260B
1,2-Dibromoethane	106	(75 - 127)	SW846 8260B
Chloromethane	106	(58 - 135)	SW846 8260B
Bromomethane	99	(35 - 153)	SW846 8260B
Vinyl chloride	101	(73 - 134)	SW846 8260B
Chloroethane	104	(72 - 129)	SW846 8260B
Methylene chloride	128 a	(69 - 118)	SW846 8260B
Acetone	103	(51 - 157)	SW846 8260B
Carbon disulfide	137 a	(74 - 123)	SW846 8260B
1,1-Dichloroethene	116	(75 - 125)	SW846 8260B
1,1-Dichloroethane	105	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	102	(85 - 111)	SW846 8260B
Chloroform	103	(74 - 127)	SW846 8260B
1,2-Dichloroethane	106	(67 - 132)	SW846 8260B
2-Butanone	108	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	102	(70 - 127)	SW846 8260B
Carbon tetrachloride	103	(71 - 132)	SW846 8260B
Bromodichloromethane	107	(70 - 130)	SW846 8260B
1,2-Dichloropropane	107	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	110	(73 - 132)	SW846 8260B
Trichloroethene	102	(67 - 128)	SW846 8260B
Dibromochloromethane	111	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	104	(75 - 136)	SW846 8260B
Benzene	104	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	120	(74 - 131)	SW846 8260B
Bromoform	104	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	114	(59 - 150)	SW846 8260B
2-Hexanone	118	(53 - 139)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D060402 **Work Order #...:** MGXP51AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D130000-146

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	95	(75 - 129)	**SW846 8260B**
1,1,2,2-Tetrachloroethane	104	(68 - 129)	**SW846 8260B**
Toluene	102	(75 - 125)	**SW846 8260B**
Chlorobenzene	101	(75 - 127)	**SW846 8260B**
Etbylbenzene	103	(75 - 120)	**SW846 8260B**
Styrene	111	(75 - 130)	**SW846 8260B**
Xylenes (total)	104	(90 - 114)	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	80	(50 - 150)
1,2-Dichloroethane-d4	76	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	95	(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 #...: A1D060402 Work Order #...: MG1FL1AC Matrix.....: WATER
LCS Lot-Sample#: A1D140000-189
Prep Date.....: 04/14/11 Analysis Date..: 04/14/11
Prep Batch #...: 1104189
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
cis-1,2-Dichloroethene	104	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	105	(75 - 134)	SW846 8260B
1,2-Dibromoethane	105	(75 - 127)	SW846 8260B
Bromochloromethane	105	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	102	(75 - 122)	SW846 8260B
o-Xylene	104	(75 - 118)	SW846 8260B
Chloromethane	100	(58 - 135)	SW846 8260B
Bromomethane	93	(35 - 153)	SW846 8260B
Vinyl chloride	96	(73 - 134)	SW846 8260B
Chloroethane	104	(72 - 129)	SW846 8260B
Methylene chloride	126 a	(69 - 118)	SW846 8260B
Acetone	101	(51 - 157)	SW846 8260B
Carbon disulfide	130 a	(74 - 123)	SW846 8260B
1,1-Dichloroethene	119	(75 - 125)	SW846 8260B
1,1-Dichloroethane	103	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	104	(85 - 111)	SW846 8260B
Chloroform	105	(74 - 127)	SW846 8260B
1,2-Dichloroethane	105	(67 - 132)	SW846 8260B
2-Butanone	109	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	103	(70 - 127)	SW846 8260B
Carbon tetrachloride	104	(71 - 132)	SW846 8260B
Bromodichloromethane	108	(70 - 130)	SW846 8260B
1,2-Dichloropropane	107	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	110	(73 - 132)	SW846 8260B
Trichloroethene	102	(67 - 128)	SW846 8260B
Dibromochloromethane	107	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	104	(75 - 136)	SW846 8260B
Benzene	106	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	118	(74 - 131)	SW846 8260B
Bromoform	104	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	116	(59 - 150)	SW846 8260B
2-Hexanone	115	(53 - 139)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D060402 **Work Order #...:** MG1FL1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D140000-189

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	94	(75 - 129)	SW846 8260B
1,1,2,2-Tetrachloroethane	102	(68 - 129)	SW846 8260B
Toluene	101	(75 - 125)	SW846 8260B
Chlorobenzene	100	(75 - 127)	SW846 8260B
Ethylbenzene	104	(75 - 120)	SW846 8260B
Styrene	110	(75 - 130)	SW846 8260B
Xylenes (total)	103	(90 - 114)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	81	(50 - 150)
1,2-Dichloroethane-d4	78	(50 - 150)
Toluene-d8	81	(50 - 150)
4-Bromofluorobenzene	93	(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 #...: A1D060402 Work Order #...: MGJ4D1AJ-MS Matrix.....: WATER
MS Lot-Sample #: A1D050458-001 MGJ4D1AK-MSD
Date Sampled...: 04/04/11 12:35 Date Received..: 04/05/11
Prep Date.....: 04/13/11 Analysis Date..: 04/13/11
Prep Batch #...: 1103146
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	99	(70 - 130)			SW846 8260B
	102	(70 - 130)	3.6	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	102	(70 - 130)			SW846 8260B
	104	(70 - 130)	1.6	(0-30)	SW846 8260B
1,2-Dibromoethane	104	(70 - 130)			SW846 8260B
	104	(70 - 130)	0.09	(0-30)	SW846 8260B
Bromochloromethane	103	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.01	(0-30)	SW846 8260B
m-Xylene & p-Xylene	97	(70 - 130)			SW846 8260B
	101	(70 - 130)	3.7	(0-30)	SW846 8260B
o-Xylene	99	(70 - 130)			SW846 8260B
	103	(70 - 130)	4.6	(0-30)	SW846 8260B
Chloromethane	98	(70 - 130)			SW846 8260B
	106	(70 - 130)	7.8	(0-30)	SW846 8260B
Bromomethane	99	(70 - 130)			SW846 8260B
	111	(70 - 130)	12	(0-30)	SW846 8260B
Vinyl chloride	95	(70 - 130)			SW846 8260B
	102	(70 - 130)	7.8	(0-30)	SW846 8260B
Chloroethane	107	(70 - 130)			SW846 8260B
	114	(70 - 130)	6.8	(0-30)	SW846 8260B
Methylene chloride	116	(70 - 130)			SW846 8260B
	121	(70 - 130)	4.2	(0-30)	SW846 8260B
Acetone	104	(70 - 130)			SW846 8260B
	112	(70 - 130)	7.3	(0-30)	SW846 8260B
Carbon disulfide	129	(70 - 130)			SW846 8260B
	139 a	(70 - 130)	7.5	(0-30)	SW846 8260B
1,1-Dichloroethene	112	(70 - 130)			SW846 8260B
	123	(70 - 130)	9.5	(0-30)	SW846 8260B
1,1-Dichloroethane	101	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.34	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	100	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.6	(0-30)	SW846 8260B
Chloroform	101	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.1	(0-30)	SW846 8260B
1,2-Dichloroethane	107	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.7	(0-30)	SW846 8260B
2-Butanone	117	(70 - 130)			SW846 8260B
	113	(70 - 130)	4.2	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D060402 **Work Order #...:** MGJ4D1AJ-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D050458-001 MGJ4D1AK-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	100	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.5	(0-30)	SW846 8260B
Carbon tetrachloride	101	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.27	(0-30)	SW846 8260B
Bromodichloromethane	106	(70 - 130)			SW846 8260B
	106	(70 - 130)	0.13	(0-30)	SW846 8260B
1,2-Dichloropropane	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.86	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	97	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.5	(0-30)	SW846 8260B
Trichloroethene	96	(70 - 130)			SW846 8260B
	100	(70 - 130)	4.8	(0-30)	SW846 8260B
Dibromochloromethane	103	(70 - 130)			SW846 8260B
	106	(70 - 130)	3.0	(0-30)	SW846 8260B
1,1,2-Trichloroethane	104	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.79	(0-30)	SW846 8260B
Benzene	101	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.1	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	111	(70 - 130)			SW846 8260B
	115	(70 - 130)	3.7	(0-30)	SW846 8260B
Bromoform	105	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.39	(0-30)	SW846 8260B
4-Methyl-2-pentanone	120	(70 - 130)			SW846 8260B
	120	(70 - 130)	0.0	(0-30)	SW846 8260B
2-Hexanone	123	(70 - 130)			SW846 8260B
	122	(70 - 130)	1.1	(0-30)	SW846 8260B
Tetrachloroethene	87	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.3	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.3	(0-30)	SW846 8260B
Toluene	97	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.8	(0-30)	SW846 8260B
Chlorobenzene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.0	(0-30)	SW846 8260B
Ethylbenzene	97	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.1	(0-30)	SW846 8260B
Styrene	103	(70 - 130)			SW846 8260B
	108	(70 - 130)	4.4	(0-30)	SW846 8260B
Xylenes (total)	98	(70 - 130)			SW846 8260B
	102	(70 - 130)	4.0	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D060402 **Work Order #...:** MGJ4D1AJ-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D050458-001 MGJ4D1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	82	(50 - 150)
	83	(50 - 150)
1,2-Dichloroethane-d4	80	(50 - 150)
	78	(50 - 150)
Toluene-d8	82	(50 - 150)
	80	(50 - 150)
4-Bromofluorobenzene	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

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D060402 Work Order #...: MGK3H1AC-MS Matrix.....: WG
MS Lot-Sample #: A1D060402-029 MGK3H1AD-MSD
Date Sampled...: 04/05/11 11:23 Date Received..: 04/06/11
Prep Date.....: 04/14/11 Analysis Date..: 04/14/11
Prep Batch #...: 1104189
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	98	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.65	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	102	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.88	(0-30)	SW846 8260B
1,2-Dibromoethane	104	(70 - 130)			SW846 8260B
	99	(70 - 130)	4.5	(0-30)	SW846 8260B
Bromochloromethane	101	(70 - 130)			SW846 8260B
	104	(70 - 130)	3.2	(0-30)	SW846 8260B
m-Xylene & p-Xylene	96	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.6	(0-30)	SW846 8260B
o-Xylene	100	(70 - 130)			SW846 8260B
	97	(70 - 130)	2.4	(0-30)	SW846 8260B
Chloromethane	100	(70 - 130)			SW846 8260B
	106	(70 - 130)	6.0	(0-30)	SW846 8260B
Bromomethane	95	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.5	(0-30)	SW846 8260B
Vinyl chloride	96	(70 - 130)			SW846 8260B
	102	(70 - 130)	6.8	(0-30)	SW846 8260B
Chloroethane	104	(70 - 130)			SW846 8260B
	117	(70 - 130)	12	(0-30)	SW846 8260B
Methylene chloride	120	(70 - 130)			SW846 8260B
	126	(70 - 130)	5.0	(0-30)	SW846 8260B
Acetone	118	(70 - 130)			SW846 8260B
	106	(70 - 130)	12	(0-30)	SW846 8260B
Carbon disulfide	130	(70 - 130)			SW846 8260B
	140 a	(70 - 130)	7.6	(0-30)	SW846 8260B
1,1-Dichloroethene	115	(70 - 130)			SW846 8260B
	125	(70 - 130)	8.4	(0-30)	SW846 8260B
1,1-Dichloroethane	102	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.90	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.76	(0-30)	SW846 8260B
Chloroform	100	(70 - 130)			SW846 8260B
	103	(70 - 130)	3.1	(0-30)	SW846 8260B
1,2-Dichloroethane	103	(70 - 130)			SW846 8260B
	105	(70 - 130)	2.0	(0-30)	SW846 8260B
2-Butanone	111	(70 - 130)			SW846 8260B
	116	(70 - 130)	4.0	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D060402 Work Order #...: MGK3H1AC-MS Matrix.....: WG
MS Lot-Sample #: A1D060402-029 MGK3H1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.2	(0-30)	SW846 8260B
Carbon tetrachloride	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.9	(0-30)	SW846 8260B
Bromodichloromethane	102	(70 - 130)			SW846 8260B
	107	(70 - 130)	5.0	(0-30)	SW846 8260B
1,2-Dichloropropane	103	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.5	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.3	(0-30)	SW846 8260B
Trichloroethene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.7	(0-30)	SW846 8260B
Dibromochloromethane	106	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.8	(0-30)	SW846 8260B
1,1,2-Trichloroethane	104	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.72	(0-30)	SW846 8260B
Benzene	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.8	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	108	(70 - 130)			SW846 8260B
	107	(70 - 130)	1.1	(0-30)	SW846 8260B
Bromoform	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.8	(0-30)	SW846 8260B
4-Methyl-2-pentanone	119	(70 - 130)			SW846 8260B
	121	(70 - 130)	1.3	(0-30)	SW846 8260B
2-Hexanone	122	(70 - 130)			SW846 8260B
	122	(70 - 130)	0.56	(0-30)	SW846 8260B
Tetrachloroethene	89	(70 - 130)			SW846 8260B
	89	(70 - 130)	0.25	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	99	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.9	(0-30)	SW846 8260B
Toluene	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.1	(0-30)	SW846 8260B
Chlorobenzene	95	(70 - 130)			SW846 8260B
	93	(70 - 130)	1.9	(0-30)	SW846 8260B
Ethylbenzene	96	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.4	(0-30)	SW846 8260B
Styrene	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.3	(0-30)	SW846 8260B
Xylenes (total)	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.9	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D060402 **Work Order #...:** MGK3H1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1D060402-029 MGK3H1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	82	(50 - 150)
	82	(50 - 150)
1,2-Dichloroethane-d4	81	(50 - 150)
	85	(50 - 150)
Toluene-d8	84	(50 - 150)
	82	(50 - 150)
4-Bromofluorobenzene	97	(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

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.: A1D060402

Lab File ID: BFB630 BFB Injection Date: 04/13/11

Instrument ID: A3UX11 BFB Injection Time: 0842

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	22.6
75	30.0 - 60.0% of mass 95	53.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.8 (1.0)1
174	50.0 - 100.0% of mass 95	76.6
175	5.0 - 9.0% of mass 174	5.3 (7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	75.4 (98.4)1
177	5.0 - 9.0% of mass 176	5.4 (7.2)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:

MRL qual.

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	50NG-CC	UXJ6611	04/13/11	1010
J 02	MGXP5CHK	MGXP51AC	UXJ6612	04/13/11	1032
03	MGXP5BLK	MGXP51AA	UXJ6615	04/13/11	1140
MeCl2 04	FWGTEAM1-TRI	MGK2G1AA	UXJ6628	04/13/11	1635
05	FWGB12MW-012	MGK2H1AA	UXJ6629	04/13/11	1657
06	FWGLL1MW-085	MGK2K1AA	UXJ6630	04/13/11	1720
07	FWGLL1MW-084	MGK2M1AA	UXJ6631	04/13/11	1742
08	FWGLL1MW-DUP	MGK2P1AA	UXJ6632	04/13/11	1805
09	FWGB12MW-010	MGK2R1AA	UXJ6633	04/13/11	1827
10	FWGDETMW-003	MGK2V1AA	UXJ6634	04/13/11	1850
11	FWGTEAM2-TRI	MGK2X1AA	UXJ6635	04/13/11	1913
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FORM V VOA 1/87 Rev.

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: MGXP51AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALCAN

SDG Number:

Lab File ID: UXJ6615.D

Lot Number: A1D060402

Date Analyzed: 04/13/11

Time Analyzed: 11:40

Matrix: WATER

Date Extracted: 04/13/11

GC Column: CAP 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	MGJ4D1AA	UXJ6616.D	04/13/11	12:03
02	LAB MS/MSD	MGJ4D1AJ S	UXJ6636.D	04/13/11	19:35
03	LAB MS/MSD	MGJ4D1AK D	UXJ6637.D	04/13/11	19:58
04	FWGTEAM1-TRIP	MGK2G1AA	UXJ6628.D	04/13/11	16:35
05	FWGB12mw-012C-1713-GW	MGK2H1AA	UXJ6629.D	04/13/11	16:57
06	FWGLL1mw-085C-1720-GW	MGK2K1AA	UXJ6630.D	04/13/11	17:20
07	FWGLL1mw-084C-1719-GW	MGK2M1AA	UXJ6631.D	04/13/11	17:42
08	FWGLL1mw-DUP2-1747-GW	MGK2P1AA	UXJ6632.D	04/13/11	18:05
09	FWGB12mw-010C-1712-GW	MGK2R1AA	UXJ6633.D	04/13/11	18:27
10	FWGDETmw-003C-1739-GW	MGK2V1AA	UXJ6634.D	04/13/11	18:50
11	FWGTEAM2-TRIP	MGK2X1AA	UXJ6635.D	04/13/11	19:13
12	CHECK SAMPLE	MGXP51AC C	UXJ6612.D	04/13/11	10:32
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COMMENTS:

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: MG1FL1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALCAN

SDG Number:

Lab File ID: UXJ6646.D

Lot Number: A1D060402

Date Analyzed: 04/14/11

Time Analyzed: 12:12

Matrix: WATER

Date Extracted:04/14/11

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	FWGSCFmw-004-1744-GW	MGK201AA	UXJ6647.D	04/14/11	12:36
02	FWGSCFmw-DUP1-1751-GW	MGK221AA	UXJ6648.D	04/14/11	12:59
03	FWGSCFmw-005-1745-GW	MGK241AA	UXJ6649.D	04/14/11	13:22
04	FWGSCFmw-006-1746-GW	MGK261AA	UXJ6650.D	04/14/11	13:44
05	FWGEQUIPRINSE2-1758-GW	MGK281AA	UXJ6651.D	04/14/11	14:07
06	FWGDETmw-004C-1740-GW	MGK291AA	UXJ6652.D	04/14/11	14:30
07	FWGTEAM3-TRIP	MGK3D1AA	UXJ6653.D	04/14/11	14:52
08	FWGLL1mw-082C-1718-GW	MGK3E1AA	UXJ6654.D	04/14/11	15:15
09	FWGLL1mw-081C-1716-GW	MGK3H1AA	UXJ6655.D	04/14/11	15:37
10	FWGLL1mw-081C-1716-GW	MGK3H1AC S	UXJ6667.D	04/14/11	20:09
11	FWGLL1mw-081C-1716-GW	MGK3H1AD D	UXJ6668.D	04/14/11	20:31
12	FWGLL1mw-067C-1715-GW	MGK3N1AA	UXJ6656.D	04/14/11	16:00
13	FWGBKGmw-010C-1708-GW	MGK3T1AA	UXJ6657.D	04/14/11	16:23
14	FWGRQLmw-017C-1638-GW	MGK3W1AA	UXJ6658.D	04/14/11	16:45
15	CHECK SAMPLE	MG1FL1AC C	UXJ6644.D	04/14/11	11:27
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COMMENTS:

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.: A1D060402

Lab File ID: BFB631 BFB Injection Date: 04/14/11

Instrument ID: A3UX11 BFB Injection Time: 0926

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	23.4
75	30.0 - 60.0% of mass 95	52.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.1 (0.1)1
174	50.0 - 100.0% of mass 95	75.8
175	5.0 - 9.0% of mass 174	5.6 (7.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	73.0 (96.3)1
177	5.0 - 9.0% of mass 176	4.6 (6.4)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-CC	UXJ6642	04/14/11	1041
02	MG1FLCHK	MG1FL1AC	UXJ6644	04/14/11	1127
03	MG1FLBLK	MG1FL1AA	UXJ6646	04/14/11	1212
04	FWGSCFMW-004	MGK201AA	UXJ6647	04/14/11	1236
05	FWGSCFMW-DUP	MGK221AA	UXJ6648	04/14/11	1259
06	FWGSCFMW-005	MGK241AA	UXJ6649	04/14/11	1322
07	FWGSCFMW-006	MGK261AA	UXJ6650	04/14/11	1344
08	FWGEQUIPRINS	MGK281AA	UXJ6651	04/14/11	1407
09	FWGDETMW-004	MGK291AA	UXJ6652	04/14/11	1430
10	FWGTEAM3-TRI	MGK3D1AA	UXJ6653	04/14/11	1452
11	FWGLL1MW-082	MGK3E1AA	UXJ6654	04/14/11	1515
12	FWGLL1MW-081	MGK3H1AA	UXJ6655	04/14/11	1537
13	FWGLL1MW-067	MGK3N1AA	UXJ6656	04/14/11	1600
14	FWGBKGMW-010	MGK3T1AA	UXJ6657	04/14/11	1623
15	FWGRQLMW-017	MGK3W1AA	UXJ6658	04/14/11	1645
16	FWGLL1MW-081	MGK3H1AC	UXJ6667	04/14/11	2009
17	FWGLL1MW-081	MGK3H1AD	UXJ6668	04/14/11	2031
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22					

Reporting Limit Outliers

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 6010B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGB12mw-010C-1712-GF	ARSENIC	B	3.7	5.0	PQL	ug/L	J (all detects)
	BARIUM	B	4.4	10.0	PQL	ug/L	
	CHROMIUM	B	1.8	5.0	PQL	ug/L	
	COBALT	B	1.6	5.0	PQL	ug/L	
	POTASSIUM	B	553	1000	PQL	ug/L	
FWGB12mw-012C-1713-GF	MANGANESE	B	4.4	10.0	PQL	ug/L	J (all detects)
	NICKEL	B	2.2	10.0	PQL	ug/L	
FWGBKGmw-010C-1708-GF	POTASSIUM	B	556	1000	PQL	ug/L	J (all detects)
FWGDETmw-003C-1739-GF	CHROMIUM	B	3.4	5.0	PQL	ug/L	J (all detects)
	NICKEL	B	2.6	10.0	PQL	ug/L	
FWGLL1mw-081C-1716-GF	NICKEL	B	9.4	10.0	PQL	ug/L	J (all detects)
FWGLL1mw-082C-1718-GF	ARSENIC	B	3.6	5.0	PQL	ug/L	J (all detects)
FWGLL1mw-DUP2-1747-GF	ARSENIC	B	4.4	5.0	PQL	ug/L	J (all detects)
	CHROMIUM	B	1.5	5.0	PQL	ug/L	
	VANADIUM	B	1.6	10.0	PQL	ug/L	
FWGSCFmw-005-1745-GF	ARSENIC	B	4.9	5.0	PQL	ug/L	J (all detects)

Method: 6020
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGB12mw-010C-1712-GF	ZINC	B	6.9	10.0	PQL	ug/L	J (all detects)
FWGB12mw-012C-1713-GF	THALLIUM	B	0.16	1.0	PQL	ug/L	J (all detects)
	ZINC	B J	4.1	10.0	PQL	ug/L	
FWGBKGmw-010C-1708-GF	IRON	B	28.1	50.0	PQL	ug/L	J (all detects)
	ZINC	B J	7.9	10.0	PQL	ug/L	
FWGDETmw-004C-1740-GF	ANTIMONY	B	0.20	2.0	PQL	ug/L	J (all detects)
FWGEQUIPRINSE2-1758-GW	SODIUM	B J	8.7	1000	PQL	ug/L	J (all detects)
FWGLL1mw-067C-1715-GF	THALLIUM	B	0.18	1.0	PQL	ug/L	J (all detects)
	ZINC	B	3.5	10.0	PQL	ug/L	
FWGLL1mw-082C-1718-GF	CADMIUM	B	0.17	0.50	PQL	ug/L	J (all detects)
FWGLL1mw-084C-1719-GF	THALLIUM	B	0.32	1.0	PQL	ug/L	J (all detects)
FWGLL1mw-085C-1720-GF	ZINC	B J	2.5	10.0	PQL	ug/L	J (all detects)
FWGLL1mw-DUP2-1747-GF	THALLIUM	B	0.31	1.0	PQL	ug/L	J (all detects)
FWGSCFmw-005-1745-GF	ZINC	B J	2.4	10.0	PQL	ug/L	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 8081A
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGLL1mw-084C-1719-GW	HEPTACHLOR	J	0.029	0.030	PQL	ug/L	J (all detects)
FWGLL1mw-DUP2-1747-GW	HEPTACHLOR	J	0.011	0.030	PQL	ug/L	J (all detects)
FWGSCFmw-DUP1-1751-GW	BETA-BHC	J	0.012	0.030	PQL	ug/L	J (all detects)

Method: 8260B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGBKGmw-010C-1708-GW	METHYLENE CHLORIDE	J B	0.39	2.0	PQL	ug/L	J (all detects)
FWGEQUIPRINSE2-1758-GW	2-BUTANONE ACETONE CHLOROFORM TOLUENE	J J J J	2.3 4.7 0.84 0.20	10 10 1.0 1.0	PQL PQL PQL PQL	ug/L ug/L ug/L ug/L	J (all detects)
FWGSCFmw-004-1744-GW	METHYLENE CHLORIDE	J B	0.34	2.0	PQL	ug/L	J (all detects)
FWGSCFmw-005-1745-GW	METHYLENE CHLORIDE	J B	0.36	2.0	PQL	ug/L	J (all detects)
FWGSCFmw-DUP1-1751-GW	METHYLENE CHLORIDE	J B	0.38	2.0	PQL	ug/L	J (all detects)
FWGTEAM1-TRIP	CHLOROFORM METHYLENE CHLORIDE	J J B	0.22 0.35	1.0 2.0	PQL PQL	ug/L ug/L	J (all detects)
FWGTEAM2-TRIP	CHLOROFORM	J	0.22	1.0	PQL	ug/L	J (all detects)
FWGTEAM3-TRIP	CHLOROFORM METHYLENE CHLORIDE	J J B	0.27 0.35	1.0 2.0	PQL PQL	ug/L ug/L	J (all detects)

Method: 8270C
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGB12mw-012C-1713-GW	BIS(2-ETHYLHEXYL) PHTHALATE	J B	2.7	10	PQL	ug/L	J (all detects)
FWGDETmw-004C-1740-GW	BIS(2-ETHYLHEXYL) PHTHALATE	J B	0.84	10	PQL	ug/L	J (all detects)
FWGLL1mw-082C-1718-GW	BIS(2-ETHYLHEXYL) PHTHALATE	J B	1.7	10	PQL	ug/L	J (all detects)
FWGLL1mw-084C-1719-GW	2,4-DINITROTOLUENE BIS(2-ETHYLHEXYL) PHTHALATE	J J B	0.66 1.4	5.0 10	PQL PQL	ug/L ug/L	J (all detects)
FWGLL1mw-DUP2-1747-GW	BIS(2-ETHYLHEXYL) PHTHALATE	J B	3.0	10	PQL	ug/L	J (all detects)
FWGRQLmw-017C-1638-GW	BIS(2-ETHYLHEXYL) PHTHALATE	J	2.8	10	PQL	ug/L	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 8270C
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGSCFmw-006-1746-GW	BIS(2-ETHYLHEXYL) PHTHALATE	J B	2.2	12	PQL	ug/L	J (all detects)

Trip Blank Outlier Report

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 8260B
Matrix: AQ

Trip Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FWGTEAM2-TRIP(RES)	4/4/2011 6:00:00 PM	CHLOROFORM	0.22 ug/L	FWGDETmw-004C-1740-GW FWGEQUIPRINSE2-1758-GW FWGSCFmw-004-1744-GW FWGSCFmw-005-1745-GW FWGSCFmw-006-1746-GW FWGSCFmw-DUP1-1751-GW
FWGTEAM3-TRIP(RES)	4/5/2011 8:00:00 AM	CHLOROFORM METHYLENE CHLORIDE	0.27 ug/L 0.35 ug/L	FWGBKGmw-010C-1708-GW FWGLL1mw-067C-1715-GW FWGLL1mw-081C-1716-GW FWGLL1mw-082C-1718-GW FWGRQLmw-017C-1638-GW

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
FWGBKGmw-010C-1708-GW(RES)	METHYLENE CHLORIDE	0.39 ug/L	2.0U ug/L
FWGEQUIPRINSE2-1758-GW(RES)	CHLOROFORM	0.84 ug/L	1.0U ug/L

Project Name and Number: 030240.0006 - RVAAP (OH)

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 8260B
Matrix: AQ

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FWGEQUIPRINSE2-1758-GW(RES)	4/5/2011 6:22:00 PM	2-BUTANONE	2.3 ug/L	FWGB12mw-010C-1712-GF
		ACETONE	4.7 ug/L	FWGB12mw-010C-1712-GW
		CHLOROFORM	0.84 ug/L	FWGB12mw-012C-1713-GF
		METHYLENE CHLORIDE	2.2 ug/L	FWGB12mw-012C-1713-GW
		TOLUENE	0.2 ug/L	FWGBKGmw-010C-1708-GF
				FWGBKGmw-010C-1708-GW
				FWGDETmw-003C-1739-GF
				FWGDETmw-003C-1739-GW
				FWGDETmw-004C-1740-GF
				FWGDETmw-004C-1740-GW
				FWGLL1mw-067C-1715-GF
				FWGLL1mw-067C-1715-GW
				FWGLL1mw-081C-1716-GF
				FWGLL1mw-081C-1716-GW
				FWGLL1mw-082C-1718-GF
				FWGLL1mw-082C-1718-GW
				FWGLL1mw-084C-1719-GF
				FWGLL1mw-084C-1719-GW
				FWGLL1mw-085C-1720-GF
				FWGLL1mw-085C-1720-GW
				FWGLL1mw-DUP2-1747-GF
				FWGLL1mw-DUP2-1747-GW
				FWGRQLmw-017C-1638-GW
				FWGSCFmw-004-1744-GF
				FWGSCFmw-004-1744-GW
				FWGSCFmw-005-1745-GF
				FWGSCFmw-005-1745-GW
				FWGSCFmw-006-1746-GF
				FWGSCFmw-006-1746-GW
				FWGSCFmw-DUP1-1751-GF
				FWGSCFmw-DUP1-1751-GW

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
FWGBKGmw-010C-1708-GW(RES)	METHYLENE CHLORIDE	0.39 ug/L	2.0U ug/L
FWGSCFmw-004-1744-GW(RES)	METHYLENE CHLORIDE	0.34 ug/L	2.0U ug/L
FWGSCFmw-005-1745-GW(RES)	METHYLENE CHLORIDE	0.36 ug/L	2.0U ug/L
FWGSCFmw-DUP1-1751-GW(RES)	METHYLENE CHLORIDE	0.38 ug/L	2.0U ug/L

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GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 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 1.9 and 3.8 °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?	✓			A4HP10-4/12/2011, 4/26/11 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
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			4/12/11-Benzoic acid 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

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
				4/26/11-Benzoic acid and 2,4-dinitrophenol, 4-nitrophenol, 4,6-dinitro-2-methylphenol, pentachlorophenol, 3,3'-dimethylbenzidine used a quadratic fit. No qualifications were made as coefficients of determination (COD), r were ≥0.99.	
16. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			4/12/11	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓				LCG Table 2
18. Were the QC/MRL recoveries 70-130%?	✓			The closing MRL analyzed 4/13/11 @ 1624 recovered below control limits for 2,4-dinitrophenol at 51%. No qualifications were made as there were no field samples bracketed by this MRL check. The closing MRL analyzed 4/14/11 @ 2006 recovered below control limits for 2,4-dinitrophenol and 4-nitrophenol at 55%. The 2,4-dinitrophenol and 4-nitrophenol results for all samples except for FWGDET3mw-003c-1739-GW were qualified as estimated, "UJ". The closing MRL analyzed 4/20/11 @ 1603 recovered below control limits for 4,6-dinitro-2-methylphenol at 61%, pentachlorophenol at 55%, 2,4-dinitrophenol at 43% and 4-nitrophenol at 51%. An MDL check was analyzed following the closing MRL with detected results for all targets except 2,4-dinitrophenol. The 4,6-dinitro-2-methylphenol, pentachlorophenol and 4-nitrophenol results for FWGDET3mw-003c-1739-GW were qualified as estimated, "UJ". The 2,4-dinitrophenol result for sample was FWGDET3mw-003c-1739-GW was reanalyzed with acceptable MRL recoveries on 4/27/11. Documentation provided in SDG A1D080405.	LCG Table 2 >130%=J; <50%=J/R 50-70%=J/UJ
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			4/12/11 @ 2000, 4/26/11 @2012	LCG Table 2 >130%=J; <50%=J/R 50-70%=J/UJ;
20. Was a CCV analyzed every 12 hours?	✓			4/13/11 @ 1100, 4/14/11 @ 1006, 4/20/11 @0930, 4/27/11 @0924 (2,4-dinitrophenol only)	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 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. The method blank analyzed 4/13/11 @ 1217 had bis2-ethylhexylphthalate detected at 0.87ug/L. The bis(2-ethylhexyl)phthalate results for samples FWGB12mw-012c-1713-GW, FWGDETmw-004c-1740-GW, FWGLL1mw-082c-1718-GW, FWGLL1mw-084c-1719-GW, FWGLL1mw-DUP2-1747-GW and FWGSCFmw-006-1747-GW were qualified, "B" as the detected results were <10x method blank contamination.	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?	✓				
32. Were the field duplicate RPDs ≤30%?	✓			Checked by ADR	QAPP Table 3-2 RPD >30=J
33. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 2

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
34. Were the LCS recoveries within limits specified in LCG Appendix C?		✓		Checked by ADR. The LCS associated with batch 1097066 recovered below control limits for pentachlorophenol at 39%. The pentachlorophenol results for samples FWGBKGmw-010c-1708-GW, FWGLL1mw-067c-1715-GW, FWGLL1mw-081c-1716-GW and FWGRQLmw-017c-1638-GW were qualified as estimated,"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?	✓				
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		Checked by ADR. The MS and MSD associated with batch 1097066 (sample FWGLL1mw-081c-1716-GW) recovered below control limits for hexachlorocyclopentadiene at 25% and 27%, 2,4-dinitrophenol at 40% and 415, 3,3'dichlorobenzidine at 28% and 29% and 4-chloroaniline at 39% and 44%. The 2,4-dinitrophenol result for sample FWGLL1mw-081c-1716-GW was qualified as estimated,"UJ". No additional qualifications were made for the matrix spike outliers as the other targets had no additional QC outliers.	LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?		✓		Checked by ADR. The following samples had associated surrogate outliers; • FWGB12mw-010c-1712-GW; 2-fluorobiphenyl recovered at 44% and phenol- d5 at 47% • FWGB12mw-012c-1713-GW; phenol- d5 recovered at 48% • FWGDETmw-004c-1740-GW; 2-fluorobiphenyl recovered at 47% and phenol- d5 at 49% • FWGEQUIPRinse2-1758-GW; phenol- d5 recovered at 49% • FWGLL1mw-081c-1716-GW; nitrobenzene-d5 recovered at 47% • FWGLL1mw-082c-1718-GW; 2-fluorobiphenyl recovered at 48% and phenol- d5 at 49% • FWGLL1mw-085c-1720-GW; phenol- d5 recovered at 49% • FWGSCFmw-004-1744-GW; 2-fluorobiphenyl recovered at 49% and phenol- d5 at 49% • FWGSCFmw-DUP1-1751-GW; 2-fluorobiphenyl recovered at 47% and phenol- d5 at 48% No qualifiers were applied to the sample results, as LCG allows for one surrogate per fraction to be outside control limits 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,		✓			

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
summarize contents.					
41. 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 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 Compounds	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: FWGB12mw-012C-1713-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-002 **Work Order #...:** MGK2H1AC **Matrix.....:** WG
Date Sampled...: 04/05/11 09:11 **Date Received..:** 04/06/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1096079
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	**2.7 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: FWGB12mw-012C-1713-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-002 Work Order #...: MGK2H1AC 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: FWGB12mw-012C-1713-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-002 Work Order #...: MGK2H1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	53	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
Terphenyl-d14	55	(50 - 150)
Phenol-d5	48 *	(50 - 150)
2-Fluorophenol	52	(50 - 150)
2,4,6-Tribromophenol	58	(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-085C-1720-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-004 Work Order #...: MGK2K1AC Matrix.....: WG
Date Sampled...: 04/05/11 10:51 Date Received..: 04/06/11
Prep Date.....: 04/06/11 Analysis Date..: 04/14/11
Prep Batch #...: 1096079
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	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: FWGLL1mw-085C-1720-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-004 Work Order #...: MGK2K1AC 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-085C-1720-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-004 Work Order #...: MGK2K1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	51	(50 - 150)
2-Fluorobiphenyl	51	(50 - 150)
Terphenyl-d14	62	(50 - 150)
Phenol-d5	49 *	(50 - 150)
2-Fluorophenol	53	(50 - 150)
2,4,6-Tribromophenol	59	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: **FWGLL1mw-084C-1719-GW**

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-006 **Work Order #...:** MGK2M1AC **Matrix.....:** WG
Date Sampled...: 04/05/11 13:25 **Date Received..:** 04/06/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1096079
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-084C-1719-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-006 Work Order #...: MGK2M1AC 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	**0.66 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-084C-1719-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-006 **Work Order #...:** MGK2M1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	52	(50 - 150)
2-Fluorobiphenyl	54	(50 - 150)
Terphenyl-d14	64	(50 - 150)
Phenol-d5	54	(50 - 150)
2-Fluorophenol	55	(50 - 150)
2,4,6-Tribromophenol	64	(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-DUP2-1747-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-008 **Work Order #...:** MGK2P1AC **Matrix.....:** WG
Date Sampled...: 04/05/11 14:15 **Date Received..:** 04/06/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1096079
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	**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: FWGLL1mw-DUP2-1747-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-008 Work Order #...: MGK2P1AC 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-DUP2-1747-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-008 Work Order #...: MGK2P1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	50	(50 - 150)
2-Fluorobiphenyl	52	(50 - 150)
Terphenyl-d14	63	(50 - 150)
Phenol-d5	51	(50 - 150)
2-Fluorophenol	54	(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: FWGB12mw-010C-1712-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-010 Work Order #...: MGK2R1AC Matrix.....: WG
Date Sampled...: 04/05/11 16:00 Date Received..: 04/06/11
Prep Date.....: 04/06/11 Analysis Date..: 04/14/11
Prep Batch #...: 1096079
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: FWGB12mw-010C-1712-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-010 **Work Order #...:** MGK2R1AC **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: FWGB12mw-010C-1712-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-010 **Work Order #...:** MGK2R1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	50	(50 - 150)
2-Fluorobiphenyl	44 *	(50 - 150)
Terphenyl-d14	56	(50 - 150)
Phenol-d5	47 *	(50 - 150)
2-Fluorophenol	51	(50 - 150)
2,4,6-Tribromophenol	57	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-003C-1739-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-012 **Work Order #...:** MGK2V1AC **Matrix.....:** WG
Date Sampled...: 04/05/11 17:50 **Date Received..:** 04/06/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/20/11
Prep Batch #...: 1096079
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: FWGDETmw-003C-1739-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-012 **Work Order #...:** MGK2V1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	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: FWGDETmw-003C-1739-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-012 **Work Order #...:** MGK2V1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(50 - 150)
2-Fluorobiphenyl	79	(50 - 150)
Terphenyl-d14	92	(50 - 150)
Phenol-d5	80	(50 - 150)
2-Fluorophenol	81	(50 - 150)
2,4,6-Tribromophenol	87	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-003C-1739-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-012	**Work Order #...:** MGK2V2AC	**Matrix.....:** WG	
Date Sampled...: 04/05/11 17:50	**Date Received..:** 04/06/11		
Prep Date.....: 04/06/11	**Analysis Date..:** 04/27/11		
Prep Batch #...: 1096079			
Dilution Factor: 1	**Initial Wgt/Vol:** 1050 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1744-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-015 **Work Order #...:** MGK201AC **Matrix.....:** WG
Date Sampled...: 04/05/11 10:02 **Date Received..:** 04/06/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1096079
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	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: FWGSCFmw-004-1744-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-015 Work Order #...: MGK201AC 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-004-1744-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-015 Work Order #...: MGK201AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	51	(50 - 150)
2-Fluorobiphenyl	49 *	(50 - 150)
Terphenyl-d14	62	(50 - 150)
Phenol-d5	49 *	(50 - 150)
2-Fluorophenol	53	(50 - 150)
2,4,6-Tribromophenol	57	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1751-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-017 **Work Order #...:** MGK221AC **Matrix.....:** WG
Date Sampled...: 04/05/11 13:02 **Date Received..:** 04/06/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1096079
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	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: FWGSCFmw-DUP1-1751-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-017 Work Order #...: MGK221AC 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-DUP1-1751-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-017 **Work Order #...:** MGK221AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	50	(50 - 150)
2-Fluorobiphenyl	47 *	(50 - 150)
Terphenyl-d14	63	(50 - 150)
Phenol-d5	48 *	(50 - 150)
2-Fluorophenol	52	(50 - 150)
2,4,6-Tribromophenol	56	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1745-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-019 **Work Order #...:** MGK241AC **Matrix.....:** WG
Date Sampled...: 04/05/11 15:08 **Date Received..:** 04/06/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1096079
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: FWGSCFmw-005-1745-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-019 **Work Order #...:** MGK241AC **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-005-1745-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-019 **Work Order #...:** MGK241AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	50	(50 - 150)
2-Fluorobiphenyl	50	(50 - 150)
Terphenyl-d14	61	(50 - 150)
Phenol-d5	50	(50 - 150)
2-Fluorophenol	53	(50 - 150)
2,4,6-Tribromophenol	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1746-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-021 **Work Order #...:** MGK261AC **Matrix.....:** WG
Date Sampled...: 04/05/11 16:38 **Date Received..:** 04/06/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1096079
Dilution Factor: 1 **Initial Wgt/Vol:** 840 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.24	ug/L	0.10
Acenaphthylene	ND	0.24	ug/L	0.10
Anthracene	ND	0.24	ug/L	0.10
Benzo(a)anthracene	ND	0.24	ug/L	0.10
Benzo(b)fluoranthene	ND	0.24	ug/L	0.10
Benzo(k)fluoranthene	ND	0.24	ug/L	0.10
Benzoic acid	ND	12	ug/L	10
Benzo(ghi)perylene	ND	0.24	ug/L	0.10
Benzo(a)pyrene	ND	0.24	ug/L	0.10
Benzyl alcohol	ND	6.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.2	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.2	ug/L	0.10
bis(2-Ethylhexyl) phthalate	2.2 J,B	12	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.4	ug/L	0.80
Butyl benzyl phthalate	ND	1.2	ug/L	0.80
Carbazole	ND	1.2	ug/L	0.28
4-Chloroaniline	ND	2.4	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.4	ug/L	0.80
2-Chloronaphthalene	ND	1.2	ug/L	0.10
2-Chlorophenol	ND	1.2	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.4	ug/L	0.30
Chrysene	ND	0.24	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.24	ug/L	0.10
Dibenzofuran	ND	1.2	ug/L	0.10
Di-n-butyl phthalate	ND	1.2	ug/L	0.67
1,2-Dichlorobenzene	ND	1.2	ug/L	0.29
1,3-Dichlorobenzene	ND	1.2	ug/L	0.80
1,4-Dichlorobenzene	ND	1.2	ug/L	0.34
3,3'-Dichlorobenzidine	ND	6.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.4	ug/L	0.80
Diethyl phthalate	ND	1.2	ug/L	0.60
2,4-Dimethylphenol	ND	2.4	ug/L	0.80
Dimethyl phthalate	ND	1.2	ug/L	0.29

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1746-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-021 **Work Order #...:** MGK261AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	6.0	ug/L	2.4
2,4-Dinitrophenol	ND	6.0	ug/L	2.4
2,4-Dinitrotoluene	ND	6.0	ug/L	0.27
2,6-Dinitrotoluene	ND	6.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.2	ug/L	0.80
Fluoranthene	ND	0.24	ug/L	0.10
Fluorene	ND	0.24	ug/L	0.10
Hexachlorobenzene	ND	0.24	ug/L	0.10
Hexachlorobutadiene	ND	1.2	ug/L	0.27
Hexachloroethane	ND	1.2	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.24	ug/L	0.10
Isophorone	ND	1.2	ug/L	0.27
2-Methylnaphthalene	ND	0.24	ug/L	0.10
2-Methylphenol	ND	1.2	ug/L	0.80
4-Methylphenol	ND	1.2	ug/L	0.80
Naphthalene	ND	0.24	ug/L	0.10
2-Nitroaniline	ND	2.4	ug/L	0.80
3-Nitroaniline	ND	2.4	ug/L	0.28
4-Nitroaniline	ND	2.4	ug/L	0.80
Nitrobenzene	ND	1.2	ug/L	0.040
2-Nitrophenol	ND	2.4	ug/L	0.28
4-Nitrophenol	ND	6.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.2	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.2	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.2	ug/L	0.40
Pentachlorophenol	ND	6.0	ug/L	2.4
Phenanthrene	ND	0.24	ug/L	0.10
Phenol	ND	1.2	ug/L	0.60
Pyrene	ND	0.24	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.2	ug/L	0.28
2,4,5-Trichloro-phenol	ND	6.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	6.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	12	ug/L	0.80

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1746-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-021 **Work Order #...:** MGK261AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	52	(50 - 150)
2-Fluorobiphenyl	52	(50 - 150)
Terphenyl-d14	64	(50 - 150)
Phenol-d5	50	(50 - 150)
2-Fluorophenol	54	(50 - 150)
2,4,6-Tribromophenol	54	(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: FWGEQUIPRINSE2-1758-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-023	**Work Order #...:** MGK281AC	**Matrix.....:** WQ	
Date Sampled...: 04/05/11 18:22	**Date Received..:** 04/06/11		
Prep Date.....: 04/06/11	**Analysis Date..:** 04/14/11		
Prep Batch #...: 1096079			
Dilution Factor: 1	**Initial Wgt/Vol:** 880 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: FWGEQUIPRINSE2-1758-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-023 **Work Order #...:** MGK281AC **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: FWGEQUIPRINSE2-1758-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-023 Work Order #...: MGK281AC Matrix.....: WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	52	(50 - 150)
2-Fluorobiphenyl	52	(50 - 150)
Terphenyl-d14	64	(50 - 150)
Phenol-d5	49 *	(50 - 150)
2-Fluorophenol	55	(50 - 150)
2,4,6-Tribromophenol	51	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-004C-1740-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-024 **Work Order #...:** MGK291AC **Matrix.....:** WG
Date Sampled...: 04/04/11 18:00 **Date Received..:** 04/06/11
Prep Date.....: 04/06/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1096079
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	**0.84 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: FWGDETmw-004C-1740-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-024 **Work Order #...:** MGK291AC **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: FWGDETmw-004C-1740-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-024 **Work Order #...:** MGK291AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	51	(50 - 150)
2-Fluorobiphenyl	47 *	(50 - 150)
Terphenyl-d14	58	(50 - 150)
Phenol-d5	49 *	(50 - 150)
2-Fluorophenol	50	(50 - 150)
2,4,6-Tribromophenol	53	(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-1718-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-027 Work Order #...: MGK3E1AC Matrix.....: WG
Date Sampled...: 04/05/11 09:23 Date Received..: 04/06/11
Prep Date.....: 04/06/11 Analysis Date..: 04/14/11
Prep Batch #...: 1096079
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	**1.7 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: FWGLL1mw-082C-1718-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-027 **Work Order #...:** MGK3E1AC **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-082C-1718-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-027 **Work Order #...:** MGK3E1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	51	(50 - 150)
2-Fluorobiphenyl	48 *	(50 - 150)
Terphenyl-d14	63	(50 - 150)
Phenol-d5	49 *	(50 - 150)
2-Fluorophenol	53	(50 - 150)
2,4,6-Tribromophenol	65	(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-081C-1716-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-029 **Work Order #...:** MGK3H1AE **Matrix.....:** WG
Date Sampled...: 04/05/11 11:23 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1097066
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	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: FWGLL1mw-081C-1716-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-029 **Work Order #...:** MGK3H1AE **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-1716-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-029 **Work Order #...:** MGK3H1AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	47 *	(50 - 150)
2-Fluorobiphenyl	50	(50 - 150)
Terphenyl-d14	56	(50 - 150)
Phenol-d5	53	(50 - 150)
2-Fluorophenol	52	(50 - 150)
2,4,6-Tribromophenol	59	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1715-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-031 **Work Order #...:** MGK3N1AC **Matrix.....:** WG
Date Sampled...: 04/05/11 14:23 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1097066
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1715-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-031 **Work Order #...:** MGK3N1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
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-1715-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-031 **Work Order #...:** MGK3N1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	50	(50 - 150)
2-Fluorobiphenyl	50	(50 - 150)
Terphenyl-d14	61	(50 - 150)
Phenol-d5	52	(50 - 150)
2-Fluorophenol	53	(50 - 150)
2,4,6-Tribromophenol	58	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-010C-1708-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-033 **Work Order #...:** MGK3T1AC **Matrix.....:** WG
Date Sampled...: 04/05/11 17:03 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1097066
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
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: FWGBKGmw-010C-1708-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-033 **Work Order #...:** MGK3T1AC **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: FWGBKGmw-010C-1708-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-033 Work Order #...: MGK3T1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	50	(50 - 150)
2-Fluorobiphenyl	51	(50 - 150)
Terphenyl-d14	62	(50 - 150)
Phenol-d5	51	(50 - 150)
2-Fluorophenol	51	(50 - 150)
2,4,6-Tribromophenol	56	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-017C-1638-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-035 **Work Order #...:** MGK3W1AC **Matrix.....:** WG
Date Sampled...: 04/05/11 15:43 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1097066
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	**2.8 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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-017C-1638-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-035 **Work Order #...:** MGK3W1AC **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: FWGRQLmw-017C-1638-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D060402-035 Work Order #...: MGK3W1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	50	(50 - 150)
2-Fluorobiphenyl	52	(50 - 150)
Terphenyl-d14	57	(50 - 150)
Phenol-d5	54	(50 - 150)
2-Fluorophenol	55	(50 - 150)
2,4,6-Tribromophenol	62	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGK5G1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D060000-079

Prep Date.....: 04/06/11 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 04/13/11 **Prep Batch #...:** 1096079
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	**0.87 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 #...: A1D060402 Work Order #...: MGK5G1AA 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	70	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	89	(50 - 150)
Phenol-d5	80	(50 - 150)
2-Fluorophenol	78	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 Work Order #...: MGK5G1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	76	(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 Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGM6K1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D070000-066

Prep Date.....: 04/07/11 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 04/14/11 **Prep Batch #...:** 1097066
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	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

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGM6K1AA **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	50	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
Terphenyl-d14	63	(50 - 150)
Phenol-d5	58	(50 - 150)
2-Fluorophenol	56	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGM6K1AA **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.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 Work Order #...: MGK5G1AC Matrix.....: WATER
LCS Lot-Sample#: A1D060000-079
Prep Date.....: 04/06/11 Analysis Date..: 04/13/11
Prep Batch #...: 1096079
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2-Methylnaphthalene	91	(32 - 115)	SW846 8270C
2-Methylphenol	84	(30 - 116)	SW846 8270C
2-Nitroaniline	75	(36 - 140)	SW846 8270C
2-Nitrophenol	84	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	50	(30 - 160)	SW846 8270C
3-Nitroaniline	70	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	83	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	88	(43 - 118)	SW846 8270C
4-Chloroaniline	64	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	84	(40 - 115)	SW846 8270C
Butyl henzyl phthalate	84	(37 - 136)	SW846 8270C
Carbazole	81	(49 - 126)	SW846 8270C
Chrysene	83	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	82	(38 - 130)	SW846 8270C
Dibenzofuran	81	(40 - 115)	SW846 8270C
Diethyl phthalate	84	(43 - 132)	SW846 8270C
Dimethyl phthalate	82	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	79	(36 - 151)	SW846 8270C
Fluoranthene	84	(47 - 132)	SW846 8270C
Fluorene	81	(41 - 115)	SW846 8270C
Hexachlorobenzene	84	(42 - 123)	SW846 8270C
Hexachlorobutadiene	77	(30 - 120)	SW846 8270C
Hexachloroethane	75	(30 - 120)	SW846 8270C
Isophorone	78	(33 - 115)	SW846 8270C
Naphthalene	77	(30 - 119)	SW846 8270C
Nitrobenzene	82	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	74	(35 - 124)	SW846 8270C
Phenanthrene	81	(45 - 117)	SW846 8270C
Indeno(1,2,3-cd)pyrene	83	(37 - 130)	SW846 8270C
Di-n-butyl phthalate	87	(46 - 123)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 Work Order #...: MGK5G1AC Matrix.....: WATER
LCS Lot-Sample#: A1D060000-079

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Hexachlorocyclopenta-diene	47	(30 - 115)	SW846 8270C
Benzoic acid	64	(30 - 136)	SW846 8270C
Benzyl alcohol	86	(29 - 115)	SW846 8270C
1,2,4-Trichloro-benzene	73	(30 - 120)	SW846 8270C
Acenaphthene	81	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	86	(34 - 151)	SW846 8270C
Pyrene	79	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	76	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	81	(30 - 115)	SW846 8270C
Pentachlorophenol	61	(30 - 150)	SW846 8270C
Phenol	89	(30 - 115)	SW846 8270C
2-Chlorophenol	87	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	82	(31 - 121)	SW846 8270C
4-Nitrophenol	90	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	80	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	77	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	86	(36 - 135)	SW846 8270C
4-Methylphenol	85	(31 - 115)	SW846 8270C
4-Nitroaniline	76	(30 - 140)	SW846 8270C
Acenaphthylene	81	(37 - 115)	SW846 8270C
Anthracene	83	(45 - 118)	SW846 8270C
Benzo(a)anthracene	77	(43 - 138)	SW846 8270C
Benzo(a)pyrene	70	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	73	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	84	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	96	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	82	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	83	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	84	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	87	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGK5G1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D060000-079

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	83	(39 - 115)	**SW846 8270C**
2,4-Dichlorophenol	83	(34 - 115)	**SW846 8270C**
2,4-Dimethylphenol	60	(31 - 120)	**SW846 8270C**
2,4-Dinitrophenol	53	(29 - 146)	**SW846 8270C**
2,6-Dinitrotoluene	88	(43 - 122)	**SW846 8270C**
2-Chloronaphthalene	80	(35 - 115)	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
2-Fluorobiphenyl	78	(50 - 150)
Terphenyl-d14	91	(50 - 150)
Phenol-d5	86	(50 - 150)
2-Fluorophenol	84	(50 - 150)
2,4,6-Tribromophenol	90	(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 Semivolatiles

Client Lot #...: A1D060402 Work Order #...: MGM6K1AC Matrix.....: WATER
LCS Lot-Sample#: A1D070000-066
Prep Date.....: 04/07/11 Analysis Date..: 04/14/11
Prep Batch #...: 1097066
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	52	(30 - 120)	SW846 8270C
Acenaphthene	58	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	60	(34 - 151)	SW846 8270C
Pyrene	55	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	51	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	54	(30 - 115)	SW846 8270C
Pentachlorophenol	39	(30 - 150)	SW846 8270C
Phenol	59	(30 - 115)	SW846 8270C
2-Chlorophenol	57	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	59	(31 - 121)	SW846 8270C
4-Nitrophenol	62	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	55	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	52	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	60	(36 - 135)	SW846 8270C
4-Methylphenol	58	(31 - 115)	SW846 8270C
4-Nitroaniline	55	(30 - 140)	SW846 8270C
Acenaphthylene	57	(37 - 115)	SW846 8270C
Anthracene	57	(45 - 118)	SW846 8270C
Benzo(a)anthracene	54	(43 - 138)	SW846 8270C
Benzo(a)pyrene	48	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	54	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	57	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	63	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	58	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	62	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	56	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	55	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 Work Order #...: MGM6K1AC Matrix.....: WATER
LCS Lot-Sample#: A1D070000-066

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	59	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	59	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	47	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	35	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	62	(43 - 122)	SW846 8270C
2-Chloronaphthalene	57	(35 - 115)	SW846 8270C
2-Methylnaphthalene	64	(32 - 115)	SW846 8270C
2-Methylphenol	57	(30 - 116)	SW846 8270C
2-Nitroaniline	54	(36 - 140)	SW846 8270C
2-Nitrophenol	59	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	34	(30 - 160)	SW846 8270C
3-Nitroaniline	53	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	58	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	62	(43 - 118)	SW846 8270C
4-Chloroaniline	48	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	59	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	59	(37 - 136)	SW846 8270C
Carbazole	57	(49 - 126)	SW846 8270C
Chrysene	59	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	57	(38 - 130)	SW846 8270C
Dibenzofuran	57	(40 - 115)	SW846 8270C
Diethyl phthalate	59	(43 - 132)	SW846 8270C
Dimethyl phthalate	59	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	51	(36 - 151)	SW846 8270C
Fluoranthene	58	(47 - 132)	SW846 8270C
Fluorene	57	(41 - 115)	SW846 8270C
Hexachlorobenzene	60	(42 - 123)	SW846 8270C
Hexachlorobutadiene	53	(30 - 120)	SW846 8270C
Hexachloroethane	50	(30 - 120)	SW846 8270C
Isopborone	56	(33 - 115)	SW846 8270C
Naphthalene	55	(30 - 119)	SW846 8270C
Nitrobenzene	57	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	50	(35 - 124)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGM6K1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D070000-066

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	57	(45 - 117)	SW846 8270C
Indeno(1,2,3-cd)pyrene	56	(37 - 130)	SW846 8270C
Di-n-butyl phthalate	60	(46 - 123)	SW846 8270C
Hexachlorocyclopenta-diene	29 a	(30 - 115)	SW846 8270C
Benzoic acid	43	(30 - 136)	SW846 8270C
Benzyl alcohol	60	(29 - 115)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(50 - 150)
2-Fluorobiphenyl	56	(50 - 150)
Terphenyl-d14	63	(50 - 150)
Phenol-d5	59	(50 - 150)
2-Fluorophenol	57	(50 - 150)
2,4,6-Tribromophenol	64	(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 #...: A1D060402 Work Order #...: MGK3H1AF-MS Matrix.....: WG
MS Lot-Sample #: A1D060402-029 MGK3H1AG-MSD
Date Sampled...: 04/05/11 11:23 Date Received..: 04/06/11
Prep Date.....: 04/07/11 Analysis Date..: 04/14/11
Prep Batch #...: 1097066
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	50	(45 - 135)			SW846 8270C
	53	(45 - 135)	5.4	(0-40)	SW846 8270C
Acenaphthene	56	(45 - 135)			SW846 8270C
	58	(45 - 135)	4.5	(0-40)	SW846 8270C
2,4-Dinitrotoluene	59	(45 - 135)			SW846 8270C
	63	(45 - 135)	7.1	(0-40)	SW846 8270C
Pyrene	54	(45 - 135)			SW846 8270C
	56	(45 - 135)	4.2	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	50	(45 - 135)			SW846 8270C
	53	(45 - 135)	5.6	(0-40)	SW846 8270C
1,4-Dichlorobenzene	53	(45 - 135)			SW846 8270C
	58	(45 - 135)	8.2	(0-40)	SW846 8270C
Pentachlorophenol	50	(45 - 135)			SW846 8270C
	52	(45 - 135)	4.7	(0-40)	SW846 8270C
Phenol	56	(45 - 135)			SW846 8270C
	62	(45 - 135)	9.2	(0-40)	SW846 8270C
2-Chlorophenol	57	(45 - 135)			SW846 8270C
	59	(45 - 135)	4.0	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	58	(45 - 135)			SW846 8270C
	61	(45 - 135)	6.4	(0-40)	SW846 8270C
4-Nitrophenol	56	(45 - 135)			SW846 8270C
	60	(45 - 135)	7.0	(0-40)	SW846 8270C
Acenaphthylene	54	(45 - 135)			SW846 8270C
	58	(45 - 135)	6.8	(0-40)	SW846 8270C
Anthracene	53	(45 - 135)			SW846 8270C
	58	(45 - 135)	9.0	(0-40)	SW846 8270C
Benzo(a)anthracene	51	(45 - 135)			SW846 8270C
	55	(45 - 135)	7.4	(0-40)	SW846 8270C
Benzo(b)fluoranthene	55	(45 - 135)			SW846 8270C
	54	(45 - 135)	2.2	(0-40)	SW846 8270C
Benzo(k)fluoranthene	54	(45 - 135)			SW846 8270C
	63	(45 - 135)	15	(0-40)	SW846 8270C
Benzo(ghi)perylene	54	(45 - 135)			SW846 8270C
	59	(45 - 135)	8.3	(0-40)	SW846 8270C
Benzo(a)pyrene	45	(45 - 135)			SW846 8270C
	48	(45 - 135)	5.8	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGK3H1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D060402-029 MGK3H1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	55	(45 - 135)			SW846 8270C
	59	(45 - 135)	7.5	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	53	(45 - 135)			SW846 8270C
	58	(45 - 135)	9.4	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	55	(45 - 135)			SW846 8270C
	60	(45 - 135)	7.9	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	55	(45 - 135)			SW846 8270C
	58	(45 - 135)	6.6	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	58	(45 - 135)			SW846 8270C
	63	(45 - 135)	9.0	(0-40)	SW846 8270C
Butyl benzyl phthalate	58	(45 - 135)			SW846 8270C
	61	(45 - 135)	5.0	(0-40)	SW846 8270C
Carbazole	55	(45 - 135)			SW846 8270C
	60	(45 - 135)	8.2	(0-40)	SW846 8270C
4-Chloroaniline	39 a	(45 - 135)			SW846 8270C
	44 a	(45 - 135)	12	(0-40)	SW846 8270C
2-Chloronaphthalene	55	(45 - 135)			SW846 8270C
	58	(45 - 135)	4.4	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	57	(45 - 135)			SW846 8270C
	61	(45 - 135)	5.5	(0-40)	SW846 8270C
Chrysene	55	(45 - 135)			SW846 8270C
	60	(45 - 135)	7.9	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	55	(45 - 135)			SW846 8270C
	58	(45 - 135)	5.3	(0-40)	SW846 8270C
Dibenzofuran	56	(45 - 135)			SW846 8270C
	58	(45 - 135)	5.2	(0-40)	SW846 8270C
Di-n-butyl phthalate	57	(45 - 135)			SW846 8270C
	63	(45 - 135)	8.9	(0-40)	SW846 8270C
1,2-Dichlorobenzene	54	(45 - 135)			SW846 8270C
	58	(45 - 135)	7.9	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGK3H1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D060402-029 MGK3H1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	51	(45 - 135)			SW846 8270C
	56	(45 - 135)	8.8	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	28 a	(45 - 135)			SW846 8270C
	29 a	(45 - 135)	4.4	(0-40)	SW846 8270C
2,4-Dichlorophenol	55	(45 - 135)			SW846 8270C
	61	(45 - 135)	9.0	(0-40)	SW846 8270C
Diethyl phthalate	58	(45 - 135)			SW846 8270C
	60	(45 - 135)	4.1	(0-40)	SW846 8270C
2,4-Dimethylphenol	46	(45 - 135)			SW846 8270C
	50	(45 - 135)	9.0	(0-40)	SW846 8270C
Dimethyl phthalate	57	(45 - 135)			SW846 8270C
	61	(45 - 135)	7.9	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	57	(45 - 135)			SW846 8270C
	60	(45 - 135)	5.2	(0-40)	SW846 8270C
2,4-Dinitrophenol	40 a	(45 - 135)			SW846 8270C
	41 a	(45 - 135)	3.5	(0-40)	SW846 8270C
2,6-Dinitrotoluene	60	(45 - 135)			SW846 8270C
	62	(45 - 135)	3.8	(0-40)	SW846 8270C
Di-n-octyl phthalate	52	(45 - 135)			SW846 8270C
	55	(45 - 135)	6.4	(0-40)	SW846 8270C
Fluoranthene	57	(45 - 135)			SW846 8270C
	61	(45 - 135)	7.6	(0-40)	SW846 8270C
Fluorene	55	(45 - 135)			SW846 8270C
	58	(45 - 135)	5.5	(0-40)	SW846 8270C
Hexachlorobenzene	57	(45 - 135)			SW846 8270C
	63	(45 - 135)	11	(0-40)	SW846 8270C
Hexachlorobutadiene	49	(45 - 135)			SW846 8270C
	54	(45 - 135)	8.9	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	25 a	(45 - 135)			SW846 8270C
	27 a	(45 - 135)	7.3	(0-40)	SW846 8270C
Hexachloroethane	50	(45 - 135)			SW846 8270C
	55	(45 - 135)	8.5	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	53	(45 - 135)			SW846 8270C
	58	(45 - 135)	7.8	(0-40)	SW846 8270C
Isophorone	53	(45 - 135)			SW846 8270C
	57	(45 - 135)	7.8	(0-40)	SW846 8270C
2-Methylnaphthalene	62	(45 - 135)			SW846 8270C
	66	(45 - 135)	6.7	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGK3H1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D060402-029 MGK3H1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	54	(45 - 135)			SW846 8270C
	59	(45 - 135)	8.4	(0-40)	SW846 8270C
4-Methylphenol	55	(45 - 135)			SW846 8270C
	59	(45 - 135)	6.6	(0-40)	SW846 8270C
Naphthalene	52	(45 - 135)			SW846 8270C
	56	(45 - 135)	8.4	(0-40)	SW846 8270C
2-Nitroaniline	52	(45 - 135)			SW846 8270C
	55	(45 - 135)	4.1	(0-40)	SW846 8270C
3-Nitroaniline	47	(45 - 135)			SW846 8270C
	50	(45 - 135)	6.5	(0-50)	SW846 8270C
4-Nitroaniline	51	(45 - 135)			SW846 8270C
	55	(45 - 135)	5.9	(0-40)	SW846 8270C
Nitrobenzene	54	(45 - 135)			SW846 8270C
	60	(45 - 135)	11	(0-40)	SW846 8270C
2-Nitrophenol	57	(45 - 135)			SW846 8270C
	62	(45 - 135)	8.9	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	50	(45 - 135)			SW846 8270C
	54	(45 - 135)	7.4	(0-40)	SW846 8270C
Phenanthrene	54	(45 - 135)			SW846 8270C
	59	(45 - 135)	8.4	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	58	(45 - 135)			SW846 8270C
	63	(45 - 135)	7.7	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	60	(45 - 135)			SW846 8270C
	61	(45 - 135)	2.0	(0-40)	SW846 8270C
Benzoic acid	47	(45 - 135)			SW846 8270C
	52	(45 - 135)	8.3	(0-40)	SW846 8270C
Benzyl alcohol	58	(45 - 135)			SW846 8270C
	61	(45 - 135)	5.1	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	53	(50 - 150)
	57	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
	56	(50 - 150)
Terphenyl-d14	60	(50 - 150)
	63	(50 - 150)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGK3H1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D060402-029 MGK3H1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	56	(50 - 150)
	60	(50 - 150)
2-Fluorophenol	54	(50 - 150)
	59	(50 - 150)
2,4,6-Tribromophenol	61	(50 - 150)
	65	(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 #...: A1D060402 **Work Order #...:** MGMRN1EE-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D060621-001 MGMRN1EF-MSD
Date Sampled...: 04/05/11 09:35 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/12/11
Prep Batch #...: 1097067
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	65	(25 - 110)			SW846 8270C
	69	(25 - 110)	6.7	(0-30)	SW846 8270C
Acenaphthene	64	(36 - 110)			SW846 8270C
	73	(36 - 110)	13	(0-30)	SW846 8270C
2,4-Dinitrotoluene	75	(46 - 119)			SW846 8270C
	84	(46 - 119)	11	(0-30)	SW846 8270C
Pyrene	68	(54 - 115)			SW846 8270C
	74	(54 - 115)	7.8	(0-30)	SW846 8270C
N-Nitrosodi-n-propyl-amine	71	(25 - 119)			SW846 8270C
	66	(25 - 119)	7.0	(0-30)	SW846 8270C
1,4-Dichlorobenzene	69	(17 - 110)			SW846 8270C
	72	(17 - 110)	4.3	(0-30)	SW846 8270C
Pentachlorophenol	56	(23 - 110)			SW846 8270C
	66	(23 - 110)	17	(0-30)	SW846 8270C
Phenol	82	(16 - 110)			SW846 8270C
	75	(16 - 110)	8.6	(0-30)	SW846 8270C
2-Chlorophenol	79	(26 - 110)			SW846 8270C
	79	(26 - 110)	0.31	(0-30)	SW846 8270C
4-Chloro-3-methylphenol	75	(33 - 110)			SW846 8270C
	86	(33 - 110)	14	(0-30)	SW846 8270C
4-Nitrophenol	61	(13 - 127)			SW846 8270C
	67	(13 - 127)	8.9	(0-30)	SW846 8270C
Acenaphthylene	66	(39 - 110)			SW846 8270C
	72	(39 - 110)	8.9	(0-30)	SW846 8270C
Anthracene	67	(46 - 110)			SW846 8270C
	72	(46 - 110)	7.2	(0-30)	SW846 8270C
Benzo(a)anthracene	59	(52 - 110)			SW846 8270C
	67	(52 - 110)	12	(0-30)	SW846 8270C
Benzo(b)fluoranthene	60	(33 - 114)			SW846 8270C
	62	(33 - 114)	3.0	(0-30)	SW846 8270C
Benzo(k)fluoranthene	70	(32 - 121)			SW846 8270C
	86	(32 - 121)	21	(0-30)	SW846 8270C
Benzo(ghi)perylene	66	(34 - 116)			SW846 8270C
	72	(34 - 116)	7.9	(0-30)	SW846 8270C
Benzo(a)pyrene	49	(33 - 110)			SW846 8270C
	51	(33 - 110)	4.4	(0-30)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGMRN1EE-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D060621-001 MGMRN1EF-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	73	(35 - 110)			SW846 8270C
	78	(35 - 110)	7.8	(0-30)	SW846 8270C
bis(2-Chloroethyl)-ether	83	(27 - 110)			SW846 8270C
	107	(27 - 110)	25	(0-30)	SW846 8270C
bis(2-Chloroisopropyl) ether	84	(13 - 124)			SW846 8270C
	81	(13 - 124)	3.5	(0-30)	SW846 8270C
bis(2-Ethylhexyl) phthalate	53	(40 - 140)			SW846 8270C
	60	(40 - 140)	12	(0-30)	SW846 8270C
4-Bromophenyl phenyl ether	77	(42 - 113)			SW846 8270C
	78	(42 - 113)	1.3	(0-30)	SW846 8270C
Butyl benzyl phthalate	75	(51 - 121)			SW846 8270C
	80	(51 - 121)	5.5	(0-30)	SW846 8270C
Carbazole	65	(49 - 114)			SW846 8270C
	71	(49 - 114)	9.4	(0-30)	SW846 8270C
4-Chloroaniline	36	(10 - 110)			SW846 8270C
	33	(10 - 110)	9.1	(0-30)	SW846 8270C
2-Chloronaphthalene	66	(34 - 110)			SW846 8270C
	73	(34 - 110)	10	(0-30)	SW846 8270C
4-Chlorophenyl phenyl ether	71	(43 - 113)			SW846 8270C
	79	(43 - 113)	11	(0-30)	SW846 8270C
Chrysene	66	(52 - 111)			SW846 8270C
	70	(52 - 111)	6.0	(0-30)	SW846 8270C
Dibenz(a,h)anthracene	66	(35 - 118)			SW846 8270C
	73	(35 - 118)	9.4	(0-30)	SW846 8270C
Dibenzofuran	68	(41 - 110)			SW846 8270C
	74	(41 - 110)	9.2	(0-30)	SW846 8270C
Di-n-butyl phthalate	71	(50 - 117)			SW846 8270C
	82	(50 - 117)	15	(0-30)	SW846 8270C
1,2-Dichlorobenzene	70	(22 - 110)			SW846 8270C
	73	(22 - 110)	4.1	(0-30)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGMRN1EE-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D060621-001 MGMRN1EF-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	64	(19 - 110)			SW846 8270C
	68	(19 - 110)	6.1	(0-30)	SW846 8270C
3,3'-Dichlorobenzidine	11	(10 - 110)			SW846 8270C
	16 p	(10 - 110)	38	(0-30)	SW846 8270C
2,4-Dichlorophenol	77	(30 - 110)			SW846 8270C
	81	(30 - 110)	5.8	(0-30)	SW846 8270C
Diethyl phthalate	71	(33 - 130)			SW846 8270C
	80	(33 - 130)	12	(0-30)	SW846 8270C
2,4-Dimethylphenol	62	(11 - 110)			SW846 8270C
	64	(11 - 110)	2.3	(0-30)	SW846 8270C
Dimethyl phthalate	70	(36 - 124)			SW846 8270C
	77	(36 - 124)	9.2	(0-30)	SW846 8270C
4,6-Dinitro-2-methylphenol	73	(25 - 110)			SW846 8270C
	75	(25 - 110)	3.0	(0-30)	SW846 8270C
2,4-Dinitrophenol	62	(11 - 119)			SW846 8270C
	63	(11 - 119)	2.7	(0-30)	SW846 8270C
2,6-Dinitrotoluene	77	(48 - 115)			SW846 8270C
	84	(48 - 115)	9.1	(0-30)	SW846 8270C
Di-n-octyl phthalate	57	(36 - 124)			SW846 8270C
	67	(36 - 124)	15	(0-30)	SW846 8270C
Fluoranthene	67	(53 - 111)			SW846 8270C
	77	(53 - 111)	14	(0-30)	SW846 8270C
Fluorene	67	(43 - 110)			SW846 8270C
	74	(43 - 110)	9.0	(0-30)	SW846 8270C
Hexachlorobenzene	71	(40 - 113)			SW846 8270C
	75	(40 - 113)	5.6	(0-30)	SW846 8270C
Hexachlorobutadiene	63	(14 - 110)			SW846 8270C
	69	(14 - 110)	9.1	(0-30)	SW846 8270C
Hexachlorocyclopentadiene	33	(10 - 110)			SW846 8270C
	33	(10 - 110)	1.2	(0-30)	SW846 8270C
Hexachloroethane	67	(10 - 110)			SW846 8270C
	72	(10 - 110)	7.3	(0-30)	SW846 8270C
Indeno(1,2,3-cd)pyrene	65	(36 - 116)			SW846 8270C
	70	(36 - 116)	7.6	(0-30)	SW846 8270C
Isophorone	71	(34 - 125)			SW846 8270C
	74	(34 - 125)	3.7	(0-30)	SW846 8270C
2-Methylnaphthalene	81	(35 - 110)			SW846 8270C
	87	(35 - 110)	7.4	(0-30)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGMRN1EE-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D060621-001 MGMRN1EF-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	81	(26 - 110)			SW846 8270C
	77	(26 - 110)	5.0	(0-30)	SW846 8270C
4-Methylphenol	83	(25 - 110)			SW846 8270C
	82	(25 - 110)	1.0	(0-30)	SW846 8270C
Naphthalene	67	(32 - 110)			SW846 8270C
	69	(32 - 110)	3.5	(0-30)	SW846 8270C
2-Nitroaniline	64	(31 - 129)			SW846 8270C
	75	(31 - 129)	15	(0-30)	SW846 8270C
3-Nitroaniline	50	(23 - 112)			SW846 8270C
	60	(23 - 112)	18	(0-30)	SW846 8270C
4-Nitroaniline	46	(26 - 115)			SW846 8270C
	57	(26 - 115)	22	(0-30)	SW846 8270C
Nitrobenzene	73	(26 - 118)			SW846 8270C
	77	(26 - 118)	4.6	(0-30)	SW846 8270C
2-Nitrophenol	78	(30 - 110)			SW846 8270C
	84	(30 - 110)	8.3	(0-30)	SW846 8270C
N-Nitrosodiphenylamine	59	(28 - 118)			SW846 8270C
	62	(28 - 118)	4.9	(0-30)	SW846 8270C
Phenanthrene	69	(47 - 110)			SW846 8270C
	75	(47 - 110)	8.8	(0-30)	SW846 8270C
2,4,5-Trichloro-phenol	74	(36 - 110)			SW846 8270C
	80	(36 - 110)	7.5	(0-30)	SW846 8270C
2,4,6-Trichloro-phenol	73	(34 - 110)			SW846 8270C
	77	(34 - 110)	4.8	(0-30)	SW846 8270C
Benzoic acid	57	(10 - 165)			SW846 8270C
	56	(10 - 165)	1.6	(0-30)	SW846 8270C
Benzyl alcohol	61	(10 - 130)			SW846 8270C
	58	(10 - 130)	5.7	(0-30)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(27 - 111)
	69	(27 - 111)
2-Fluorobiphenyl	67	(28 - 110)
	70	(28 - 110)
Terphenyl-d14	78	(37 - 119)
	79	(37 - 119)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGMRN1EE-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D060621-001 MGMRN1EF-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	80	(10 - 110)
	78	(10 - 110)
2-Fluorophenol	77	(10 - 110)
	77	(10 - 110)
2,4,6-Tribromophenol	80	(22 - 120)
	87	(22 - 120)

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.

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: qcmrlcl2
Level: LOW
Data Type: MS DATA
SpikeList File: qcmrl.spk
Sublist File: qcmrl.sub
Client SDG: SDGa00195
Fraction: SV
Operator: 001710
SampleType: mrl
Quant Type: ISTD
Method File: \\cansvr11\dd\chem\MSS\a4hp10.i\10414a.b\8270C-625.m
Misc Info:

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
82	Acenaphthene	10.000	9.8969	98.97	70-130
79	Acenaphthylene	10.000	9.5596	95.60	70-130
116	Anthracene	10.000	10.157	101.57	70-130
136	Benzo(a)Anthracene	10.000	9.1719	91.72	70-130
141	Benzo(b)fluoranthe	10.000	7.9264	79.26	70-130
151	Benzo(g,h,i)peryle	10.000	9.5484	95.48	70-130
146	Benzo(a)pyrene	10.000	9.7594	97.59	70-130
29	Benzyl Alcohol	10.000	8.3113	83.11	70-130
44	bis(2-Chloroethoxy	10.000	10.100	101.00	70-130
23	bis(2-Chloroethyl)	10.000	10.763	107.63	70-130
31	bis(2-Chloroisopro	10.000	9.6598	96.60	70-130
139	bis(2-ethylhexyl)P	10.000	9.8907	98.91	70-130
106	4-Bromophenyl-phen	10.000	10.019	100.19	70-130
131	Butylbenzylphthala	10.000	9.7688	97.69	70-130
52	4-Chloroaniline	10.000	8.3742	83.74	70-130
70	2-Chloronaphthalen	10.000	9.6424	96.42	70-130
95	4-Chlorophenyl-phe	10.000	10.203	102.03	70-130
137	Chrysene	10.000	10.198	101.98	70-130
150	Dibenz(a,h)anthrac	10.000	9.9565	99.56	70-130
86	Dibenzofuran	10.000	9.6758	96.76	70-130
120	Di-n-Butylphthalat	10.000	10.090	100.90	70-130
28	1,2-Dichlorobenzen	10.000	10.097	100.97	70-130
26	1,3-Dichlorobenzen	10.000	9.9986	99.99	70-130
27	1,4-Dichlorobenzen	10.000	10.077	100.77	70-130
135	3,3'-Dichlorobenzi	10.000	9.7549	97.55	70-130
93	Diethylphthalate	10.000	10.125	101.25	70-130
76	Dimethylphthalate	10.000	9.8437	98.44	70-130
87	2,4-Dinitrotoluene	10.000	10.360	103.60	70-130
78	2,6-Dinitrotoluene	10.000	9.4380	94.38	70-130
140	Di-n-octylphthalat	10.000	9.5252	95.25	70-130
123	Fluoranthene	10.000	9.9038	99.04	70-130
94	Fluorene	10.000	9.7253	97.25	70-130
107	Hexachlorobenzene	10.000	10.563	105.63	70-130
56	Hexachlorobutadien	10.000	10.282	102.82	70-130
64	Hexachlorocyclopen	10.000	8.4453	84.45	70-130
34	Hexachloroethane	10.000	10.202	102.02	70-130
149	Indeno(1,2,3-cd)py	10.000	9.8032	98.03	70-130
41	Isophorone	10.000	9.9416	99.42	70-130
63	1-Methylnaphthalen	10.000	10.008	100.09	70-130
62	2-Methylnaphthalen	10.000	9.8340	98.34	70-130

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
51	Naphthalene	10.000	9.6424	96.42	70-130
73	2-Nitroaniline	10.000	9.5647	95.65	70-130
81	3-Nitroaniline	10.000	9.4184	94.18	70-130
96	4-Nitroaniline	10.000	9.0270	90.27	70-130
35	Nitrobenzene	10.000	9.8295	98.30	70-130
32	N-Nitroso-di-n-pro	10.000	9.4212	94.21	70-130
99	N-Nitrosodiphenyla	10.000	10.182	101.83	70-130
115	Phenanthrene	10.000	9.7253	97.25	70-130
125	Pyrene	10.000	9.7491	97.49	70-130
50	1,2,4-Trichloroben	10.000	10.016	100.16	70-130
49	Benzoic Acid	20.000	16.133	80.66	70-130
59	4-Chloro-3-Methylp	10.000	8.9879	89.88	70-130
24	2-Chlorophenol	10.000	9.3293	93.29	70-130
48	2,4-Dichlorophenol	10.000	8.4432	84.43	70-130
43	2,4-Dimethylphenol	10.000	9.2068	92.07	70-130
98	4,6-Dinitro-2-meth	10.000	7.5437	75.44	70-130
83	2,4-Dinitrophenol	20.000	11.008	55.04*	70-130
30	2-Methylphenol	10.000	9.2394	92.39	70-130
192	4-Methylphenol	10.000	8.5583	85.58	70-130
42	2-Nitrophenol	10.000	9.0499	90.50	70-130
85	4-Nitrophenol	10.000	5.5256	55.26*	70-130
111	Pentachlorophenol	20.000	17.395	86.97	70-130
22	Phenol	10.000	9.1884	91.88	70-130
67	2,4,5-Trichlorophe	10.000	9.2662	92.66	70-130
66	2,4,6-Trichlorophe	10.000	8.6326	86.33	70-130
119	Carbazole	10.000	10.080	100.81	70-130
142	Benzo(k)fluoranthe	10.000	11.680	116.81	70-130
37	Acetophenone	10.000	9.3680	93.68	70-130
209	Benzaldehyde	10.000	10.705	107.05	70-130
210	Caprolactam	10.000	8.3966	83.97	70-130
211	1,1'-Biphenyl	10.000	9.6197	96.20	70-130
212	Atrazine	10.000	10.001	100.01	70-130
21	Aniline	10.000	8.5052	85.05	70-130
10	N-Nitrosodimethyla	10.000	9.7000	97.00	70-130
80	1,2-Dinitrobenzene	10.000	9.5964	95.96	70-130
91	2,3,5,6-Tetrachlor	10.000	8.6812	86.81	70-130

Data File: \\ansvr11\dd\chem\MSS\a4hp10,i\10414a,b\QCHRLCL.D
Date : 14-APR-2011 20:06
Client ID:
Sample Info: qcmrlcl,10414a,b,8270C-625,qcmri,sub
Volume Injected (uL): 0.5
Column phase: db5,625
Instrument: a4hp10,i
Operator: 001710
Column diameter: 0.32
Page 1
Y (x10^6)
Min
-1,4-Dioxane
-Pyridine+
-3-Chloropropionitrile
-Benzaldehyde+
-2-Chlorophenol
-1,4-Dichlorobenzene-d4+
-1,2-Dichlorobenzene+
-Acetophenone+
-Hexachloroethane+
-Isophorone
-2-Nitrophenol+
-2,4-Dichlorophenol+
-Naphthalene-d8+
-Hexachlorobutadiene+
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene+
-2,4,6-Trichlorophenol+
-2-Nitroaniline
-Dimethylphthalate
2,4-Toluenediamene+
-Acenaphthylene+
-Acenaphthene-d10+
-Dibenzofuran+
-Diethylphthalate
-Fluorene+
-N-Nitrosodiphenylamine+
-4-Bromophenyl-phenylether
-Hexachlorobenzene+
-Pentachlorophenol
-Phenanthrene-d10+
-Anthracene
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Benzidine
-Pyrene
-Butylbenzylphthalate
-Chrysene-d12+
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-d12
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
\\ansvr11\dd\chem\MSS\a4hp10,i\10414a,b\QCHRLCL.D

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1D060402

Lab File ID: 1DF0414 DFTPP Injection Date: 04/14/11

Instrument ID: A4HP10 DFTPP Injection Time: 0947

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	50.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	47.4
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	25.0 - 75.0% of mass 198	51.8
197	Less than 1.0% of mass 198	0.6
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	23.5
365	Greater than 0.75% of mass 198	2.29
441	Present, but less than mass 443	12.2
442	40.0 - 110.0% of mass 198	67.8
443	15.0 - 24.0% of mass 442	12.9 (19.1)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD006	L6	1SMH0414	04/14/11	1006
02	MGM6KBLK	MGM6K1AA	MGM6K1AA	04/14/11	1044
03	MGM6KCHK	MGM6K1AC	MGM6K1AC	04/14/11	1102
04	FWGLL1MW-081	MGK3H1AE	MGK3H1AE	04/14/11	1237
05	FWGLL1MW-081	MGK3H1AF	MGK3H1AF	04/14/11	1256
06	FWGLL1MW-081	MGK3H1AG	MGK3H1AG	04/14/11	1314
07	FWGRQLMW-017	MGK3W1AC	MGK3W1AC	04/14/11	1333
08	FWGBKGMW-010	MGK3T1AC	MGK3T1AC	04/14/11	1352
09	FWGLL1MW-067	MGK3N1AC	MGK3N1AC	04/14/11	1411
10	FWGLL1MW-084	MGK2M1AC	MGK2M1AC	04/14/11	1601
11	FWGLL1MW-DUP	MGK2P1AC	MGK2P1AC	04/14/11	1620
12	FWGB12MW-012	MGK2H1AC	MGK2H1AC	04/14/11	1639
13	FWGLL1MW-082	MGK3E1AC	MGK3E1AC	04/14/11	1658
14	FWGSCFMW-005	MGK241AC	MGK241AC	04/14/11	1716
15	FWGSCFMW-006	MGK261AC	MGK261AC	04/14/11	1735
16	FWGEQUIPRINS	MGK281AC	MGK281AC	04/14/11	1754
17	FWGSCFMW-DUP	MGK221AC	MGK221AC	04/14/11	1813
18	FWGB12MW-010	MGK2R1AC	MGK2R1AC	04/14/11	1832
19	FWGSCFMW-004	MGK201AC	MGK201AC	04/14/11	1909
20	FWGLL1MW-085	MGK2K1AC	MGK2K1AC	04/14/11	1928
21	FWGDETMW-004	MGK291AC	MGK291AC	04/14/11	1947
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1D060402

Lab File ID: 1DF0413 DFTPP Injection Date: 04/13/11

Instrument ID: A4HP10 DFTPP Injection Time: 1041

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	51.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	48.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	53.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	23.1
365	Greater than 0.75% of mass 198	1.99
441	Present, but less than mass 443	10.8
442	40.0 - 110.0% of mass 198	64.4
443	15.0 - 24.0% of mass 442	12.6 (19.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD006	L6	1SMH0413	04/13/11	1100
02	MGK5GBLK	MGK5G1AA	MGK5G1AA	04/13/11	1217
03	MGK5GCHK	MGK5G1AC	MGK5G1AC	04/13/11	1236
04					
05					
06					
07					
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1D060402

Lab File ID: 1DF0426 DFTPP Injection Date: 04/26/11

Instrument ID: A4HP10 DFTPP Injection Time: 1700

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	58.4
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	47.7
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	25.0 - 75.0% of mass 198	57.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	20.9
365	Greater than 0.75% of mass 198	2.00
441	Present, but less than mass 443	7.4
442	40.0 - 110.0% of mass 198	49.7
443	15.0 - 24.0% of mass 442	10.4 (20.9)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD005	L5	1SMM0426	04/26/11	1719
02	SSTD004	L4	1SM0426	04/26/11	1738
03	SSTD003	L3	1SML0426	04/26/11	1757
04	SSTD002	L2	1SL0426	04/26/11	1817
05	SSTD001	L1	1SLL0426	04/26/11	1836
06	SSTD009	L9	1SHHH0426	04/26/11	1855
07	SSTD008	L8	1SHH0426	04/26/11	1914
08	SSTD007	L7	1SH0426	04/26/11	1933
09	SSTD006	L6	1SMH0426	04/26/11	1953
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1D060402

Lab File ID: 1DF0420 DFTPP Injection Date: 04/20/11

Instrument ID: A4HP10 DFTPP Injection Time: 0912

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	49.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	48.3
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	25.0 - 75.0% of mass 198	53.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	24.0
365	Greater than 0.75% of mass 198	2.29
441	Present, but less than mass 443	11.9
442	40.0 - 110.0% of mass 198	64.9
443	15.0 - 24.0% of mass 442	12.7 (19.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD006	L6	1SMH0420	04/20/11	0930
02	FWGDETMW-003	MGK2V1AC	MGK2V1AC	04/20/11	1545
03					
04	All but	2,4-Dinitrophenol			
05					
06					
07					
08					
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15					
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1D060402

Lab File ID: 1DF0427 DFTPP Injection Date: 04/27/11

Instrument ID: A4HP10 DFTPP Injection Time: 0905

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	55.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	47.8
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	25.0 - 75.0% of mass 198	56.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	20.5
365	Greater than 0.75% of mass 198	1.94
441	Present, but less than mass 443	8.1
442	40.0 - 110.0% of mass 198	50.4
443	15.0 - 24.0% of mass 442	10.3 (20.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD006	L6	1SMH0427	04/27/11	0924
02	FWGDETMW-003	MGK2V2AC	MGK2V2AC	04/27/11	1156
03			2,4-Dinitrophenol		
04					
05		2,4-Dinitrophenol			
06					
07					
08					
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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 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 1.9 and 3.8 °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 4/15/11 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?	✓			Instrument A2HP9 3/15/11	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%?		✓			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%?		✓		Instrument A2HP9 4/15/11 @ 0632, tox 4/15/11 @ 0352	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a CCV run every 12 hours?	✓				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.	LCG Appendix C >UL=J; <30%=J/R 30%-LL=J/UJ;
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 analyzed on sample FWGLL1mw-081c-1716-GW recovered below limits at 49% for endosulfan I. No qualifications were made as Endosulfan I recovered within control limits in the LCS.	*QAPP Table 3-2,* Pj
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits for sample FWGB12mw-010c-1712-GW at 44%, FWGLL1mw-081c-1716-GW at 37%, FWGLL1mw-084c-1719-GW at 39%, FWGLL1mw-DUP2-1747-GW at 48% and FWSCFmw-005-1745-GW at 43%. The results for samples FWGB12mw-010c-1712-GW, FWGLL1mw-081c-1716-GW, FWGLL1mw-084c-1719-GW, FWGLL1mw-DUP2-1747-GW and FWSCFmw-005-1745-GW 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%?	✓			Checked by ADR.	QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPD's ≤ 40?			✓	There were no detected results above the RL.	LCG Table 4 >40 RPD=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 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?		✓			
31. 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 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-1720-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-004 **Work Order #...:** MGK2K1AD **Matrix.....:** WG
Date Sampled...: 04/05/11 10:51 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
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	67	(50 - 150)
Decachlorobiphenyl	59	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1719-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-006	**Work Order #...:** MGK2M1AD	**Matrix.....:** WG	
Date Sampled...: 04/05/11 13:25	**Date Received..:** 04/06/11		
Prep Date.....: 04/07/11	**Analysis Date..:** 04/18/11		
Prep Batch #...: 1097051			
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	**0.029 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	73	(50 - 150)
Decachlorobiphenyl	39 *	(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-DUP2-1747-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-008 **Work Order #...:** MGK2P1AD **Matrix.....:** WG
Date Sampled...: 04/05/11 14:15 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
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	**0.011 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	81	(50 - 150)
Decachlorobiphenyl	48 *	(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: FWGB12mw-010C-1712-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-010 **Work Order #...:** MGK2R1AD **Matrix.....:** WG
Date Sampled...: 04/05/11 16:00 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
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	74	(50 - 150)
Decachlorobiphenyl	44 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-003C-1739-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-012 **Work Order #...:** MGK2V1AD **Matrix.....:** WG
Date Sampled...: 04/05/11 17:50 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
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	78	(50 - 150)
Decachlorobiphenyl	55	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1744-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-015 **Work Order #...:** MGK201AD **Matrix.....:** WG
Date Sampled...: 04/05/11 10:02 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
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	67	(50 - 150)
Decachlorobiphenyl	62	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1751-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-017 **Work Order #...:** MGK221AD **Matrix.....:** WG
Date Sampled...: 04/05/11 13:02 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
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	74	(50 - 150)
Decachlorobiphenyl	64	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1745-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-019	**Work Order #...:** MGK241AD	**Matrix.....:** WG	
Date Sampled...: 04/05/11 15:08	**Date Received..:** 04/06/11		
Prep Date.....: 04/07/11	**Analysis Date..:** 04/18/11		
Prep Batch #...: 1097051			
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	71	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1746-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-021 **Work Order #...:** MGK261AD **Matrix.....:** WG
Date Sampled...: 04/05/11 16:38 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
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	78	(50 - 150)
Decachlorobiphenyl	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1758-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-023 **Work Order #...:** MGK281AD **Matrix.....:** WQ
Date Sampled...: 04/05/11 18:22 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
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	68	(50 - 150)
Decachlorobiphenyl	61	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-004C-1740-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-024 **Work Order #...:** MGK291AD **Matrix.....:** WG
Date Sampled...: 04/04/11 18:00 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
Dilution Factor: 1 **Initial Wgt/Vol:** 810 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: FWGLL1mw-082C-1718-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-027 **Work Order #...:** MGK3E1AD **Matrix.....:** WG
Date Sampled...: 04/05/11 09:23 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
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	64	(50 - 150)
Decachlorobiphenyl	55	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1716-GW

GC Semivolatiles

Lot-Sample #...:	A1D060402-029	**Work Order #...:**	MGK3H1AH	**Matrix.....:**	WG
Date Sampled...:	04/05/11 11:23	**Date Received..:**	04/06/11		
Prep Date.....:	04/07/11	**Analysis Date..:**	04/18/11		
Prep Batch #...:	1097051				
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	75	(50 - 150)
Decachlorobiphenyl	37 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1715-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-031 **Work Order #...:** MGK3N1AD **Matrix.....:** WG
Date Sampled...: 04/05/11 14:23 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
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	78	(50 - 150)
Decachlorobiphenyl	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-010C-1708-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-033 **Work Order #...:** MGK3T1AD **Matrix.....:** WG
Date Sampled...: 04/05/11 17:03 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1097051
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	87	(50 - 150)
Decachlorobiphenyl	63	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGM511AA **Matrix.....:** WATER
MB Lot-Sample #: A1D070000-051

Prep Date.....: 04/07/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/18/11 **Prep Batch #...:** 1097051
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	81	(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 #...: A1D060402 Work Order #...: MGM511AC Matrix.....: WATER
LCS Lot-Sample#: A1D070000-051
Prep Date.....: 04/07/11 Analysis Date..: 04/18/11
Prep Batch #...: 1097051
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	90	(44 - 137)	SW846 8081A
beta-BHC	86	(50 - 135)	SW846 8081A
delta-BHC	89	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	90	(58 - 127)	SW846 8081A
Heptachlor	84	(48 - 150)	SW846 8081A
Aldrin	83	(53 - 128)	SW846 8081A
Heptachlor epoxide	86	(50 - 127)	SW846 8081A
Endosulfan I	51	(50 - 160)	SW846 8081A
Dieldrin	87	(50 - 124)	SW846 8081A
4,4'-DDE	88	(50 - 130)	SW846 8081A
Endrin	87	(50 - 137)	SW846 8081A
Endosulfan II	59	(50 - 144)	SW846 8081A
4,4'-DDD	96	(50 - 137)	SW846 8081A
Endosulfan sulfate	88	(50 - 160)	SW846 8081A
4,4'-DDT	92	(50 - 145)	SW846 8081A
Methoxychlor	93	(50 - 160)	SW846 8081A
Endrin ketone	85	(50 - 150)	SW846 8081A
Endrin aldehyde	70	(30 - 160)	SW846 8081A
alpha-Chlordane	84	(50 - 122)	SW846 8081A
gamma-Chlordane	86	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
Decachlorobiphenyl	82	(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 #...: A1D060402 Work Order #...: MGK3H1AJ-MS Matrix.....: WG
MS Lot-Sample #: A1D060402-029 MGK3H1AK-MSD
Date Sampled...: 04/05/11 11:23 Date Received..: 04/06/11
Prep Date.....: 04/07/11 Analysis Date..: 04/18/11
Prep Batch #...: 1097051
Dilution Factor: 1 Initial Wgt/Vol: 500 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	84	(50 - 150)			SW846 8081A
	86	(50 - 150)	2.5	(0-50)	SW846 8081A
beta-BHC	79	(50 - 150)			SW846 8081A
	82	(50 - 150)	3.6	(0-50)	SW846 8081A
delta-BHC	83	(50 - 150)			SW846 8081A
	86	(50 - 150)	3.3	(0-50)	SW846 8081A
gamma-BHC (Lindane)	84	(50 - 150)			SW846 8081A
	86	(50 - 150)	2.6	(0-50)	SW846 8081A
Heptachlor	75	(50 - 150)			SW846 8081A
	77	(50 - 150)	3.0	(0-50)	SW846 8081A
Aldrin	76	(50 - 150)			SW846 8081A
	79	(50 - 150)	3.6	(0-50)	SW846 8081A
Heptachlor epoxide	79	(50 - 150)			SW846 8081A
	83	(50 - 150)	4.7	(0-50)	SW846 8081A
Endosulfan I	49 a	(50 - 150)			SW846 8081A
	50	(50 - 150)	3.4	(0-50)	SW846 8081A
Dieldrin	79	(50 - 150)			SW846 8081A
	82	(50 - 150)	3.7	(0-50)	SW846 8081A
4,4'-DDE	79	(50 - 150)			SW846 8081A
	83	(50 - 150)	4.6	(0-50)	SW846 8081A
Endrin	80	(50 - 150)			SW846 8081A
	82	(50 - 150)	3.0	(0-50)	SW846 8081A
Endosulfan II	54	(50 - 150)			SW846 8081A
	56	(50 - 150)	3.5	(0-50)	SW846 8081A
4,4'-DDD	84	(50 - 150)			SW846 8081A
	90	(50 - 150)	6.2	(0-50)	SW846 8081A
Endosulfan sulfate	77	(50 - 150)			SW846 8081A
	82	(50 - 150)	6.6	(0-50)	SW846 8081A
4,4'-DDT	79	(50 - 150)			SW846 8081A
	85	(50 - 150)	7.3	(0-50)	SW846 8081A
Methoxychlor	80	(50 - 150)			SW846 8081A
	87	(50 - 150)	8.4	(0-50)	SW846 8081A
Endrin ketone	73	(50 - 150)			SW846 8081A
	78	(50 - 150)	6.1	(0-50)	SW846 8081A
Endrin aldehyde	59	(50 - 150)			SW846 8081A
	61	(50 - 150)	3.4	(0-50)	SW846 8081A
alpha-Chlordane	77	(50 - 150)			SW846 8081A
	80	(50 - 150)	4.4	(0-50)	SW846 8081A
gamma-Chlordane	79	(50 - 150)			SW846 8081A
	82	(50 - 150)	4.5	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGK3H1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A1D060402-029 MGK3H1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	74	(50 - 150)
	79	(50 - 150)
Decachlorobiphenyl	53	(50 - 150)
	57	(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.

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POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 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 1.9 and 3.8°C.	QAPP Table 4-2
3. Were holding times met?		✓		Due to surrogate outliers, sample FWGSCFmw-DUP1-1751-GW was reextracted. The reextraction was completed at 16 days after collection, which is greater than 2x the holding time specified in LCG. The sample results for FWGSCFmw-DUP1-1751-GW were qualified as estimated, "UJ", since the associated analytical method has a hold time of up to one year.	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 4/13/11 Stds = 0.05, 0.1, 0.2, 0.5, 1.0, 2.0 Instrument A2HP12; ICAL on 4/23/11 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?	✓			3/9/11	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%?	✓			4/13/11 (A2HP13), 4/23/11 (A2HP12) @0806,	LCG Table 3 >115%=J; <80%=J/R 80-85%=J/UJ;

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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
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; <30%=J/R LL-30%=J/UJ;
21. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?		✓		The MS/MSD parent sample was from another 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 for sample FWGB12mw-010c-1712-GW at 32%, FWGB12mw-012c-1713-GW at 24%, FWGDETmw-003c-1739-GW at 42%, FWGDETmw-004c-1740-GW at 48%, FWGLL1mw-081c-1716-GW at	LCG Table 3 >150%=J; 10-50%=J/UJ;

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 17, 2011

SDG: A1D060402 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
				32%, FWGLL1mw-084c-1719-GW at 30%, FWGLL1mw-085c-1720-GW at 45%, FWGLL1mw-DUP2-1747-GW at 35% and FWSCFmw-005-1745-GW at 35%. The results for samples FWGB12mw-010c-1712-GW, FWGB12mw-012c-1713-GW, FWGDETmw-003c-1739-GW, FWGDETmw-004c-1740-GW, FWGLL1mw-081c-1716-GW, FWGLL1mw-084c-1719-GW, FWGLL1mw-085c-1720-GW, FWGLL1mw-DUP2-1747-GW and FWSCFmw-005-1745-GW were qualified as estimated, "UJ".	<10%=R
26. Was a field duplicate analyzed? Were the RPDs <30%?	✓			Checked by ADR.	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.		✓			

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:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-012C-1713-GW

GC Semivolatiles

Lot-Sample #...:	A1D060402-002	**Work Order #...:**	MGK2H1AE	**Matrix.....:**	WG
Date Sampled...:	04/05/11 09:11	**Date Received..:**	04/06/11		
Prep Date.....:	04/07/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1097052				
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	74	(50 - 150)
Decachlorobiphenyl	24 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1720-GW

GC Semivolatiles

Lot-Sample #...:	A1D060402-004	**Work Order #...:**	MGK2K1AF	**Matrix.....:**	WG
Date Sampled...:	04/05/11 10:51	**Date Received..:**	04/06/11		
Prep Date.....:	04/07/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1097052				
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-084C-1719-GW

GC Semivolatiles

Lot-Sample #...:	A1D060402-006	**Work Order #...:**	MGK2M1AF	**Matrix.....:**	WG
Date Sampled...:	04/05/11 13:25	**Date Received..:**	04/06/11		
Prep Date.....:	04/07/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1097052				
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	73	(50 - 150)
Decachlorobiphenyl	30 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1747-GW

GC Semivolatiles

Lot-Sample #...:	A1D060402-008	Work Order #...:	MGK2P1AF	Matrix.....:	WG
Date Sampled...:	04/05/11 14:15	Date Received..:	04/06/11		
Prep Date.....:	04/07/11	Analysis Date..:	04/15/11		
Prep Batch #...:	1097052				
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	35 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-010C-1712-GW

GC Semivolatiles

Lot-Sample #...:	A1D060402-010	**Work Order #...:**	MGK2R1AF	**Matrix.....:**	WG
Date Sampled...:	04/05/11 16:00	**Date Received..:**	04/06/11		
Prep Date.....:	04/07/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1097052				
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	74	(50 - 150)
Decachlorobiphenyl	32 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-003C-1739-GW

GC Semivolatiles

Lot-Sample #...:	A1D060402-012	**Work Order #...:**	MGK2V1AF	**Matrix.....:**	WG
Date Sampled...:	04/05/11 17:50	**Date Received..:**	04/06/11		
Prep Date.....:	04/07/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1097052				
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	83	(50 - 150)
Decachlorobiphenyl	42 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1744-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-015	**Work Order #...:** MGK201AF	**Matrix.....:** WG	
Date Sampled...: 04/05/11 10:02	**Date Received..:** 04/06/11		
Prep Date.....: 04/07/11	**Analysis Date..:** 04/15/11		
Prep Batch #...: 1097052			
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	88	(50 - 150)
Decachlorobiphenyl	59	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1751-GW

GC Semivolatiles

Lot-Sample #...:	A1D060402-017	**Work Order #...:**	MGK222AF	**Matrix.....:**	WG
Date Sampled...:	04/05/11 13:02	**Date Received..:**	04/06/11		
Prep Date.....:	04/22/11	**Analysis Date..:**	04/26/11		
Prep Batch #...:	1112028				
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	84	(50 - 150)
Decachlorobiphenyl	88	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1745-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-019	**Work Order #...:** MGK241AF	**Matrix.....:** WG	
Date Sampled...: 04/05/11 15:08	**Date Received..:** 04/06/11		
Prep Date.....: 04/07/11	**Analysis Date..:** 04/15/11		
Prep Batch #...: 1097052			
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	80	(50 - 150)
Decachlorobiphenyl	35 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1746-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-021	**Work Order #...:** MGK261AF	**Matrix.....:** WG	
Date Sampled...: 04/05/11 16:38	**Date Received..:** 04/06/11		
Prep Date.....: 04/07/11	**Analysis Date..:** 04/15/11		
Prep Batch #...: 1097052			
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	85	(50 - 150)
Decachlorobiphenyl	62	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1758-GW

GC Semivolatiles

Lot-Sample #...:	A1D060402-023	**Work Order #...:**	MGK281AF	**Matrix.....:**	WQ
Date Sampled...:	04/05/11 18:22	**Date Received..:**	04/06/11		
Prep Date.....:	04/07/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1097052				
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	85	(50 - 150)
Decachlorobiphenyl	64	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-004C-1740-GW

GC Semivolatiles

Lot-Sample #...:	A1D060402-024	**Work Order #...:**	MGK291AF	**Matrix.....:**	WG
Date Sampled...:	04/04/11 18:00	**Date Received..:**	04/06/11		
Prep Date.....:	04/07/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1097052				
Dilution Factor:	1	**Initial Wgt/Vol:**	810 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	48 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1718-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-027 Work Order #...: MGK3E1AF Matrix.....: WG
Date Sampled...: 04/05/11 09:23 Date Received..: 04/06/11
Prep Date.....: 04/07/11 Analysis Date..: 04/15/11
Prep Batch #...: 1097052
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	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1716-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-029	**Work Order #...:** MGK3H1AP	**Matrix.....:** WG	
Date Sampled...: 04/05/11 11:23	**Date Received..:** 04/06/11		
Prep Date.....: 04/07/11	**Analysis Date..:** 04/15/11		
Prep Batch #...: 1097052			
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	86	(50 - 150)
Decachlorobiphenyl	32 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1715-GW

GC Semivolatiles

Lot-Sample #...: A1D060402-031	**Work Order #...:** MGK3N1AF	**Matrix.....:** WG	
Date Sampled...: 04/05/11 14:23	**Date Received..:** 04/06/11		
Prep Date.....: 04/07/11	**Analysis Date..:** 04/15/11		
Prep Batch #...: 1097052			
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	82	(50 - 150)
Decachlorobiphenyl	53	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-010C-1708-GW

GC Semivolatiles

Lot-Sample #...:	A1D060402-033	**Work Order #...:**	MGK3T1AF	**Matrix.....:**	WG
Date Sampled...:	04/05/11 17:03	**Date Received..:**	04/06/11		
Prep Date.....:	04/07/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1097052				
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	80	(50 - 150)
Decachlorobiphenyl	51	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MGM521AA **Matrix.....:** WATER
MB Lot-Sample #: A1D070000-052

Prep Date.....: 04/07/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/15/11 **Prep Batch #...:** 1097052
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	81	(50 - 150)
Decachlorobiphenyl	73	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MHDGP1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D220000-028

Prep Date.....: 04/22/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/26/11 **Prep Batch #...:** 1112028
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	83	(50 - 150)
Decachlorobiphenyl	73	(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 #...: A1D060402 **Work Order #...:** MGM521AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D070000-052
Prep Date.....: 04/07/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1097052
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**98**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**96**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(50 - 150)
Decachlorobiphenyl	85	(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 Semivolatiles

Client Lot #...: A1D060402 **Work Order #...:** MHDGP1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D220000-028
Prep Date.....: 04/22/11 **Analysis Date..:** 04/26/11
Prep Batch #...: 1112028
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	82	(58 - 141)	**SW846 8082**
Aroclor 1260	83	(71 - 143)	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	46 *	(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 #...: A1D060402 **Work Order #...:** MGK3H1AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A1D060402-029 MGK3H1AR-MSD
Date Sampled...: 04/05/11 11:23 **Date Received..:** 04/06/11
Prep Date.....: 04/07/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1097052
Dilution Factor: 2 **Initial Wgt/Vol:** 525 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**106**	**(50 - 150)**			**SW846 8082**
	94	**(50 - 150)**	**12**	**(0-50)**	**SW846 8082**
Aroclor 1260	**73**	**(50 - 150)**			**SW846 8082**
	60	**(50 - 150)**	**20**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	97	(50 - 150)
	84	(50 - 150)
Decachlorobiphenyl	40 *	(50 - 150)
	32 *	(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.

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METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 18, 2011

SDG: A1D060402 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 1.9 and 3.8°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?	✓			1/1/11	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
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		The ICB analyzed 4/11/11 had sodium detected at 34.5ug/L and thallium detected at 0.2ug/L. The thallium result for samples FWGB12mw-012c-1713-GF, FWGLL1mw-084c-1719-GF, FWGLL1mw-DUP2-1747-GF and FWGLL1mw-067c-1715-GF and the sodium result for sample FWGEQUIPRinse2-1758-GF were qualified "U" as the detected concentrations were <5x the 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.	LCG Table 7 < 5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG**: A1D060402 R0
Sample Event: April 2011 **Analysis:** SW846 6010B/6020
Data Reviewer/Date: Angye Dragotta/ May 18, 2011

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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, <85%=J/R 90-85%=J/UJ;
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICPMS The CCBs analyzed 4/11/11 had detected thallium from 0.18ug/L to 0.25ug/L and sodium from 52.9ug/L to 93ug/L. No additional qualifications were made other than those made for the ICB contamination. ICP The CCB analyzed 4/14/11 at 1650 had arsenic detected at 5.2ug/L, chromium at 2.2ug/L, cobalt at 2.3ug/L, nickel at 3.1ug/L, silver at 2.9ug/L and vanadium at 2.6ug/L. No qualifications were made as the detected results bracketed by this CCB 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.	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; Sodium was detected in the method blank at 74.1ug/L and zinc at 19ug/L. Sodium was detected in the method blank at 74.1ug/L and zinc at 19ug/L. The zinc results for samples FWGB12mw-012c-1713-GF, FWGLL1mw-085c-1720-GF, FWGSCFmw-005-1745-GF, FWGBKGmw-010c-1708-GF and the sodium result for FWGEQUIPRinse2-1758-GF were qualified "B" as the detected concentrations were <5x the method blank 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; Sodium was detected in FWGEQUIPRinse2-1758-GW at 8.7ug/L. No qualifications were made as the detected sodium results in the associated field samples were >5x contamination.	<5x=B

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 18, 2011

SDG: A1D060402 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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 zinc LCS from prep batch 1097020 recovered above control limits at 122%. The zinc results for samples FWGB12mw-012c-1713-GF, FWGLL1mw-085c-1720-GF, FWGSCFmw-005-1745-GF and FWGBKGmw-010c-1708-GF were qualified as estimated, "J".	LCG Appendix C >UL=J; <60%=J/R 60%-LL= J/UJ;
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%?	✓				LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤20%?	✓			Checked by ADR. Only sample results with detections above the RL were evaluated.	LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	Matrix spike recoveries were within control limits.	LCG Table 7 >125%=J; <30%=R 30-75%=J/UJ;
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%?	✓				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:

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 18, 2011

SDG: A1D060402 R0
Analysis: SW846 6010B/6020

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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 18, 2011

SDG: A1D060402 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 1.9 and 3.8°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?	✓			1/1/11	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:** A1D060402 R0
Sample Event: April 2011 **Analysis:** SW846 7470A
Data Reviewer/Date: Angye Dragotta/ May 18, 2011

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?	✓			Mercury was detected in the method blank at 0.18ug/L, but no qualifications were made as there were no reported mercury concentrations in the associated field samples.	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%?	✓			Checked by ADR.	LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓				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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 18, 2011

SDG: A1D060402 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: FWGB12mw-012C-1713-GF

TOTAL Metals

Lot-Sample #...: A1D060402-003 **Matrix.....:** WG
Date Sampled...: 04/05/11 09:11 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1AN
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK2J1AA
		Dilution Factor: 1		Analysis Time..: 16:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1AK
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**13.0**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2J1AP**
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK2J1AC
		Dilution Factor: 1		Analysis Time..: 16:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**52700**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2J1AQ**
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK2J1AD
		Dilution Factor: 1		Analysis Time..: 16:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1AR
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1AT
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1AU
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-012C-1713-GF

TOTAL Metals

Lot-Sample #...: A1D060402-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK2J1AE
		Dilution Factor: 1		Analysis Time..: 16:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK2J1A2
		Dilution Factor: 1		Analysis Time..: 12:15	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1870**	1000	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1AV
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**35800**	1000	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1AW
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**4.4 B**	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1AX
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**16900 J**	1000	ug/L	SW846 6020	04/07-04/11/11	MGK2J1AJ
		Dilution Factor: 1		Analysis Time..: 16:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**2.2 B**	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1A0
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1AL
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK2J1AF
		Dilution Factor: 1		Analysis Time..: 16:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1AM
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-012C-1713-GF

TOTAL Metals

Lot-Sample #...: A1D060402-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.16 B**	**1.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2J1AH**
		Dilution Factor: 1		Analysis Time..: 16:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2J1A1
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**4.1 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2J1AG**
		Dilution Factor: 1		Analysis Time..: 16:14	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: FWGLL1mw-085C-1720-GF

TOTAL Metals

Lot-Sample #...: A1D060402-005 **Matrix.....:** WG
Date Sampled...: 04/05/11 10:51 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2L1AR
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK2L1AE
		Dilution Factor: 1		Analysis Time..: 16:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**5.7**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2L1AN**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**22.0**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2L1AT**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK2L1AF
		Dilution Factor: 1		Analysis Time..: 16:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**85400**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2L1AU**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK2L1AG
		Dilution Factor: 1		Analysis Time..: 16:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**5.3**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2L1AV**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2L1AW
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	**11.1**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2L1AX**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1720-GF

TOTAL Metals

Lot-Sample #...: A1D060402-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**423**	**50.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2L1AH**
		Dilution Factor: 1		Analysis Time..: 16:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK2L1AD
		Dilution Factor: 1		Analysis Time..: 12:06	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2070**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2L1A0**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**22400**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2L1A1**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1180**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2L1A2**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1900 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2L1AM**
		Dilution Factor: 1		Analysis Time..: 16:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**21.6**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2L1AA**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2L1AP
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK2L1AJ
		Dilution Factor: 1		Analysis Time..: 16:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2L1AQ
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1720-GF

TOTAL Metals

Lot-Sample #...: A1D060402-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK2L1AL
		Dilution Factor: 1		Analysis Time..: 16:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2L1AC
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**2.5 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2L1AK**
		Dilution Factor: 1		Analysis Time..: 16:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1719-GF

TOTAL Metals

Lot-Sample #...: A1D060402-007 **Matrix.....:** WG
Date Sampled...: 04/05/11 13:25 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2N1AV
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**246**	**50.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2N1AH**
		Dilution Factor: 1		Analysis Time..: 16:24	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2N1AR
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**16.7**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2N1AW**
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK2N1AJ
		Dilution Factor: 1		Analysis Time..: 16:24	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**49100**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2N1AX**
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	**1.5**	**0.50**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2N1AK**
		Dilution Factor: 1		Analysis Time..: 16:24	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**14.6**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2N1A0**
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2N1A1
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	**9.9**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2N1A2**
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1719-GF

TOTAL Metals

Lot-Sample #...: A1D060402-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK2N1AL
		Dilution Factor: 1		Analysis Time..: 16:24	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK2N1AG
		Dilution Factor: 1		Analysis Time..: 11:55	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2420**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2N1AA**
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**2900**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2N1AC**
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**192**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2N1AD**
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2920 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2N1AQ**
		Dilution Factor: 1		Analysis Time..: 16:24	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**24.6**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2N1AE**
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2N1AT
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK2N1AM
		Dilution Factor: 1		Analysis Time..: 16:24	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2N1AU
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1719-GF

TOTAL Metals

Lot-Sample #...: A1D060402-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.32 B**	**1.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2N1AP**
		Dilution Factor: 1		Analysis Time..: 16:24	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2N1AF
		Dilution Factor: 1		Analysis Time..: 14:01	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Prep Batch #...: 1103010						
Zinc	**49.3**	**10.0**	**ug/L**	**SW846 6020**	**04/13-04/14/11**	**MGK2N2AN**
		Dilution Factor: 1		Analysis Time..: 14:43	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1747-GF

TOTAL Metals

Lot-Sample #...: A1D060402-009 Matrix.....: WG
Date Sampled...: 04/05/11 14:15 Date Received..: 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2Q1AR
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	244	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK2Q1AE
		Dilution Factor: 1		Analysis Time..: 16:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	4.4 B	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2Q1AN
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	17.1	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2Q1AT
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK2Q1AF
		Dilution Factor: 1		Analysis Time..: 16:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	49500	1000	ug/L	SW846 6010B	04/07-04/14/11	MGK2Q1AU
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	1.5	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK2Q1AG
		Dilution Factor: 1		Analysis Time..: 16:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	16.4	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2Q1AV
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	1.5 B	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2Q1AW
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	11.4	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2Q1AX
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1747-GF

TOTAL Metals

Lot-Sample #...: A1D060402-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK2Q1AH
		Dilution Factor: 1		Analysis Time..: 16:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK2Q1AD
		Dilution Factor: 1		Analysis Time..: 12:12	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2510**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2Q1A0**
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**2960**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2Q1A1**
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**196**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2Q1A2**
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2910 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2Q1AM**
		Dilution Factor: 1		Analysis Time..: 16:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**27.5**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2Q1AA**
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2Q1AP
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK2Q1AJ
		Dilution Factor: 1		Analysis Time..: 16:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2Q1AQ
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1747-GF

TOTAL Metals

Lot-Sample #...: A1D060402-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	0.31 B	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK2Q1AL
		Dilution Factor: 1		Analysis Time..: 16:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	1.6 B	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2Q1AC
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Prep Batch #...: 1103010						
Zinc	49.5	10.0	ug/L	SW846 6020	04/13-04/14/11	MGK2Q2AK
		Dilution Factor: 1		Analysis Time..: 14:48	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: FWGB12mw-010C-1712-GF

TOTAL Metals

Lot-Sample #...: A1D060402-011 **Matrix.....:** WG
Date Sampled...: 04/05/11 16:00 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2T1AR
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**198**	**50.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2T1AE**
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**3.7 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2T1AN**
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**4.4 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2T1AT**
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK2T1AF
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**5910**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2T1AU**
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK2T1AG
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.6 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2T1AV**
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	**1.8 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2T1AW**
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2T1AX
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-010C-1712-GF

TOTAL Metals

Lot-Sample #...: A1D060402-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**296**	**50.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2T1AH**
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK2T1AD
		Dilution Factor: 1		Analysis Time..: 11:58	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**553 B**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2T1A0**
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**4080**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2T1A1**
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**52.6**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2T1A2**
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**3870 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2T1AM**
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**19.7**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2T1AA**
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2T1AP
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK2T1AJ
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2T1AQ
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-010C-1712-GF

TOTAL Metals

Lot-Sample #...: A1D060402-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK2T1AL
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2T1AC
		Dilution Factor: 1		Analysis Time..: 14:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Prep Batch #...: 1103010						
Zinc	**6.9 B**	**10.0**	**ug/L**	**SW846 6020**	**04/13-04/14/11**	**MGK2T2AK**
		Dilution Factor: 1		Analysis Time..: 14:52	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: FWGDETmw-003C-1739-GF

TOTAL Metals

Lot-Sample #...: A1D060402-013 **Matrix.....:** WG
Date Sampled...: 04/05/11 17:50 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2W1AR
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK2W1AE
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**11.0**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2W1AN**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**46.8**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2W1AT**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK2W1AF
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**88200**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2W1AU**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK2W1AG
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2W1AV
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	**3.4 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2W1AW**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2W1AX
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-003C-1739-GF

TOTAL Metals

Lot-Sample #...: A1D060402-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1780**	**50.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2W1AH**
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK2W1AD
		Dilution Factor: 1		Analysis Time..: 12:07	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1460**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2W1A0**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**32900**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2W1A1**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**277**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2W1A2**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**12200 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK2W1AM**
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**2.6 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK2W1AA**
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2W1AP
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK2W1AJ
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2W1AQ
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-003C-1739-GF

TOTAL Metals

Lot-Sample #...: A1D060402-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK2W1AL
		Dilution Factor: 1		Analysis Time..: 16:49	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK2W1AC
		Dilution Factor: 1		Analysis Time..: 14:30	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/07-04/11/11	MGK2W1AK
		Dilution Factor: 1		Analysis Time..: 16:49	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: FWGSCFmw-004-1744-GF

TOTAL Metals

Lot-Sample #...: A1D060402-016 **Matrix.....:** WG
Date Sampled...: 04/05/11 10:02 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK211AR
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK211AE
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK211AN
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**99.1**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK211AT**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK211AF
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**151000**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK211AU**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK211AG
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK211AV
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK211AW
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK211AX
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1744-GF

TOTAL Metals

Lot-Sample #...: A1D060402-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK211AH
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK211AD
		Dilution Factor: 1		Analysis Time..: 12:02	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2310**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK211A0**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**60800**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK211A1**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**734**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK211A2**
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**12900 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK211AM**
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK211AA
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK211AP
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK211AJ
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK211AQ
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1744-GF

TOTAL Metals

Lot-Sample #...: A1D060402-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK211AL
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK211AC
		Dilution Factor: 1		Analysis Time..: 14:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/07-04/11/11	MGK211AK
		Dilution Factor: 1		Analysis Time..: 16:54	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1751-GF

TOTAL Metals

Lot-Sample #...: A1D060402-018 **Matrix.....:** WG
Date Sampled...: 04/05/11 13:02 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK231AN
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK231AA
		Dilution Factor: 1		Analysis Time..: 16:59	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK231AK
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**101**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK231AP**
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK231AC
		Dilution Factor: 1		Analysis Time..: 16:59	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**152000**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK231AQ**
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK231AD
		Dilution Factor: 1		Analysis Time..: 16:59	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK231AR
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK231AT
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK231AU
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1751-GF

TOTAL Metals

Lot-Sample #...: A1D060402-018 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK231AE
		Dilution Factor: 1		Analysis Time..: 16:59	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK231A2
		Dilution Factor: 1		Analysis Time..: 12:04	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2330**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK231AV**
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**61500**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK231AW**
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**742**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK231AX**
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**12900 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK231AJ**
		Dilution Factor: 1		Analysis Time..: 16:59	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK231A0
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK231AL
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK231AF
		Dilution Factor: 1		Analysis Time..: 16:59	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK231AM
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1751-GF

TOTAL Metals

Lot-Sample #...: A1D060402-018 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK231AH
		Dilution Factor: 1		Analysis Time..: 16:59	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK231A1
		Dilution Factor: 1		Analysis Time..: 14:42	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/07-04/11/11	MGK231AG
		Dilution Factor: 1		Analysis Time..: 16:59	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1745-GF

TOTAL Metals

Lot-Sample #...: A1D060402-020 **Matrix.....:** WG
Date Sampled...: 04/05/11 15:08 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK251AR
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK251AE
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**4.9 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK251AN**
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**35.8**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK251AT**
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK251AF
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**94200**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK251AU**
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK251AG
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK251AV
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK251AW
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK251AX
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1745-GF

TOTAL Metals

Lot-Sample #...: A1D060402-020 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**3950**	**50.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK251AH**
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK251AD
		Dilution Factor: 1		Analysis Time..: 12:11	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2180**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK251A0**
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**42600**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK251A1**
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1620**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK251A2**
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**10000 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK251AM**
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK251AA
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK251AP
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK251AJ
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK251AQ
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1745-GF

TOTAL Metals

Lot-Sample #...: A1D060402-020 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK251AL
		Dilution Factor: 1		Analysis Time..: 17:04	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK251AC
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**2.4 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK251AK**
		Dilution Factor: 1		Analysis Time..: 17:04	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: FWGSCFmw-006-1746-GF

TOTAL Metals

Lot-Sample #...: A1D060402-022 **Matrix.....:** WG
Date Sampled...: 04/05/11 16:38 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/15/11	MGK271AR
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK271AE
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**13.5**	5.0	ug/L	SW846 6010B	04/07-04/15/11	MGK271AN
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**118**	10.0	ug/L	SW846 6010B	04/07-04/15/11	MGK271AT
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK271AF
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**63500**	1000	ug/L	SW846 6010B	04/07-04/15/11	MGK271AU
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK271AG
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/07-04/15/11	MGK271AV
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/15/11	MGK271AW
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/15/11	MGK271AX
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1746-GF

TOTAL Metals

Lot-Sample #...: A1D060402-022 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**502**	**50.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK271AH**
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK271AD
		Dilution Factor: 1		Analysis Time..: 12:13	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**6740**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/15/11**	**MGK271A0**
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**17800**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/15/11**	**MGK271A1**
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**177**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/15/11**	**MGK271A2**
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**12900 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK271AM**
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/07-04/15/11	MGK271AA
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/15/11	MGK271AP
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK271AJ
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/15/11	MGK271AQ
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1746-GF

TOTAL Metals

Lot-Sample #...: A1D060402-022 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK271AL
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/15/11	MGK271AC
		Dilution Factor: 1		Analysis Time..: 01:37	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/07-04/11/11	MGK271AK
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1758-GW

TOTAL Metals

Lot-Sample #...: A1D060402-023 **Matrix.....:** WQ
Date Sampled...: 04/05/11 18:22 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK281AU
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK281AG
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK281AQ
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK281AV
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK281AH
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	04/07-04/14/11	MGK281AW
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK281AJ
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK281AX
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK281A0
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK281A1
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1758-GW

TOTAL Metals

Lot-Sample #...: A1D060402-023 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK281AK
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK281A7
		Dilution Factor: 1		Analysis Time..: 11:59	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	04/07-04/14/11	MGK281A2
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	04/07-04/14/11	MGK281A3
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK281A4
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**8.7 B,J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK281AP**
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK281A5
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK281AR
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK281AL
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK281AT
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1758-GW

TOTAL Metals

Lot-Sample #...: A1D060402-023 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK281AN
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK281A6
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/07-04/11/11	MGK281AM
		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.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-004C-1740-GF

TOTAL Metals

Lot-Sample #...: A1D060402-025 **Matrix.....:** WG
Date Sampled...: 04/04/11 18:00 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3A1AR
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK3A1AE
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3A1AN
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**49.9**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3A1AT**
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK3A1AF
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**116000**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3A1AU**
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK3A1AG
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3A1AV
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3A1AW
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3A1AX
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-004C-1740-GF

TOTAL Metals

Lot-Sample #...: A1D060402-025 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK3A1AH
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK3A1AD
		Dilution Factor: 1		Analysis Time..: 11:57	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1030**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3A1A0**
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**23500**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3A1A1**
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3A1A2
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2350 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3A1AM**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3A1AA
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3A1AP
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.20 B**	**2.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3A1AJ**
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3A1AQ
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-004C-1740-GF

TOTAL Metals

Lot-Sample #...: A1D060402-025 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK3A1AL
		Dilution Factor: 1		Analysis Time..: 17:18	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3A1AC
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Prep Batch #...: 1103010						
Zinc	**10.9**	**10.0**	**ug/L**	**SW846 6020**	**04/13-04/14/11**	**MGK3A2AK**
		Dilution Factor: 1		Analysis Time..: 14:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1718-GF

TOTAL Metals

Lot-Sample #...: A1D060402-028 **Matrix.....:** WG
Date Sampled...: 04/05/11 09:23 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:17 MDL.....: 1.7	04/07-04/14/11 Analyst ID.....: 002260	MGK3F1AR
Aluminum	ND	50.0 Dilution Factor: 1 Instrument ID..: I8	ug/L	SW846 6020 Analysis Time..: 17:22 MDL.....: 19.0	04/07-04/11/11 Analyst ID.....: 000079	MGK3F1AE
Arsenic	**3.6 B**	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:17 MDL.....: 3.3	04/07-04/14/11 Analyst ID.....: 002260	MGK3F1AN
Barium	**10.9**	10.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:17 MDL.....: 2.8	04/07-04/14/11 Analyst ID.....: 002260	MGK3F1AT
Beryllium	ND	1.0 Dilution Factor: 1 Instrument ID..: I8	ug/L	SW846 6020 Analysis Time..: 17:22 MDL.....: 0.20	04/07-04/11/11 Analyst ID.....: 000079	MGK3F1AF
Calcium	**38400**	1000 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:17 MDL.....: 634	04/07-04/14/11 Analyst ID.....: 002260	MGK3F1AU
Cadmium	**0.17 B**	0.50 Dilution Factor: 1 Instrument ID..: I8	ug/L	SW846 6020 Analysis Time..: 17:22 MDL.....: 0.13	04/07-04/11/11 Analyst ID.....: 000079	MGK3F1AG
Cobalt	**14.3**	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:17 MDL.....: 1.5	04/07-04/14/11 Analyst ID.....: 002260	MGK3F1AV
Chromium	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:17 MDL.....: 1.4	04/07-04/14/11 Analyst ID.....: 002260	MGK3F1AW
Copper	ND	5.0 Dilution Factor: 1 Instrument ID..: I5	ug/L	SW846 6010B Analysis Time..: 15:17 MDL.....: 4.4	04/07-04/14/11 Analyst ID.....: 002260	MGK3F1AX

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1718-GF

TOTAL Metals

Lot-Sample #...: A1D060402-028 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**5210**	**50.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3F1AH**
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK3F1AD
		Dilution Factor: 1		Analysis Time..: 12:00	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1460**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3F1A0**
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**14200**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3F1A1**
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1640**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3F1A2**
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1250 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3F1AM**
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**27.3**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3F1AA**
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3F1AP
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK3F1AJ
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3F1AQ
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1718-GF

TOTAL Metals

Lot-Sample #...: A1D060402-028 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK3F1AL
		Dilution Factor: 1		Analysis Time..: 17:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3F1AC
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Prep Batch #...: 1103010						
Zinc	**70.4**	**10.0**	**ug/L**	**SW846 6020**	**04/13-04/14/11**	**MGK3F2AK**
		Dilution Factor: 1		Analysis Time..: 15:02	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: FWGLL1mw-081C-1716-GF

TOTAL Metals

Lot-Sample #...: A1D060402-030 **Matrix.....:** WG
Date Sampled...: 04/05/11 11:23 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3L1CP
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK3L1AL
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/07-04/15/11	MGK3L1CE
		Dilution Factor: 1		Analysis Time..: 07:36	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**21.4**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3L1CT**
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK3L1AP
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**66300**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3L1CW**
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK3L1AT
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**5.7**	**5.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3L1C1**
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3L1C4
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3L1C7
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1716-GF

TOTAL Metals

Lot-Sample #...: A1D060402-030 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**4630**	**50.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3L1AW**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK3L1AH
		Dilution Factor: 1		Analysis Time..: 11:47	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2500**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3L1DA**
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**13400**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3L1DE**
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**2170**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3L1DH**
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2350 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3L1CA**
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**9.4 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3L1AA**
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3L1CH
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK3L1A1
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3L1CL
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1716-GF

TOTAL Metals

Lot-Sample #...: A1D060402-030 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK3L1A7
		Dilution Factor: 1		Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3L1AE
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Prep Batch #...: 1103010						
Zinc	47.7	10.0	ug/L	SW846 6020	04/13-04/14/11	MGK3L2A4
		Dilution Factor: 1		Analysis Time..: 15:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1715-GF

TOTAL Metals

Lot-Sample #...: A1D060402-032 **Matrix.....:** WG
Date Sampled...: 04/05/11 14:23 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3Q1AR
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK3Q1AE
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3Q1AN
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**27.4**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3Q1AT**
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK3Q1AF
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**37200**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3Q1AU**
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK3Q1AG
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3Q1AV
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3Q1AW
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3Q1AX
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1715-GF

TOTAL Metals

Lot-Sample #...: A1D060402-032 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGK3Q1AH
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK3Q1AD
		Dilution Factor: 1		Analysis Time..: 12:03	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1110**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3Q1A0**
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**41800**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3Q1A1**
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**85.0**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3Q1A2**
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**4420 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3Q1AM**
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**39.8**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3Q1AA**
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3Q1AP
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK3Q1AJ
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3Q1AQ
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1715-GF

TOTAL Metals

Lot-Sample #...: A1D060402-032 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.18 B**	**1.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3Q1AL**
		Dilution Factor: 1		Analysis Time..: 18:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3Q1AC
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Prep Batch #...: 1103010						
Zinc	**3.5 B**	**10.0**	**ug/L**	**SW846 6020**	**04/13-04/14/11**	**MGK3Q2AK**
		Dilution Factor: 1		Analysis Time..: 15:40	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-010C-1708-GF

TOTAL Metals

Lot-Sample #...: A1D060402-034 **Matrix.....:** WG
Date Sampled...: 04/05/11 17:03 **Date Received..:** 04/06/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1097020						
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3V1AR
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**132**	**50.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3V1AE**
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3V1AN
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**17.4**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3V1AT**
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK3V1AF
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**10300**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3V1AU**
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGK3V1AG
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3V1AV
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3V1AW
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3V1AX
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-010C-1708-GF

TOTAL Metals

Lot-Sample #...: A1D060402-034 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**28.1 B**	**50.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3V1AH**
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/07-04/11/11	MGK3V1AD
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**556 B**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3V1A0**
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**12300**	**1000**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3V1A1**
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**602**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3V1A2**
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**4010 J**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3V1AM**
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**66.0**	**10.0**	**ug/L**	**SW846 6010B**	**04/07-04/14/11**	**MGK3V1AA**
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3V1AP
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGK3V1AJ
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3V1AQ
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-010C-1708-GF

TOTAL Metals

Lot-Sample #...: A1D060402-034 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGK3V1AL
		Dilution Factor: 1		Analysis Time..: 18:05	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGK3V1AC
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**7.9 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGK3V1AK**
		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.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1D060402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1D070000-020 **Prep Batch #...:** 1097020						
Aluminum	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGM4R1AA
		Dilution Factor: 1				
		Analysis Time..: 16:03		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	04/07-04/11/11	MGM4R1AF
		Dilution Factor: 1				
		Analysis Time..: 16:03		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AK
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AP
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGM4R1AC
		Dilution Factor: 1				
		Analysis Time..: 16:03		Analyst ID.....: 000079	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	04/07-04/11/11	MGM4R1AD
		Dilution Factor: 1				
		Analysis Time..: 16:03		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AQ
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AT
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AR
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AU
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	04/07-04/11/11	MGM4R1AE
		Dilution Factor: 1				
		Analysis Time..: 16:03		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1D060402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AL
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AW
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AX
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Mercury	**0.18 B**	**0.20**	**ug/L**	**SW846 7470A**	**04/07-04/11/11**	**MGM4R1A2**
		Dilution Factor: 1				
		Analysis Time..: 11:45		Analyst ID.....: 002260	Instrument ID..: H1	
Nickel	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1A0
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AV
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AM
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1AN
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Sodium	**74.1 B**	**1000**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGM4R1AJ**
		Dilution Factor: 1				
		Analysis Time..: 16:03		Analyst ID.....: 000079	Instrument ID..: I8	
Thallium	ND	1.0	ug/L	SW846 6020	04/07-04/11/11	MGM4R1AH
		Dilution Factor: 1				
		Analysis Time..: 16:03		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	04/07-04/14/11	MGM4R1A1
		Dilution Factor: 1				
		Analysis Time..: 13:37		Analyst ID.....: 002260	Instrument ID..: I5	
Zinc	**19.0**	**10.0**	**ug/L**	**SW846 6020**	**04/07-04/11/11**	**MGM4R1AG**
		Dilution Factor: 1				
		Analysis Time..: 16:03		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1D060402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1D130000-010 **Prep Batch #...:** 1103010						
Zinc	ND	10.0	ug/L	SW846 6020	04/13-04/14/11	MGXF31AA

Dilution Factor: 1
Analysis Time..: 14:31 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.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D060402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A1D070000-020 **Prep Batch #...:** 1097020					
Aluminum	92	(80 - 120)	SW846 6020	04/07-04/11/11	MGM4R1A3
		Dilution Factor: 1	Analysis Time..: 16:08	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	94	(80 - 120)	SW846 6020	04/07-04/11/11	MGM4R1A4
		Dilution Factor: 1	Analysis Time..: 16:08	Analyst ID.....: 000079	
		Instrument ID..: I8			
Cadmium	98	(80 - 120)	SW846 6020	04/07-04/11/11	MGM4R1A5
		Dilution Factor: 1	Analysis Time..: 16:08	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	95	(80 - 120)	SW846 6020	04/07-04/11/11	MGM4R1A6
		Dilution Factor: 1	Analysis Time..: 16:08	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	96	(80 - 120)	SW846 6020	04/07-04/11/11	MGM4R1A7
		Dilution Factor: 1	Analysis Time..: 16:08	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	122 N	(80 - 120)	SW846 6020	04/07-04/11/11	MGM4R1A8
		Dilution Factor: 1	Analysis Time..: 16:08	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	93	(80 - 120)	SW846 6020	04/07-04/11/11	MGM4R1A9
		Dilution Factor: 1	Analysis Time..: 16:08	Analyst ID.....: 000079	
		Instrument ID..: I8			
Sodium	106	(80 - 120)	SW846 6020	04/07-04/11/11	MGM4R1CA
		Dilution Factor: 1	Analysis Time..: 16:08	Analyst ID.....: 000079	
		Instrument ID..: I8			
Arsenic	92	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CC
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Lead	101	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CD
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D060402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	102	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CE
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Silver	86	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CF
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Barium	98	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CG
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Calcium	95	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CH
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Cobalt	96	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CJ
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Chromium	94	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CK
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Copper	96	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CL
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Potassium	89	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CM
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Magnesium	96	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CN
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Manganese	102	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CP
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Nickel	91	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CQ
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D060402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	97	(80 - 120)	SW846 6010B	04/07-04/14/11	MGM4R1CR
		Dilution Factor: 1	Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: I5			
Mercury	92	(80 - 120)	SW846 7470A	04/07-04/11/11	MGM4R1CT
		Dilution Factor: 1	Analysis Time..: 11:46	Analyst ID.....: 002260	
		Instrument ID..: H1			

LCS Lot-Sample#: A1D130000-010 **Prep Batch #...:** 1103010

Zinc	107	(80 - 120)	SW846 6020	04/13-04/14/11	MGXF31AC
		Dilution Factor: 1	Analysis Time..: 14:36	Analyst ID.....: 000079	
		Instrument ID..: I8			

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 #...: A1D060402 **Matrix.....:** WG
Date Sampled...: 04/05/11 11:23 **Date Received..:** 04/06/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1D060402-030 **Prep Batch #...:** 1097020					
Aluminum	97	(75 - 125)	SW846 6020	04/07-04/11/11	MGK3L1AM
		Dilution Factor: 1	Analysis Time..: 17:27	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	105	(75 - 125)	SW846 6020	04/07-04/11/11	MGK3L1A2
		Dilution Factor: 1	Analysis Time..: 17:27	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	97	(75 - 125)	SW846 6010B	04/07-04/15/11	MGK3L1CF
		Dilution Factor: 1	Analysis Time..: 07:36	Instrument ID..: I5	
		Analyst ID.....: 002260			
Barium	103	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1CU
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			
Beryllium	98	(75 - 125)	SW846 6020	04/07-04/11/11	MGK3L1AQ
		Dilution Factor: 1	Analysis Time..: 17:27	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	105	(75 - 125)	SW846 6020	04/07-04/11/11	MGK3L1AU
		Dilution Factor: 1	Analysis Time..: 17:27	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	95	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1CX
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			
Chromium	99	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1C5
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			
Cobalt	101	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1C2
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			
Copper	100	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1C8
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D060402 **Matrix.....:** WG
Date Sampled...: 04/05/11 11:23 **Date Received..:** 04/06/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	96	(75 - 125)	SW846 6020	04/07-04/11/11	MGK3L1AX
		Dilution Factor: 1	Analysis Time..: 17:27	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	106	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1CJ
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			
Magnesium	101	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1DF
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			
Manganese	NC,MSB	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1DJ
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			
Mercury	98	(80 - 120)	SW846 7470A	04/07-04/11/11	MGK3L1AJ
		Dilution Factor: 1	Analysis Time..: 11:47	Instrument ID..: H1	
		Analyst ID.....: 002260			
Nickel	102	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1AC
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			
Potassium	96	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1DC
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			
Selenium	107	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1CM
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			
Silver	94	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1CQ
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 002260			
Sodium	110	(75 - 125)	SW846 6020	04/07-04/11/11	MGK3L1CC
		Dilution Factor: 1	Analysis Time..: 17:27	Instrument ID..: I8	
		Analyst ID.....: 000079			
Thallium	101	(75 - 125)	SW846 6020	04/07-04/11/11	MGK3L1A8
		Dilution Factor: 1	Analysis Time..: 17:27	Instrument ID..: I8	
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D060402 **Matrix.....:** WG
Date Sampled...: 04/05/11 11:23 **Date Received..:** 04/06/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	101	(75 - 125)	SW846 6010B	04/07-04/14/11	MGK3L1AF

Dilution Factor: 1 Analysis Time..: 15:23 Instrument ID..: I5
Analyst ID.....: 002260

MS Lot-Sample #: A1D060402-030 **Prep Batch #...:** 1103010

Zinc	105	(75 - 125)	SW846 6020	04/13-04/14/11	MGK3L1EC

Dilution Factor: 1 Analysis Time..: 15:07 Instrument ID..: I8
Analyst ID.....: 000079

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD may be outside control limits because the sample amount was greater than 4X the spike amount.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A1D060402 **Work Order #...:** MGK3L-SMP MGK3L-DUP **Matrix.....:** WG

Date Sampled...: 04/05/11 11:23 **Date Received..:** 04/06/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/07-04/14/11	1097020
			Dilution Factor: 1			Analysis Time..: 15:23	Analyst ID.....: 002260	
			Instrument ID..: I5					
Aluminum						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/07-04/11/11	1097020
			Dilution Factor: 1			Analysis Time..: 17:27	Analyst ID.....: 000079	
			Instrument ID..: I8					
Arsenic						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/07-04/15/11	1097020
			Dilution Factor: 1			Analysis Time..: 07:36	Analyst ID.....: 002260	
			Instrument ID..: I5					
Barium						SD Lot-Sample #: A1D060402-030		
	21.4	21.0	ug/L	1.5	(0-20)	SW846 6010B	04/07-04/14/11	1097020
			Dilution Factor: 1			Analysis Time..: 15:23	Analyst ID.....: 002260	
			Instrument ID..: I5					
Beryllium						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/07-04/11/11	1097020
			Dilution Factor: 1			Analysis Time..: 17:27	Analyst ID.....: 000079	
			Instrument ID..: I8					
Calcium						SD Lot-Sample #: A1D060402-030		
	66300	61300	ug/L	7.9	(0-20)	SW846 6010B	04/07-04/14/11	1097020
			Dilution Factor: 1			Analysis Time..: 15:23	Analyst ID.....: 002260	
			Instrument ID..: I5					
Cadmium						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/07-04/11/11	1097020
			Dilution Factor: 1			Analysis Time..: 17:27	Analyst ID.....: 000079	
			Instrument ID..: I8					
Cobalt						SD Lot-Sample #: A1D060402-030		
	5.7	5.9	ug/L	4.1	(0-20)	SW846 6010B	04/07-04/14/11	1097020
			Dilution Factor: 1			Analysis Time..: 15:23	Analyst ID.....: 002260	
			Instrument ID..: I5					
Chromium						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/07-04/14/11	1097020
			Dilution Factor: 1			Analysis Time..: 15:23	Analyst ID.....: 002260	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1D060402-000 **Work Order #...:** MGK3L-SMP MGK3L-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/07-04/14/11	1097020
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A1D060402-030		
	4630	4590	ug/L	0.80	(0-20)	SW846 6020	04/07-04/11/11	1097020
		Dilution Factor: 1				Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	04/07-04/11/11	1097020
		Dilution Factor: 1				Analysis Time..: 11:47	Analyst ID.....: 002260	
		Instrument ID..: H1						
Potassium						SD Lot-Sample #: A1D060402-030		
	2500	2540	ug/L	1.7	(0-20)	SW846 6010B	04/07-04/14/11	1097020
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A1D060402-030		
	13400	12200	ug/L	9.2	(0-20)	SW846 6010B	04/07-04/14/11	1097020
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A1D060402-030		
	2170	2030	ug/L	6.7	(0-20)	SW846 6010B	04/07-04/14/11	1097020
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A1D060402-030		
	2350 J	2330	ug/L	0.81	(0-20)	SW846 6020	04/07-04/11/11	1097020
		Dilution Factor: 1				Analysis Time..: 17:27	Analyst ID.....: 000079	
		Instrument ID..: I8						
Nickel						SD Lot-Sample #: A1D060402-030		
	9.4 B	10.2	ug/L	8.2	(0-20)	SW846 6010B	04/07-04/14/11	1097020
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/07-04/14/11	1097020
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 002260	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1D060402-000 **Work Order #...:** MGK3L-SMP MGK3L-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/07-04/11/11	1097020
			Dilution Factor: 1			Analysis Time..: 17:27	Analyst ID.....: 000079	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/07-04/14/11	1097020
			Dilution Factor: 1			Analysis Time..: 15:23	Analyst ID.....: 002260	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/07-04/11/11	1097020
			Dilution Factor: 1			Analysis Time..: 17:27	Analyst ID.....: 000079	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #: A1D060402-030		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/07-04/14/11	1097020
			Dilution Factor: 1			Analysis Time..: 15:23	Analyst ID.....: 002260	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #: A1D060402-030		
	47.7	47.3	ug/L	0.72	(0-20)	SW846 6020	04/13-04/14/11	1103010
			Dilution Factor: 1			Analysis Time..: 15:07	Analyst ID.....: 000079	
			Instrument ID..: I8					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80411A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 04/11/11 2:08 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	19	U								
Antimony	121	2	0.13	U								
Beryllium	9	1	0.2	U								
Cadmium	111	0.5	0.13	U								
Iron	56	50	26	U								
Sodium	23	1000	**34.5**	**B**								
Thallium	205	1	**0.2**	**B**								
Zinc	66	10	2.3	U								

Tl
B12-12-1713
LL1-84-1719
LL1-DUP2-1747
LL1-67-1715

Na
EQUIPBLNK 2-1758

U Result is less than the MDL
B Result is between MDL and RL

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50414A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 04/14/11 11:57 AM Found	Q	CCB 04/14/11 1:07 PM Found	Q	CCB 04/14/11 2:18 PM Found	Q	CCB 04/14/11 3:40 PM Found	Q	CCB 04/14/11 4:50 PM Found	Q
Arsenic	189.042	5	3.3	U	3.3	U	3.3	U	3.3	U	**5.2**	
Barium	493.409	10	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
Calcium	317.933	1000	634.0	U	634.0	U	634.0	U	634.0	U	634.0	U
Chromium	267.716	5	1.4	U	1.4	U	1.4	U	1.4	U	**2.2**	**B**
Cobalt	228.616	5	1.5	U	1.5	U	1.5	U	1.5	U	**2.3**	**B**
Copper	324.753	5	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
Lead	220.353	3	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
Magnesium	279.078	1000	122.0	U	122.0	U	122.0	U	122.0	U	122.0	U
Manganese	257.61	10	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Nickel	231.604	10	2.2	U	2.2	U	2.2	U	2.2	U	**3.1**	**B**
Potassium	766.491	1000	300.0	U	300.0	U	300.0	U	300.0	U	300.0	U
Selenium	196.026	5	4.0	U	4.0	U	**-4.0**	**B**	**-4.4**	**B**	4.0	U
Silver	328.068	5	1.7	U	1.7	U	1.7	U	1.7	U	**2.9**	**B**
Vanadium	292.402	10	1.3	U	1.3	U	1.3	U	1.3	U	**2.6**	**B**

NQ

>5X

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80411A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 04/11/11 2:36 PM Found	Q	CCB 1 04/11/11 3:39 PM Found	Q	CCB 2 04/11/11 4:40 PM Found	Q	CCB 3 04/11/11 5:39 PM Found	Q	CCB 4 04/11/11 6:42 PM Found	Q
Aluminum	27	50	19	U	19	U	19	U	19	U	19	U
Antimony	121	2	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Beryllium	9	1	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Cadmium	111	0.5	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Iron	56	50	26	U	26	U	26	U	26	U	26	U
Sodium	23	1000	**93**	**B**	**55.6**	**B**	**52.9**	**B**	**57.5**	**B**	**58**	**B**
Thallium	205	1	**0.25**	**B**	**0.23**	**B**	**0.18**	**B**	**0.16**	**B**	**0.22**	**B**
Zinc	66	10	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U

U Result is less than the MDL

B Result is between MDL and RL

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50414A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 04/14/11 6:01 PM Found	Q	CCB 04/14/11 7:12 PM Found	Q	CCB 04/14/11 8:23 PM Found	Q	CCB 04/14/11 9:34 PM Found	Q	CCB 04/14/11 10:45 PM Found	Q
Arsenic	189.042	5	3.3	U	3.3	U	3.3	U	3.3	U	**3.7**	**B**
Barium	493.409	10	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
Calcium	317.933	1000	634.0	U	634.0	U	634.0	U	634.0	U	634.0	U
Chromium	267.716	5	1.4	U	1.4	U	1.4	U	1.4	U	**1.8**	**B**
Cobalt	228.616	5	1.5	U	1.5	U	1.5	U	1.5	U	**1.6**	**B**
Copper	324.753	5	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
Lead	220.353	3	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
Magnesium	279.078	1000	122.0	U	122.0	U	122.0	U	122.0	U	122.0	U
Manganese	257.61	10	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Nickel	231.604	10	2.2	U	2.2	U	2.2	U	2.2	U	2.2	U
Potassium	766.491	1000	300.0	U	300.0	U	300.0	U	300.0	U	300.0	U
Selenium	196.026	5	4.0	U	4.0	U	4.0	U	4.0	U	**-4.4**	**B**
Silver	328.068	5	1.7	U	1.7	U	1.7	U	1.7	U	**2.0**	**B**
Vanadium	292.402	10	1.3	U	1.3	U	1.3	U	1.3	U	**2.0**	**B**

NB= Not Bracketing

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 18, 2011

SDG: A1D060402 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 1.9 and 3.8°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 ≥ .995?	✓				LCG Table 10 R<0.995=-J/R
9. Were a high and low standard distilled and compared to the undistilled standard? Were the results within ± 10%?	✓				LCG Table 10 R
10. Was an MDL Level Verification performed at least once per quarter with all target analytes detected?	✓			1/19/11	LCG Table 10 R
11. 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
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓				LCG Table 10 >115%=J; <80%=J/R 80-85%=J/UJ;
13. Was the ICB analyzed after the ICV with results <1/2 the MRL?	✓				LCG Table 7 < 5x = U
14. Was a CCV run at the beginning and end of the analytical sequence?	✓				LCG Table 10
15. Were the CCV results 80-120%?	✓				LCG Table 10 >120%=J; <75%=J/R 75-80%=J/UJ;

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 18, 2011

SDG: A1D060402 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
16. Was a method blank prepared and analyzed with each batch?	✓				
17. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR.	LCG Table 10 <5x=B
18. Was a field blank collected and analyzed?	✓				
19. Were target analytes in the field blank analyses <1/2 the MRL?	✓				<5x=B
20. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Checked by ADR.	QAPP Table 3-2 >30% = J
21. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 10
22. Were the LCS recoveries 80-120%?	✓			Checked by ADR.	LCG Table 10 >120%=J; <50%=R 50-79%=J/UJ;
23. Was a MS prepared once per every 10 samples?	✓				LCG Table 10
24. Was the MS parent a Ravenna sample?	✓				
25. Were MS recoveries 75-125%?		✓		The matrix spike from batch 1097302 recovered below control limits at 72%. The cyanide results for samples FWGB12mw-012c-1713-GW, FWGLL1mw-085c-1720-GW, FWGLL1mw-084c-1719-GW and FWGLL1mw-DUP2-1747-GW were qualified as estimated, "UJ". (Parent sample lab ID for the matrix spike analysis incorrectly listed in the raw data as MGJD4, should be MGJ4D.)	QAPP Table 3-2 >125%=J; <30%=J/R 30-75%=J/UJ;
26. Were reported sample concentrations within calibration range?	✓				
27. Were laboratory-generated Quality Control Exception Reports issued?		✓			
28. 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 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

Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-012C-1713-GW

General Chemistry

Lot-Sample #...: A1D060402-002 **Work Order #...:** MGK2H **Matrix.....:** WG
Date Sampled...: 04/05/11 09:11 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1720-GW

General Chemistry

Lot-Sample #...: A1D060402-004 **Work Order #...:** MGK2K **Matrix.....:** WG
Date Sampled...: 04/05/11 10:51 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1719-GW

General Chemistry

Lot-Sample #...: A1D060402-006 **Work Order #...:** MGK2M **Matrix.....:** WG
Date Sampled...: 04/05/11 13:25 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1747-GW

General Chemistry

Lot-Sample #...: A1D060402-008 **Work Order #...:** MGK2P **Matrix.....:** WG
Date Sampled...: 04/05/11 14:15 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-010C-1712-GW

General Chemistry

Lot-Sample #...: A1D060402-010 **Work Order #...:** MGK2R **Matrix.....:** WG
Date Sampled...: 04/05/11 16:00 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-003C-1739-GW

General Chemistry

Lot-Sample #...: A1D060402-012 **Work Order #...:** MGK2V **Matrix.....:** WG
Date Sampled...: 04/05/11 17:50 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1744-GW

General Chemistry

Lot-Sample #...: A1D060402-015 **Work Order #...:** MGK20 **Matrix.....:** WG
Date Sampled...: 04/05/11 10:02 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1751-GW

General Chemistry

Lot-Sample #...: A1D060402-017 **Work Order #...:** MGK22 **Matrix.....:** WG
Date Sampled...: 04/05/11 13:02 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1745-GW

General Chemistry

Lot-Sample #...: A1D060402-019 **Work Order #...:** MGK24 **Matrix.....:** WG
Date Sampled...: 04/05/11 15:08 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1746-GW

General Chemistry

Lot-Sample #...: A1D060402-021 **Work Order #...:** MGK26 **Matrix.....:** WG
Date Sampled...: 04/05/11 16:38 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1758-GW

General Chemistry

Lot-Sample #...: A1D060402-023 **Work Order #...:** MGK28 **Matrix.....:** WQ
Date Sampled...: 04/05/11 18:22 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDETmw-004C-1740-GW

General Chemistry

Lot-Sample #...: A1D060402-024 Work Order #...: MGK29 Matrix.....: WG
Date Sampled...: 04/04/11 18:00 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1718-GW

General Chemistry

Lot-Sample #...: A1D060402-027 **Work Order #...:** MGK3E **Matrix.....:** WG
Date Sampled...: 04/05/11 09:23 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1716-GW

General Chemistry

Lot-Sample #...: A1D060402-029 Work Order #...: MGK3H Matrix.....: WG
Date Sampled...: 04/05/11 11:23 Date Received..: 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1715-GW

General Chemistry

Lot-Sample #...: A1D060402-031 **Work Order #...:** MGK3N **Matrix.....:** WG
Date Sampled...: 04/05/11 14:23 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-010C-1708-GW

General Chemistry

Lot-Sample #...: A1D060402-033 **Work Order #...:** MGK3T **Matrix.....:** WG
Date Sampled...: 04/05/11 17:03 **Date Received..:** 04/06/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1D060402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MGPAG1AA		MB Lot-Sample #:	A1D070000-302	
	ND	0.010	mg/L	SW846 9012A	04/07/11	1097302
		Dilution Factor: 1				
Cyanide, Total		Work Order #: MGQ7K1AA		MB Lot-Sample #:	A1D080000-270	
	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270
		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 #...: A1D060402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MGPAG1AC	LCS Lot-Sample#: A1D070000-302		
	105	(80 - 120)	SW846 9012A	04/07/11	1097302
		Dilution Factor: 1			
Cyanide, Total		Work Order #: MGQ7K1AC	LCS Lot-Sample#: A1D080000-270		
	94	(80 - 120)	SW846 9012A	04/08/11	1098270
		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 #...: A1D060402 **Matrix.....:** WATER
Date Sampled...: 04/04/11 12:35 **Date Received..:** 04/05/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: MGJ4D1AG-MS/MGJ4D1AH-MSD				MS Lot-Sample #: A1D050458-001	
	72 N	(80 - 120)			SW846 9012A	04/07/11	1097302
	83	(80 - 120)	11	(0-20)	SW846 9012A	04/07/11	1097302
		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 #...: A1D060402 **Matrix.....:** WG
Date Sampled...: 04/05/11 11:23 **Date Received..:** 04/06/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: MGK3H1AM-MS/MGK3H1AN-MSD				MS Lot-Sample #: A1D060402-029	
	96	(80 - 120)			SW846 9012A	04/08/11	1098270
	90	(80 - 120)	6.8	(0-20)	SW846 9012A	04/08/11	1098270
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix 1

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1D060402										
6010B	FWGB12mw-010C-1712-GF	AQ	N							
				Arsenic	5.0	3.7B		J	ug/L	RI
				Barium	10.0	4.4B		J	ug/L	RI
				Chromium	5.0	1.8B		J	ug/L	RI
				Cobalt	5.0	1.6B		J	ug/L	RI
				Potassium	1000	553B		J	ug/L	RI
6010B	FWGB12mw-012C-1713-GF	AQ	N							
				Manganese	10.0	4.4B		J	ug/L	RI
				Nickel	10.0	2.2B		J	ug/L	RI
6010B	FWGBKGmw-010C-1708-GF	AQ	N							
				Potassium	1000	556B		J	ug/L	RI
6010B	FWGDETmw-003C-1739-GF	AQ	N							
				Chromium	5.0	3.4B		J	ug/L	RI
				Nickel	10.0	2.6B		J	ug/L	RI
6010B	FWGLL1mw-081C-1716-GF	AQ	N							
				Nickel	10.0	9.4B		J	ug/L	RI
6010B	FWGLL1mw-082C-1718-GF	AQ	N							
				Arsenic	5.0	3.6B		J	ug/L	RI
6010B	FWGLL1mw-DUP2-1747-GF	AQ	FD							
				Arsenic	5.0	4.4B		J	ug/L	RI
				Chromium	5.0	1.5B		J	ug/L	RI
				Vanadium	10.0	1.6B		J	ug/L	RI
6010B	FWGSCFmw-005-1745-GF	AQ	N							
				Arsenic	5.0	4.9B		J	ug/L	RI

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: A1D060402										
6020	FWGB12mw-010C-1712-GF	AQ	N							
				Zinc	10.0	6.9B		J	ug/L	RI
6020	FWGB12mw-012C-1713-GF	AQ	N							
				Thallium	1.0	0.16B		UJ	ug/L	Cb, RI
				Zinc	10.0	4.1B J		JB	ug/L	Mb, Lcs, R
6020	FWGBKGmw-010C-1708-GF	AQ	N							
				Iron	50.0	28.1B		J	ug/L	RI
				Zinc	10.0	7.9B J		JB	ug/L	Mb, Lcs, R
6020	FWGDETmw-004C-1740-GF	AQ	N							
				Antimony	2.0	0.20B		J	ug/L	RI
6020	FWGEQUIPRINSE2-1758-GW	AQ	EB							
				Sodium	1000	8.7B J		UJB	ug/L	Mb, Cb, RI
6020	FWGLL1mw-067C-1715-GF	AQ	N							
				Thallium	1.0	0.18B		UJ	ug/L	Cb, RI
				Zinc	10.0	3.5B		J	ug/L	RI
6020	FWGLL1mw-082C-1718-GF	AQ	N							
				Cadmium	0.50	0.17B		J	ug/L	RI
6020	FWGLL1mw-084C-1719-GF	AQ	N							
				Thallium	1.0	0.32B		UJ	ug/L	Cb, RI
6020	FWGLL1mw-085C-1720-GF	AQ	N							
				Zinc	10.0	2.5B J		JB	ug/L	Mb, Lcs, R
6020	FWGLL1mw-DUP2-1747-GF	AQ	FD							
				Thallium	1.0	0.31B		UJ	ug/L	Cb, RI

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: A1D060402										
6020	FWGSCFmw-005-1745-GF	AQ	N							
				Zinc	10.0	2.4B J		JB	ug/L	Mb, Lcs, R
8081A	FWGB12mw-010C-1712-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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: A1D060402										
8081A	FWGLL1mw-081C-1716-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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: A1D060402										
8081A	FWGLL1mw-084C-1719-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.029J		J	ug/L	Surr, RI
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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: A1D060402										
8081A	FWGLL1mw-DUP2-1747-GW	AQ	FD							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.011J		J	ug/L	Surr, RI
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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: A1D060402										
8081A	FWGSCFmw-005-1745-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr
8081A	FWGSCFmw-DUP1-1751-GW	AQ	FD							
				beta-BHC	0.030	0.012J		J	ug/L	RI

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: A1D060402										
8082	FWGB12mw-010C-1712-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGB12mw-012C-1713-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGDETmw-003C-1739-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr

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: A1D060402										
8082	FWGDETmw-004C-1740-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGLL1mw-081C-1716-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGLL1mw-084C-1719-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr

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: A1D060402										
8082	FWGLL1mw-085C-1720-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGLL1mw-DUP2-1747-GW	AQ	FD							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGSCFmw-005-1745-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr

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: A1D060402										
8082	FWGSCFmw-DUP1-1751-GW	AQ	FD							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	EtoA
				Aroclor 1221	0.50	0.50U		UJ	ug/L	EtoA
				Aroclor 1232	0.50	0.50U		UJ	ug/L	EtoA
				Aroclor 1242	0.50	0.50U		UJ	ug/L	EtoA
				Aroclor 1248	0.50	0.50U		UJ	ug/L	EtoA
				Aroclor 1254	0.50	0.50U		UJ	ug/L	EtoA
				Aroclor 1260	0.50	0.50U		UJ	ug/L	EtoA
8260B	FWGB12mw-010C-1712-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	ProfJudg
8260B	FWGB12mw-012C-1713-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	ProfJudg
8260B	FWGBKGmw-010C-1708-GW	AQ	N							
				Methylene chloride	2.0	0.39J B		JB	ug/L	Mb, Tb, Eb
8260B	FWGDETmw-003C-1739-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	ProfJudg
8260B	FWGEQUIPRINSE2-1758-GW	AQ	EB							
				2-Butanone	10	2.3J		J	ug/L	RI
				Acetone	10	4.7J		J	ug/L	RI
				Chloroform	1.0	0.84J		JB	ug/L	Tb, RI
				Methylene chloride	2.0	2.2B		JB	ug/L	Mb, Lcs, P
				Toluene	1.0	0.20J		J	ug/L	RI
8260B	FWGLL1mw-084C-1719-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	ProfJudg
8260B	FWGLL1mw-085C-1720-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	ProfJudg

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: A1D060402										
8260B	FWGLL1mw-DUP2-1747-GW	AQ	FD							
				Methylene chloride	2.0	2.0U		UJ	ug/L	ProfJudg
8260B	FWGSCFmw-004-1744-GW	AQ	N							
				Methylene chloride	2.0	0.34J B		JB	ug/L	Mb, Eb, Lc
8260B	FWGSCFmw-005-1745-GW	AQ	N							
				Carbon disulfide	1.0	1.5		J	ug/L	Ms, Lcs
				Methylene chloride	2.0	0.36J B		JB	ug/L	Mb, Eb, Lc
8260B	FWGSCFmw-DUP1-1751-GW	AQ	FD							
				Methylene chloride	2.0	0.38J B		JB	ug/L	Mb, Eb, Lc
8260B	FWGTEAM1-TRIP	AQ	TB							
				Chloroform	1.0	0.22J		J	ug/L	RI
				Methylene chloride	2.0	0.35J B		JB	ug/L	Mb, Lcs, R
8260B	FWGTEAM2-TRIP	AQ	TB							
				Chloroform	1.0	0.22J		J	ug/L	RI
				Methylene chloride	2.0	2.0U		J	ug/L	ProfJudg
8260B	FWGTEAM3-TRIP	AQ	TB							
				Chloroform	1.0	0.27J		J	ug/L	RI
				Methylene chloride	2.0	0.35J B		JB	ug/L	Mb, Lcs, R
8270C	FWGB12mw-010C-1712-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
8270C	FWGB12mw-012C-1713-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				bis(2-Ethylhexyl) phthalate	10	2.7J B		JB	ug/L	Mb, RI

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: A1D060402										
8270C	FWGBKGmw-010C-1708-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Ms
				3,3'-Dichlorobenzidine	5.0	5.0U		UJ	ug/L	Ms
				4-Chloroaniline	2.0	2.0U		UJ	ug/L	Ms
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Ms
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Lcs
8270C	FWGDETmw-003C-1739-GW	AQ	N							
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	ProfJudg
8270C	FWGDETmw-004C-1740-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				bis(2-Ethylhexyl) phthalate	10	0.84J B		JB	ug/L	Mb, RI
8270C	FWGEQUIPRINSE2-1758-GW	AQ	EB							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
8270C	FWGLL1mw-067C-1715-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Ms
				3,3'-Dichlorobenzidine	5.0	5.0U		UJ	ug/L	Ms
				4-Chloroaniline	2.0	2.0U		UJ	ug/L	Ms
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Ms
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Lcs
8270C	FWGLL1mw-081C-1716-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Ms
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Lcs

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: A1D060402										
8270C	FWGLL1mw-082C-1718-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				bis(2-Ethylhexyl) phthalate	10	1.7J B		JB	ug/L	Mb, RI
8270C	FWGLL1mw-084C-1719-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				2,4-Dinitrotoluene	5.0	0.66J		J	ug/L	RI
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				bis(2-Ethylhexyl) phthalate	10	1.4J B		JB	ug/L	Mb, RI
8270C	FWGLL1mw-085C-1720-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
8270C	FWGLL1mw-DUP2-1747-GW	AQ	FD							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				bis(2-Ethylhexyl) phthalate	10	3.0J B		JB	ug/L	Mb, RI
8270C	FWGRQLmw-017C-1638-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Ms
				3,3'-Dichlorobenzidine	5.0	5.0U		UJ	ug/L	Ms
				4-Chloroaniline	2.0	2.0U		UJ	ug/L	Ms
				bis(2-Ethylhexyl) phthalate	10	2.8J		J	ug/L	RI
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Ms
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Lcs
8270C	FWGSCFmw-004-1744-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg

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: A1D060402										
8270C	FWGSCFmw-005-1745-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
8270C	FWGSCFmw-006-1746-GW	AQ	N							
				2,4-Dinitrophenol	6.0	6.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	6.0	6.0U		UJ	ug/L	ProfJudg
				bis(2-Ethylhexyl) phthalate	12	2.2J B		JB	ug/L	Mb, RI
8270C	FWGSCFmw-DUP1-1751-GW	AQ	FD							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
9012A	FWGB12mw-012C-1713-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	Ms
9012A	FWGLL1mw-084C-1719-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	Ms
9012A	FWGLL1mw-085C-1720-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	Ms
9012A	FWGLL1mw-DUP2-1747-GW	AQ	FD							
				Cyanide	0.010	0.010U		UJ	mg/L	Ms

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: GENCHEM

Method: 9012A **Matrix: AQ**

Sample ID: FWGB12mw-012C-1713-GW *Collected:* 4/5/2011 9:11:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CYANIDE	0.010	U	0.0050	MDL	0.010	PQL	mg/L	UJ	Ms

Sample ID: FWGLL1mw-084C-1719-GW *Collected:* 4/5/2011 1:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CYANIDE	0.010	U	0.0050	MDL	0.010	PQL	mg/L	UJ	Ms

Sample ID: FWGLL1mw-085C-1720-GW *Collected:* 4/5/2011 10:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CYANIDE	0.010	U	0.0050	MDL	0.010	PQL	mg/L	UJ	Ms

Sample ID: FWGLL1mw-DUP2-1747-GW *Collected:* 4/5/2011 2:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CYANIDE	0.010	U	0.0050	MDL	0.010	PQL	mg/L	UJ	Ms

Method Category: METALS

Method: 6010B **Matrix: AQ**

Sample ID: FWGB12mw-010C-1712-GF *Collected:* 4/5/2011 4:00:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.7	B	3.3	MDL	5.0	PQL	ug/L	J	RI
BARIUM	4.4	B	2.8	MDL	10.0	PQL	ug/L	J	RI
CHROMIUM	1.8	B	1.4	MDL	5.0	PQL	ug/L	J	RI
COBALT	1.6	B	1.5	MDL	5.0	PQL	ug/L	J	RI
POTASSIUM	553	B	300	MDL	1000	PQL	ug/L	J	RI

Sample ID: FWGB12mw-012C-1713-GF *Collected:* 4/5/2011 9:11:00 AM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	4.4	B	1.8	MDL	10.0	PQL	ug/L	J	RI
NICKEL	2.2	B	2.2	MDL	10.0	PQL	ug/L	J	RI

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: METALS

Method: 6010B **Matrix: AQ**

Sample ID: **FWGBKGmw-010C-1708-GF** ***Collected:*** **4/5/2011 5:03:00 PM** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	556	B	300	MDL	1000	PQL	ug/L	J	RI

Sample ID: **FWGDETmw-003C-1739-GF** ***Collected:*** **4/5/2011 5:50:00 PM** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	3.4	B	1.4	MDL	5.0	PQL	ug/L	J	RI
NICKEL	2.6	B	2.2	MDL	10.0	PQL	ug/L	J	RI

Sample ID: **FWGLL1mw-081C-1716-GF** ***Collected:*** **4/5/2011 11:23:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	9.4	B	2.2	MDL	10.0	PQL	ug/L	J	RI

Sample ID: **FWGLL1mw-082C-1718-GF** ***Collected:*** **4/5/2011 9:23:00 AM** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.6	B	3.3	MDL	5.0	PQL	ug/L	J	RI

Sample ID: **FWGLL1mw-DUP2-1747-GF** ***Collected:*** **4/5/2011 2:15:00 PM** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.4	B	3.3	MDL	5.0	PQL	ug/L	J	RI
CHROMIUM	1.5	B	1.4	MDL	5.0	PQL	ug/L	J	RI
VANADIUM	1.6	B	1.3	MDL	10.0	PQL	ug/L	J	RI

Sample ID: **FWGSCFmw-005-1745-GF** ***Collected:*** **4/5/2011 3:08:00 PM** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.9	B	3.3	MDL	5.0	PQL	ug/L	J	RI

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory:** TALCAN

EDD Filename: A1D060402 **eQAPP Name:** Ravenna 111810

Method Category: METALS

Method: 6020 **Matrix:** AQ

Sample ID: FWGB12mw-010C-1712-GF *Collected:* 4/5/2011 4:00:00 PM *Analysis Type:* RE/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	6.9	B	2.3	MDL	10.0	PQL	ug/L	J	RI

Sample ID: FWGB12mw-012C-1713-GF *Collected:* 4/5/2011 9:11:00 AM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.16	B	0.14	MDL	1.0	PQL	ug/L	UJ	RI, Cb
ZINC	4.1	B J	2.3	MDL	10.0	PQL	ug/L	UJ JB	RI, Lcs, Mb

Sample ID: FWGBKGmw-010C-1708-GF *Collected:* 4/5/2011 5:03:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	28.1	B	26.0	MDL	50.0	PQL	ug/L	J	RI
ZINC	7.9	B J	2.3	MDL	10.0	PQL	ug/L	UJ JB	RI, Lcs, Mb

Sample ID: FWGDETmw-004C-1740-GF *Collected:* 4/4/2011 6:00:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.20	B	0.13	MDL	2.0	PQL	ug/L	J	RI

Sample ID: FWGEQUIPRINSE2-1758-GW *Collected:* 4/5/2011 6:22:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	8.7	B J	6.9	MDL	1000	PQL	ug/L	UJ B	RI, Mb, Cb

Sample ID: FWGLL1mw-067C-1715-GF *Collected:* 4/5/2011 2:23:00 PM *Analysis Type:* RE/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	3.5	B	2.3	MDL	10.0	PQL	ug/L	J	RI

Sample ID: FWGLL1mw-067C-1715-GF *Collected:* 4/5/2011 2:23:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.18	B	0.14	MDL	1.0	PQL	ug/L	UJ	RI, Cb

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: METALS

Method: 6020 **Matrix: AQ**

Sample ID: FWGLL1mw-082C-1718-GF *Collected:* 4/5/2011 9:23:00 AM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.17	B	0.13	MDL	0.50	PQL	ug/L	J	RI

Sample ID: FWGLL1mw-084C-1719-GF *Collected:* 4/5/2011 1:25:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.32	B	0.14	MDL	1.0	PQL	ug/L	UJ	RI, Cb

Sample ID: FWGLL1mw-085C-1720-GF *Collected:* 4/5/2011 10:51:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	2.5	B J	2.3	MDL	10.0	PQL	ug/L	UJ JB	RI, Lcs, Mb

Sample ID: FWGLL1mw-DUP2-1747-GF *Collected:* 4/5/2011 2:15:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.31	B	0.14	MDL	1.0	PQL	ug/L	UJ	RI, Cb

Sample ID: FWGSCFmw-005-1745-GF *Collected:* 4/5/2011 3:08:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	2.4	B J	2.3	MDL	10.0	PQL	ug/L	UJ JB	RI, Lcs, Mb

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: FWGB12mw-010C-1712-GW *Collected:* 4/5/2011 4:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8081A **Matrix:** AQ

Sample ID: **FWGB12mw-010C-1712-GW** ***Collected:*** 4/5/2011 4:00:00 PM ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: **FWGLL1mw-081C-1716-GW** ***Collected:*** 4/5/2011 11:23:00 ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8081A **Matrix:** AQ

Sample ID: **FWGLL1mw-081C-1716-GW** *Collected:* **4/5/2011 11:23:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: **FWGLL1mw-084C-1719-GW** *Collected:* **4/5/2011 1:25:00 PM** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.029	J	0.0080	MDL	0.030	PQL	ug/L	J	RI, Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: **FWGLL1mw-DUP2-1747-GW** *Collected:* **4/5/2011 2:15:00 PM** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8081A **Matrix:** AQ

Sample ID: **FWGLL1mw-DUP2-1747-GW** ***Collected:*** 4/5/2011 2:15:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.011	J	0.0080	MDL	0.030	PQL	ug/L	J	RI, Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: **FWGSCFmw-005-1745-GW** ***Collected:*** 4/5/2011 3:08:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: **FWGSCFmw-005-1745-GW** *Collected:* **4/5/2011 3:08:00 PM** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: **FWGSCFmw-DUP1-1751-GW** *Collected:* **4/5/2011 1:02:00 PM** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.012	J	0.0084	MDL	0.030	PQL	ug/L	J	RI

Method Category: SVOA

Method: 8082 **Matrix: AQ**

Sample ID: **FWGB12mw-010C-1712-GW** *Collected:* **4/5/2011 4:00:00 PM** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: **FWGB12mw-012C-1713-GW** *Collected:* **4/5/2011 9:11:00 AM** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Sample ID: **FWGB12mw-012C-1713-GW** ***Collected:*** **4/5/2011 9:11:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: **FWGDETmw-003C-1739-GW** ***Collected:*** **4/5/2011 5:50:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: **FWGDETmw-004C-1740-GW** ***Collected:*** **4/4/2011 6:00:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: **FWGLL1mw-081C-1716-GW** ***Collected:*** **4/5/2011 11:23:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8082 **Matrix:** AQ

Sample ID: FWGLL1mw-084C-1719-GW *Collected:* 4/5/2011 1:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGLL1mw-085C-1720-GW *Collected:* 4/5/2011 10:51:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGLL1mw-DUP2-1747-GW *Collected:* 4/5/2011 2:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGSCFmw-005-1745-GW *Collected:* 4/5/2011 3:08:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr

Project Name and Number: 030240.0006 - RVAAP (OH)

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: SVOA **Method:** 8082 **Matrix:** AQ

Sample ID: FWGSCFmw-005-1745-GW ***Collected:*** 4/5/2011 3:08:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGSCFmw-DUP1-1751-GW ***Collected:*** 4/5/2011 1:02:00 PM ***Analysis Type:*** RE-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	EtoA
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	EtoA
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	EtoA
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	EtoA
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	EtoA
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	EtoA
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	EtoA

Method Category: SVOA **Method:** 8270C **Matrix:** AQ

Sample ID: FWGB12mw-010C-1712-GW ***Collected:*** 4/5/2011 4:00:00 PM ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: FWGB12mw-012C-1713-GW ***Collected:*** 4/5/2011 9:11:00 AM ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
BIS(2-ETHYLHEXYL) PHTHALATE	2.7	J B	0.80	MDL	10	PQL	ug/L	UJ JB	RI, Mb

Sample ID: FWGBKGmw-010C-1708-GW ***Collected:*** 4/5/2011 5:03:00 PM ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Ms

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: **FWGBKGmw-010C-1708-GW** ***Collected:*** 4/5/2011 5:03:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	5.0	U	0.37	MDL	5.0	PQL	ug/L	UJ	Ms
4-CHLOROANILINE	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Ms
HEXACHLOROCYCLOPENTADIENE	10	U	0.80	MDL	10	PQL	ug/L	UJ	Ms
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Lcs

Sample ID: **FWGDETmw-003C-1739-GW** ***Collected:*** 4/5/2011 5:50:00 PM ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: **FWGDETmw-004C-1740-GW** ***Collected:*** 4/4/2011 6:00:00 PM ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
BIS(2-ETHYLHEXYL) PHTHALATE	0.84	J B	0.80	MDL	10	PQL	ug/L	UJ JB	RI, Mb

Sample ID: **FWGEQUIPRINSE2-1758-GW** ***Collected:*** 4/5/2011 6:22:00 PM ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: **FWGLL1mw-067C-1715-GW** ***Collected:*** 4/5/2011 2:23:00 PM ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Ms
3,3'-DICHLOROBENZIDINE	5.0	U	0.37	MDL	5.0	PQL	ug/L	UJ	Ms
4-CHLOROANILINE	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Ms
HEXACHLOROCYCLOPENTADIENE	10	U	0.80	MDL	10	PQL	ug/L	UJ	Ms
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Lcs

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: **FWGLL1mw-081C-1716-GW** ***Collected:*** **4/5/2011 11:23:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Ms
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Lcs

Sample ID: **FWGLL1mw-082C-1718-GW** ***Collected:*** **4/5/2011 9:23:00 AM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
BIS(2-ETHYLHEXYL) PHTHALATE	1.7	J B	0.80	MDL	10	PQL	ug/L	UJ JB	RI, Mb

Sample ID: **FWGLL1mw-084C-1719-GW** ***Collected:*** **4/5/2011 1:25:00 PM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
2,4-DINITROTOLUENE	0.66	J	0.27	MDL	5.0	PQL	ug/L	J	RI
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
BIS(2-ETHYLHEXYL) PHTHALATE	1.4	J B	0.80	MDL	10	PQL	ug/L	UJ JB	RI, Mb

Sample ID: **FWGLL1mw-085C-1720-GW** ***Collected:*** **4/5/2011 10:51:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: **FWGLL1mw-DUP2-1747-GW** ***Collected:*** **4/5/2011 2:15:00 PM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
BIS(2-ETHYLHEXYL) PHTHALATE	3.0	J B	0.80	MDL	10	PQL	ug/L	UJ JB	RI, Mb

Sample ID: **FWGRQLmw-017C-1638-GW** ***Collected:*** **4/5/2011 3:43:00 PM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Ms
3,3'-DICHLOROBENZIDINE	5.0	U	0.37	MDL	5.0	PQL	ug/L	UJ	Ms

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: **FWGRQLmw-017C-1638-GW** ***Collected:*** **4/5/2011 3:43:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Ms
BIS(2-ETHYLHEXYL) PHTHALATE	2.8	J	0.80	MDL	10	PQL	ug/L	J	RI
HEXACHLOROCYCLOPENTADIENE	10	U	0.80	MDL	10	PQL	ug/L	UJ	Ms
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Lcs

Sample ID: **FWGSCFmw-004-1744-GW** ***Collected:*** **4/5/2011 10:02:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: **FWGSCFmw-005-1745-GW** ***Collected:*** **4/5/2011 3:08:00 PM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: **FWGSCFmw-006-1746-GW** ***Collected:*** **4/5/2011 4:38:00 PM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	6.0	U	2.4	MDL	6.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	6.0	U	2.4	MDL	6.0	PQL	ug/L	UJ	ProfJudg
BIS(2-ETHYLHEXYL) PHTHALATE	2.2	J B	0.80	MDL	12	PQL	ug/L	UJ JB	RI, Mb

Sample ID: **FWGSCFmw-DUP1-1751-GW** ***Collected:*** **4/5/2011 1:02:00 PM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: VOA

Method: 8260B *Matrix:* AQ

Sample ID: FWGB12mw-010C-1712-GW *Collected:* 4/5/2011 4:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.0	U	0.33	MDL	2.0	PQL	ug/L	UJ	ProfJudg

Sample ID: FWGB12mw-012C-1713-GW *Collected:* 4/5/2011 9:11:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.0	U	0.33	MDL	2.0	PQL	ug/L	UJ	ProfJudg

Sample ID: FWGBKGmw-010C-1708-GW *Collected:* 4/5/2011 5:03:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.39	J B	0.33	MDL	2.0	PQL	ug/L	UJ JB	RI, Lcs, Mb, Eb, Tb, ProfJudg

Sample ID: FWGDETmw-003C-1739-GW *Collected:* 4/5/2011 5:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.0	U	0.33	MDL	2.0	PQL	ug/L	UJ	ProfJudg

Sample ID: FWGEQUIPRINSE2-1758-GW *Collected:* 4/5/2011 6:22:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE	2.3	J	0.57	MDL	10	PQL	ug/L	J	RI
ACETONE	4.7	J	1.1	MDL	10	PQL	ug/L	J	RI
CHLOROFORM	0.84	J	0.16	MDL	1.0	PQL	ug/L	UJ JB	RI, Tb
METHYLENE CHLORIDE	2.2	B	0.33	MDL	2.0	PQL	ug/L	UJ JB	Lcs, Mb, ProfJudg
TOLUENE	0.20	J	0.13	MDL	1.0	PQL	ug/L	J	RI

Sample ID: FWGLL1mw-084C-1719-GW *Collected:* 4/5/2011 1:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.0	U	0.33	MDL	2.0	PQL	ug/L	UJ	ProfJudg

Sample ID: FWGLL1mw-085C-1720-GW *Collected:* 4/5/2011 10:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.0	U	0.33	MDL	2.0	PQL	ug/L	UJ	ProfJudg

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID:*FWGLL1mw-DUP2-1747-GW** ***Collected: 4/5/2011 2:15:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.0	U	0.33	MDL	2.0	PQL	ug/L	UJ	ProfJudg

Sample ID:*FWGSCFmw-004-1744-GW** ***Collected: 4/5/2011 10:02:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.34	J B	0.33	MDL	2.0	PQL	ug/L	~~UJ~~ JB	RI, Lcs, Mb, Eb, ProfJudg

Sample ID:*FWGSCFmw-005-1745-GW** ***Collected: 4/5/2011 3:08:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBON DISULFIDE	1.5		0.13	MDL	1.0	PQL	ug/L	J	Ms, Lcs
METHYLENE CHLORIDE	0.36	J B	0.33	MDL	2.0	PQL	ug/L	~~UJ~~ JB	RI, Lcs, Mb, Eb, ProfJudg

Sample ID:*FWGSCFmw-DUP1-1751-GW** ***Collected: 4/5/2011 1:02:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.38	J B	0.33	MDL	2.0	PQL	ug/L	~~UJ~~ JB	RI, Lcs, Mb, Eb, ProfJudg

Sample ID:*FWGTEAM1-TRIP** ***Collected: 4/5/2011 8:00:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.22	J	0.16	MDL	1.0	PQL	ug/L	J	RI
METHYLENE CHLORIDE	0.35	J B	0.33	MDL	2.0	PQL	ug/L	~~UJ~~ JB	RI, Lcs, Mb, ProfJudg

Sample ID:*FWGTEAM2-TRIP** ***Collected: 4/4/2011 6:00:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.22	J	0.16	MDL	1.0	PQL	ug/L	J	RI
METHYLENE CHLORIDE	2.0	U	0.33	MDL	2.0	PQL	ug/L	J	ProfJudg

Sample ID:*FWGTEAM3-TRIP** ***Collected: 4/5/2011 8:00:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.27	J	0.16	MDL	1.0	PQL	ug/L	J	RI
METHYLENE CHLORIDE	0.35	J B	0.33	MDL	2.0	PQL	ug/L	~~UJ~~ JB	RI, Lcs, Mb, ProfJudg

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method Category:	VOA		
Method:	8260B	*Matrix:*	AQ

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Reason Code Legend

Reason Code	*Description*
Cb	Calibration Blank Contamination
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
Ccv	Continuing Calibration Verification Percent Difference Lower Rejection
Ccv	Continuing Calibration Verification Percent Difference Upper Estimation
Ccv	Continuing Calibration Verification Percent Difference Upper Rejection
Ccv	Continuing Calibration Verification Percent Recovery Lower Estimation
Ccv	Continuing Calibration Verification Percent Recovery Lower Rejection
Ccv	Continuing Calibration Verification Percent Recovery Upper Estimation
Ccv	Continuing Calibration Verification Percent Recovery Upper Rejection
CcvCC	Continuing Calibration Verification Correlation Coefficient
CcvRrf	Continuing Calibration Verification Relative Response Factor
ContTune	Continuing Tune
Dup=0	Duplicate Sample Count = 0
Dup>1	Duplicate Sample Count > 1
Eb	Equipment Blank Contamination
EtoA	Extraction to Analysis Estimation
EtoA	Extraction to Analysis Rejection
Fb	Field Blank Contamination
Fd	Field Duplicate Precision
IcCC	Initial Calibration Correlation Coefficient
IcRrf	Initial Calibration Relative Response Factor
IcRsd	Initial Calibration Percent Relative Standard Deviation
Icv	Initial Calibration Verification Percent Difference Lower Estimation
Icv	Initial Calibration Verification Percent Difference Lower Rejection
Icv	Initial Calibration Verification Percent Difference Upper Estimation
Icv	Initial Calibration Verification Percent Difference Upper Rejection
Icv	Initial Calibration Verification Percent Recovery Lower Estimation
Icv	Initial Calibration Verification Percent Recovery Lower Rejection
Icv	Initial Calibration Verification Percent Recovery Upper Estimation
Icv	Initial Calibration Verification Percent Recovery Upper Rejection
IcvCC	Initial Calibration Verification Correlation Coefficient

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

IcvRrf	Initial Calibration Verification Relative Response Factor
IllogicalFraction	Illogical Fraction
InitTune	Initial Tune
Is	Internal Standard Estimation
Is	Internal Standard Rejection
Lcs	Laboratory Control Precision
Lcs	Laboratory Control Spike Lower Estimation
Lcs	Laboratory Control Spike Lower Rejection
Lcs	Laboratory Control Spike Upper Estimation
Lcs	Laboratory Control Spike Upper Rejection
Lcs=0	Laboratory Control Sample Count = 0
Lcs>1	Laboratory Control Sample Count > 1
Ld	Laboratory Duplicate Precision
Mb	Method Blank Contamination
Mb=0	Method Blank Sample Count = 0
Mb>1	Method Blank Sample Count > 1
Moist	Percent Moisture
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Lower Rejection
Ms	Matrix Spike Precision
Ms	Matrix Spike Upper Estimation
Ms	Matrix Spike Upper Rejection
Ms=0	Matrix Spike Sample Count = 0
Ms>1	Matrix Spike Sample Count > 1
PEM	Performance Evaluation Mixture
Preservation	Preservation
ProfJudg	Professional Judgment
REM	Resolution Check Mixture
Rl	Reporting Limit
Rl	Reporting Limit > Project Maximum Contamination Limit
Rl	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoA	Sampling to Analysis Rejection

Data Qualifier Summary

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

StoE	Sampling to Extraction Estimation
StoE	Sampling to Extraction Rejection
StoL	Sampling to Leaching Estimation
StoL	Sampling to Leaching Rejection
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Lower Rejection
Surr	Surrogate/Tracer Recovery Upper Estimation
Surr	Surrogate/Tracer Recovery Upper Rejection
Tb	Trip Blank Contamination
TempEst	Temperature Estimation
TempRej	Temperature Rejection

Method Blank Outlier Report

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 6020
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
A1D070000020B	4/11/2011 4:03:00 PM	SODIUM ZINC	74.1 ug/L 19.0 ug/L	FWGB12mw-010C-1712-GF FWGB12mw-012C-1713-GF FWGBKGmw-010C-1708-GF FWGDETmw-003C-1739-GF FWGDETmw-004C-1740-GF FWGEQUIPRINSE2-1758-GW FWGLL1mw-067C-1715-GF FWGLL1mw-081C-1716-GF FWGLL1mw-082C-1718-GF FWGLL1mw-084C-1719-GF FWGLL1mw-085C-1720-GF FWGLL1mw-DUP2-1747-GF FWGSCFmw-004-1744-GF FWGSCFmw-005-1745-GF FWGSCFmw-006-1746-GF FWGSCFmw-DUP1-1751-GF

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
FWGB12mw-012C-1713-GF(RES/TOT)	ZINC	4.1 ug/L	4.1U ug/L
FWGBKGmw-010C-1708-GF(RES/TOT)	ZINC	7.9 ug/L	7.9U ug/L
FWGEQUIPRINSE2-1758-GW(RES/TOT)	SODIUM	8.7 ug/L	8.7U ug/L
FWGLL1mw-085C-1720-GF(RES/TOT)	ZINC	2.5 ug/L	2.5U ug/L
FWGSCFmw-005-1745-GF(RES/TOT)	ZINC	2.4 ug/L	2.4U ug/L

Method: 7470A
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
A1D070000020B	4/11/2011 11:45:00 AM	MERCURY	0.18 ug/L	FWGB12mw-010C-1712-GF FWGB12mw-012C-1713-GF FWGBKGmw-010C-1708-GF FWGDETmw-003C-1739-GF FWGDETmw-004C-1740-GF FWGEQUIPRINSE2-1758-GW FWGLL1mw-067C-1715-GF FWGLL1mw-081C-1716-GF FWGLL1mw-082C-1718-GF FWGLL1mw-084C-1719-GF FWGLL1mw-085C-1720-GF FWGLL1mw-DUP2-1747-GF FWGSCFmw-004-1744-GF FWGSCFmw-005-1745-GF FWGSCFmw-006-1746-GF FWGSCFmw-DUP1-1751-GF

Method Blank Outlier Report

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 8260B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
A1D130000146B	4/13/2011 11:40:00 AM	METHYLENE CHLORIDE	0.99 ug/L	FWGB12mw-010C-1712-GW FWGB12mw-012C-1713-GW FWGDETmw-003C-1739-GW FWGLL1mw-084C-1719-GW FWGLL1mw-085C-1720-GW FWGLL1mw-DUP2-1747-GW FWGTEAM1-TRIP FWGTEAM2-TRIP
A1D140000189B	4/14/2011 12:12:00 PM	METHYLENE CHLORIDE	1.3 ug/L	FWGBKGmw-010C-1708-GW FWGDETmw-004C-1740-GW FWGEQUIPRINSE2-1758-GW FWGLL1mw-067C-1715-GW FWGLL1mw-081C-1716-GW FWGLL1mw-082C-1718-GW FWGROLmw-017C-1638-GW FWGSCFmw-004-1744-GW FWGSCFmw-005-1745-GW FWGSCFmw-006-1746-GW FWGSCFmw-DUP1-1751-GW FWGTEAM3-TRIP

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
FWGBKGmw-010C-1708-GW(RES)	METHYLENE CHLORIDE	0.39 ug/L	2.0U ug/L
FWGEQUIPRINSE2-1758-GW(RES)	METHYLENE CHLORIDE	2.2 ug/L	2.2U ug/L
FWGSCFmw-004-1744-GW(RES)	METHYLENE CHLORIDE	0.34 ug/L	2.0U ug/L
FWGSCFmw-005-1745-GW(RES)	METHYLENE CHLORIDE	0.36 ug/L	2.0U ug/L
FWGSCFmw-DUP1-1751-GW(RES)	METHYLENE CHLORIDE	0.38 ug/L	2.0U ug/L
FWGTEAM1-TRIP(RES)	METHYLENE CHLORIDE	0.35 ug/L	2.0U ug/L
FWGTEAM3-TRIP(RES)	METHYLENE CHLORIDE	0.35 ug/L	2.0U ug/L

Method: 8270C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
A1D060000079B	4/13/2011 12:17:00 PM	BIS(2-ETHYLHEXYL) PHTHALATE	0.67 ug/L	FWGB12mw-010C-1712-GW FWGB12mw-012C-1713-GW FWGDETmw-003C-1739-GW FWGDETmw-004C-1740-GW FWGEQUIPRINSE2-1758-GW FWGLL1mw-082C-1718-GW FWGLL1mw-084C-1719-GW FWGLL1mw-085C-1720-GW FWGLL1mw-DUP2-1747-GW FWGSCFmw-004-1744-GW FWGSCFmw-005-1745-GW FWGSCFmw-006-1746-GW FWGSCFmw-DUP1-1751-GW

Method Blank Outlier Report

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 8270C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
FWGB12mw-012C-1713-GW(RES)	BIS(2-ETHYLHEXYL) PHTHALATE	2.7 ug/L	10U ug/L
FWGDETmw-004C-1740-GW(RES)	BIS(2-ETHYLHEXYL) PHTHALATE	0.84 ug/L	10U ug/L
FWGLL1mw-082C-1718-GW(RES)	BIS(2-ETHYLHEXYL) PHTHALATE	1.7 ug/L	10U ug/L
FWGLL1mw-084C-1719-GW(RES)	BIS(2-ETHYLHEXYL) PHTHALATE	1.4 ug/L	10U ug/L
FWGLL1mw-DUP2-1747-GW(RES)	BIS(2-ETHYLHEXYL) PHTHALATE	3.0 ug/L	10U ug/L
FWGSCFmw-006-1746-GW(RES)	BIS(2-ETHYLHEXYL) PHTHALATE	2.2 ug/L	12U ug/L

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
A1D140000189C	CARBON DISULFIDE	130	-	74.00-123.00	-	CARBON DISULFIDE	
(FWGBKGmw-010C-1708-GW	METHYLENE CHLORIDE	126	-	69.00-118.00	-	METHYLENE CHLORIDE	
FWGDETmw-004C-1740-GW							
FWGEQUIPRINSE2-1758-GW							
FWGLL1mw-067C-1715-GW							
FWGLL1mw-081C-1716-GW							
FWGLL1mw-082C-1718-GW							J(all detects)
FWGRQLmw-017C-1638-GW							
FWGSCFmw-004-1744-GW							
FWGSCFmw-005-1745-GW							
FWGSCFmw-006-1746-GW							
FWGSCFmw-DUP1-1751-GW							
FWGTEAM3-TRIP)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 8081A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
FWGLL1mw-081C-1716-GWMS (FWGB12mw-010C-1712-GW FWGBKGmw-010C-1708-GW FWGDETmw-003C-1739-GW FWGDETmw-004C-1740-GW FWGEQUIPRINSE2-1758-GW FWGLL1mw-067C-1715-GW FWGLL1mw-081C-1716-GW FWGLL1mw-082C-1718-GW FWGLL1mw-084C-1719-GW FWGLL1mw-085C-1720-GW FWGLL1mw-DUP2-1747-GW FWGSCFmw-004-1744-GW FWGSCFmw-005-1745-GW FWGSCFmw-006-1746-GW FWGSCFmw-DUP1-1751-GW)	ENDOSULFAN I	49	-	50.00-150.00	-	ENDOSULFAN I	J (all detects) UJ (all non-detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
FWGLL1mw-081C-1716-GWMS **FWGLL1mw-081C-1716-GWMSD** (FWGBKGmw-010C-1708-GW FWGLL1mw-067C-1715-GW FWGLL1mw-081C-1716-GW FWGRQLmw-017C-1638-GW)	2,4-DINITROPHENOL	40	41	45.00-135.00	-	2,4-DINITROPHENOL	J(all detects) UJ(all non-detects)
	3,3'-DICHLOROBENZIDINE	28	29	45.00-135.00	-	3,3'-DICHLOROBENZIDINE	
	4-CHLOROANILINE	39	44	45.00-135.00	-	4-CHLOROANILINE	
	HEXACHLOROCYCLOPENTADI	25	27	45.00-135.00	-	HEXACHLOROCYCLOPENTAD	

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
FWGLL1mw-081C-1716-GWMSD (FWGBKGmw-010C-1708-GW FWGDETmw-004C-1740-GW FWGEQUIPRINSE2-1758-GW FWGLL1mw-067C-1715-GW FWGLL1mw-081C-1716-GW FWGLL1mw-082C-1718-GW FWGRQLmw-017C-1638-GW FWGSCFmw-004-1744-GW FWGSCFmw-005-1745-GW FWGSCFmw-006-1746-GW FWGSCFmw-DUP1-1751-GW FWGTEAM3-TRIP)	CARBON DISULFIDE	-	140	70.00-130.00	-	CARBON DISULFIDE	J(all detects)

Project Name and Number: 030240.0006 - RVAAP (OH)

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: A1D060402
EDD Filename: A1D060402

Laboratory: TALCAN
eQAPP Name: Ravenna 111810

Method: 8082 Preparation Method: 3520C
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
FWGSCFmw-DUP1-1751-GW (RE)	Sampling To Extraction	16.00	7.00	DAYS	J (all detects) R (all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 8081A
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
FWGB12mw-010C-1712-GW	DECACHLOROBIPHENYL	44	50.00-150.00	All Target Analytes	J (all detects) UJ (all non-detects)
FWGLL1mw-081C-1716-GW	DECACHLOROBIPHENYL	37	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL1mw-084C-1719-GW	DECACHLOROBIPHENYL	39	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL1mw-DUP2-1747-GW	DECACHLOROBIPHENYL	48	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGSCFmw-005-1745-GW	DECACHLOROBIPHENYL	43	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
FWGB12mw-010C-1712-GW	DECACHLOROBIPHENYL	32	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGB12mw-012C-1713-GW	DECACHLOROBIPHENYL	24	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGDETmw-003C-1739-GW	DECACHLOROBIPHENYL	42	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGDETmw-004C-1740-GW	DECACHLOROBIPHENYL	48	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL1mw-081C-1716-GW	DECACHLOROBIPHENYL	32	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL1mw-084C-1719-GW	DECACHLOROBIPHENYL	30	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL1mw-085C-1720-GW	DECACHLOROBIPHENYL	45	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL1mw-DUP2-1747-GW	DECACHLOROBIPHENYL	35	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGSCFmw-005-1745-GW	DECACHLOROBIPHENYL	35	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
FWGB12mw-010C-1712-GW	2-FLUOROBIPHENYL PHENOL-D5	44 47	50.00-150.00 50.00-150.00	No Affected Compounds	J(all detects) UJ(all non-detects)
FWGB12mw-012C-1713-GW	PHENOL-D5	48	50.00-150.00	No Affected Compounds	J(all detects) UJ(all non-detects)
FWGDETmw-004C-1740-GW	2-FLUOROBIPHENYL PHENOL-D5	47 49	50.00-150.00 50.00-150.00	No Affected Compounds	J(all detects) UJ(all non-detects)

Project Name and Number: 030240.0006 - RVAAP (OH)

Surrogate Outlier Report

Lab Reporting Batch ID: A1D060402 **Laboratory: TALCAN**

EDD Filename: A1D060402 **eQAPP Name: Ravenna 111810**

Method: 8270C
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
FWGEQUIPRINSE 2-1758-GW	PHENOL-D5	49	50.00-150.00	No Affected Compounds	J(all detects) UJ(all non-detects)
FWGLL1mw-081C-1716-GW	NITROBENZENE-D5	47	50.00-150.00	No Affected Compounds	J(all detects) UJ(all non-detects)
FWGLL1mw-082C-1718-GW	2-FLUOROBIPHENYL PHENOL-D5	48 49	50.00-150.00 50.00-150.00	No Affected Compounds	J(all detects) UJ(all non-detects)
FWGLL1mw-085C-1720-GW	PHENOL-D5	49	50.00-150.00	No Affected Compounds	J(all detects) UJ(all non-detects)
FWGSCFmw-004-1744-GW	2-FLUOROBIPHENYL PHENOL-D5	49 49	50.00-150.00 50.00-150.00	No Affected Compounds	J(all detects) UJ(all non-detects)
FWGSCFmw-DUP1-1751-GW	2-FLUOROBIPHENYL PHENOL-D5	47 48	50.00-150.00 50.00-150.00	No Affected Compounds	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: A1D060402 | **Laboratory: TALCAN**

EDD Filename: A1D060402 | **eQAPP Name: Ravenna 111810**

Method: 6020
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
A1D070000020C (FWGB12mw-010C-1712-GF FWGB12mw-012C-1713-GF FWGBKGmw-010C-1708-GF FWGDETmw-003C-1739-GF FWGDETmw-004C-1740-GF FWGEQUIPRINSE2-1758-GW FWGLL1mw-067C-1715-GF FWGLL1mw-081C-1716-GF FWGLL1mw-082C-1718-GF FWGLL1mw-084C-1719-GF FWGLL1mw-085C-1720-GF FWGLL1mw-DUP2-1747-GF FWGSCFmw-004-1744-GF FWGSCFmw-005-1745-GF FWGSCFmw-006-1746-GF FWGSCFmw-DUP1-1751-GF)	ZINC 1097020	122	-	80.00-120.00	-	ZINC	J (all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
A1D070000066C (FWGBKGmw-010C-1708-GW FWGLL1mw-067C-1715-GW FWGLL1mw-081C-1716-GW FWGRQLmw-017C-1638-GW)	HEXACHLOROCYCLOPENTADI	29	-	30.00-115.00	-	HEXACHLOROCYCLOPENTAD	J(all detects) R(all non-detects)
A1D070000066C (FWGBKGmw-010C-1708-GW FWGLL1mw-067C-1715-GW FWGLL1mw-081C-1716-GW FWGRQLmw-017C-1638-GW)	PENTACHLOROPHENOL	39	-	45.00-150.00	-	PENTACHLOROPHENOL	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
A1D130000146C (FWGB12mw-010C-1712-GW FWGB12mw-012C-1713-GW FWGDETmw-003C-1739-GW FWGLL1mw-084C-1719-GW FWGLL1mw-085C-1720-GW FWGLL1mw-DUP2-1747-GW FWGTEAM1-TRIP FWGTEAM2-TRIP)	CARBON DISULFIDE METHYLENE CHLORIDE	137 128	- -	74.00-123.00 69.00-118.00	- -	CARBON DISULFIDE METHYLENE CHLORIDE	J(all detects)

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011
TA Sample Delivery Group: A1D070414

Date: May 3, 2011
Revision: 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On April 6, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1D070414.

Field Sample ID	Analytes	Method
FWGBKGmw-006c-1706-GW	Explosives Nitroguanidine Nitrocellulose	SW846 8330 SW846 M8330 TAL- SOP WS-WC-0050
FWGBKGmw-015c-1709-GW		
FWGBKGmw-021c-1711-GW		
FWGBKGmw-008c-1707-GW		
FWGRQLmw-009c-1735-GW		
FWGRQLmw-DUP5-1750-GW		
FWGEQUIPRinse3-1759-GW		
FWGRQLmw-014c-1736-GW		
FWGRQLmw-017c-1738-GW		
FWGRQLmw-016c-1737-GW		
FWGRQLmw-008c-1734-GW		
FWGRQLmw-007c-1733-GW		
FWGSCFmw-003-1743-GW	Nitrate-Nitrite Explosives Nitroguanidine Nitrocellulose	353.2 SW846 8330 SW846 M8330 TAL- SOP WS-WC-0050
FWGSCFmw-001-1741-GW		
FWGSCFmw-002-1742-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 cooler temperatures were documented as being received from 1.9°C – 3.8°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.

Explosives- 8330

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
- Retention time criteria
- MDL Verification
- Surrogate recovery criteria
- Equipment and method blanks free from contamination
- MS Recovery Criteria
- LCS Recovery Criteria

MRL Recovery

- The MRL analyzed 4/15/11 @1247 recovered above control limits with a %D of 32% for 4-amino-2,6-dinitrotoluene and 32% for 4-nitrotoluene.

- The MRL analyzed 4/15/11 @2148 recovered above control limits with a %D of 34% for 2,6-dinitrotoluene and 35% for 3-nitrotoluene.
- The MRL analyzed 4/16/11 @0649 recovered above control limits with a %D of 33% for RDX.
- The MRL analyzed 4/16/11 @1551 recovered above control limits with a %D of 32% for 4-amino-2,6-dinitrotoluene and 37% for 2-nitrotoluene.

No qualifications were made for the MRL outliers, as the detected 2-nitrotoluene result for sample FWGRQLmw-014c-1736-GW was bracketed by a passing MRL.

Blanks

Due to excessive particulates, samples FWGBKGmw-006c-1706-GW, FWGRQLmw-008c-1734-GW and FWGRQLmw-007c-1733-GW required filtration. A filter blank was prepared and analyzed with no detected concentrations.

Nitroguanidine- 8330M

The following QC criteria were reviewed with acceptable results, except as noted below:

- 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 – WS-WC-0050

The following QC criteria were reviewed with acceptable results, except as noted below:

- 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.

Nitrate/Nitrite –353.2

The following QC criteria were reviewed with acceptable results, except as noted below:

- 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

The matrix spike and duplicate recovered below control limits at 87% and 88%. The nitrate-nitrite results were qualified as estimated, "UJ/J".

The field blank, FWGEQUIPRinse3-1759-GW, was not logged or analyzed by the lab for nitrate-nitrite.

SAMPLE SUMMARY

A1D070414

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MGNCW	001	FWGBKGmw-006C-1706-GW	04/06/11	09:21
MGNC1	002	FWGBKGmw-015C-1709-GW	04/06/11	10:35
MGNC2	003	FWGBKGmw-021C-1711-GW	04/06/11	12:45
MGNC3	004	FWGBKGmw-008C-1707-GW	04/06/11	14:01
MGNC4	005	FWGRQLmw-009C-1735-GW	04/06/11	15:31
MGNC6	006	FWGRQLmw-DUP5-1750-GW	04/06/11	16:55
MGNC7	007	FWGEQUIPRINSE3-1759-GW	04/06/11	17:35
MGNC9	008	FWGSCFmw-003-1743-GW	04/06/11	09:22
MGNDC	009	FWGSCFmw-001-1741-GW	04/06/11	12:52
MGNDD	010	FWGSCFmw-002-1742-GW	04/06/11	15:48
MGNDG	011	FWGRQLmw-014C-1736-GW	04/06/11	09:16
MGNDJ	012	FWGRQLmw-017C-1738-GW	04/06/11	10:03
MGNDL	013	FWGRQLmw-016C-1737-GW	04/06/11	11:03
MGNDN	014	FWGRQLmw-008C-1734-GW	04/06/11	13:09
MGNDP	015	FWGRQLmw-007C-1733-GW	04/06/11	15:19

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

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/6/11	Chain of Custody Number: 000493
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513-825-7500	Lab Number:	Page 1 of 2
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E. Corbin; Lab Contact: M. Loeb		
Project Name and Location (State): RVAAP OH	Carrier/Waybill Number: Lab Pickup		
Contract/Purchase Order/Quote No.: 030240.0006 PO16726			

Matrix: Air, Aqueous, Sed., Soil

Containers & Preservatives: Unpres., H2SO4, HNO3, HCl, NaOH, ZnAc/NaOH

Analysis (Attach list if more space is needed): VOCs 8260, SVOC 8270, Pest 8081, PCB 8082, Explosives 8330, Propellants, Cyanide 9012, Metals 6010/6020 7470

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOCs 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Special Instructions/ Conditions of Receipt: Cooler ID
FWG Team 1 - Trip	4/6/11	08:00		X						3			X								727
FWGBKGmw-006C-1706-GW	4/6/11	09:21		X			9			3	1		X	X	X	X	X	X	X		BRUFF1
FWGBKGmw-006C-1706-GF	4/6/11	09:21		X					1											X	BRUFF1
FWGBKGmw-015C-1709-GW	4/6/11	10:35		X			9			3	1		X	X	X	X	X	X	X		727
FWGBKGmw-015C-1709-GF	4/6/11	10:35		X					1											X	727
FWGBKGmw-021C-1711-GW	4/6/11	12:45		X			9			3	1		X	X	X	X	X	X	X		317
FWGBKGmw-021C-1711-GF	4/6/11	12:45		X					1											X	317
FWGBKGmw-008C-1707-GW	4/6/11	14:01		X			9			3	1		X	X	X	X	X	X	X		IC3
FWGBKGmw-008C-1707-GF	4/6/11	14:01		X					1											X	IC3
FWGRQLmw-009C-1635-GW	4/6/11	15:31		X			9			3	1		X	X	X	X	X	X	X		H113
FWGRQLmw-009C-1635-GF	4/6/11	15:31		X					1											X	H113
FWGRQLmw-DUP5-1750-GW	4/6/11	16:55		X			9			3	1		X	X	X	X	X	X	X		405A

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 [ ] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metals are field filtered

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	4/6/11	18:30	1. Received By: [signature]	4/6/11	1830
2. Relinquished By: [signature]	4/6/11	1944	2. Received By: [signature]	4/7/11	0700
3. Relinquished By:			3. Received By:		

Comments: Temps may not meet requirements if sample collection time is close to lab pickup time

All VOCs in Cooler 727

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

14

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/6/11	Chain of Custody Number: 000494
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513-825-7500	Lab Number:	Page 2 of 2
City: Cincinnati / State: OH / Zip Code: 45240	Site Contact: E. Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP OH	Carrier/Waybill Number: Lab Pickup		
Contract/Purchase Order/Quote No.: 030240.0006 PO # 16726			

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	VOCs 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Perchlorate 6850	Cyanide 9012	Total Metals 6010B/7470	NO3/NO2 353.2
FWGRQLmw-DUP5-1750-GF	4/6/11	16:55		X					1											X	
FWGEQUIPRinse3-1759-GW	4/6/11	17:35		X			9	1	1	3	1		X	X	X	X	X	X	X	X	X

Special Instructions/ Conditions of Receipt

Cooler ID
405A
A5088 metals not Filtered.

EQ 4/6/11

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 are field filtered

	Date	Time		Date	Time
1. Relinquished By: Emily Corbin EQ	4/6/11	18:30	1. Received By: TC	4/6/11	1830
2. Relinquished By: TC Fedex	4/6/11	1944	2. Received By:	4/7/11	0700
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments
Temps may not meet requirements if sample collection time is close to lab pickup time.
All VOCs in cooler 727

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica Laboratory location: Canton, Ohio

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica 16
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: E. Corbin	Lab Contact: M Loeb	COC No: 019330
Address: 1800 CARILLON BLVD	Telephone: 513 825 7500	Telephone: 513 825 7500	Telephone: 330 497 9396	1 of ___ COCs
City/State/Zip: Cincinnati OH 424 4526	Email: clear@ecorbin@eqm.com	Analysis Turnaround Time (in BUS days)		For lab use only
Phone: 513 825-7500		TAT if different from Below per SOW		Walk-in client ☐
Project Name: RVAAP	Method of Shipment/Carrier: Lab Pickup.	☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab pickup ☐
Project Number: 30240.0006	Shipping/Tracking No: N/A			Lab sampling ☐
PO #				Job/SDG No.

Analyses

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite (C/G)	VOC	SVOC	Pest	PCB	Explo	Propellant	Cyanide	NO2 NO3	Metals, Filtered in Field	Sample Specific Notes / Special Instructions:
FWG Team 2 - Trip	4-6-11	0800		/						2					N		X									7111
FWG SCFmw-003-1743 GW	↓	0922		/				3		9	3		9	27	N	G	X	X	X	X	X	X	X	X		S-1, EC9, 185
FWG SCFmw-003-1743 GF	↓	0922		/					3						Y	G									X	S1, EC9, 185
FWG SCFmw-001-1741-GW	↓	1252		/				1		3	1		7		N	G	X	X	X	X	X	X	X	X		partial volume E115
FWG SCFmw-001-1741-GF	↓	1252		/					1						Y	G									X	E115
FWG SCFmw-002-1742-GW	↓	1548		/				1		3	1		9		N	G	X	X	X	X	X	X	X	X		7111
FWG SCFmw-002-1742-GF	↓	1548		/					1						Y	G									X	7111

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 collection time is close to lab pickup.
Metals (GF) were field filtered. All VOAs in Cooler ID 7111

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	4/6/11 18:30	RC Robin	TAL-NC	4/6/11 - 1830
RC Robin	TAL-NC	4/6/11 - 1944			
			Received in Laboratory by: [signature]	TA NC	4/7/11 0700

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TAL 0018-1 (04/10)

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/6/11	Chain of Custody Number: 000467
Address: 1800 Carillon	Telephone Number (Area Code)/Fax Number: 513825-7500	Lab Number: 330 497 9396	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 OH	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 30240.0006			

Matrix / Containers & Preservatives / Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010 6020 7470	Special Instructions/ Conditions of Receipt
FWG Team 3 - Trip	4-6-11	0800		X									X								405
FWGRQLmw-014C-1636-GW	4-6-11	0916		X			9			3	1		X	X	X	X	X	X	X		405
FWGRQLmw-014C-1636-GF	↓	↓		X					1											X	405
FWGB12mw-012C-1713-GW	4/6/11	0933		X											X						325 **
FWGRQLmw-017C-1738-GW		1003		X			3									X	X	X			~~CHI~~ 325
FWGRQLmw-017C-1738-GF		↓		X					1											X	~~CHI~~ 325
* FWGRQLmw-016C-1637-GW		1103		X			9			3	1		X	X	X	X	X	X	X		A-1
* FWGRQLmw-016C-1637-GF		↓		X					1											X	A-1
FWGRQLmw-008C-1734-GW		1309		X			27			9	3		X	X	X	X	X	X	X		15
FWGRQLmw-008C-1734-GF		↓		X					3											X	15
FWGRQLmw-~~010C~~ 007C-1733-GW		1519		X			9			3	1		X	X	X	X	X	X	X		316
FWGRQLmw-007C-1733-GF	↓	↓		X					1											X	316

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 [X] Other SOW

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	4/6/11	18:30	1. Received By: RC Robison	4/6/11	1830
2. Relinquished By: RC Robison	4/6/11	1944	2. Received By: [signature]	4/7/11	0700
3. Relinquished By:			3. Received By:		

Comments: Metals (GF) were field filtered
Temps may not meet requirements if sample collection time is close to lab pickup time
* ~~Change is incorrect - keep 1635~~ * labels are incorrect should be FWGRQLmw-016C-1737

** DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy
Additional Vol. other than pesticides DOH to [illegible] 4/6/11
All VOAs in cooler 405

Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** ATD0704/4
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 4/7/11 Opened on 4/7/11
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 19 Quantity Unsalvageable 1
   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)? 4/12/11 ~~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 4/7/11 by via Verbal ☐ Voice Mail ☐ Other ☒ Email
Concerning #14

14. CHAIN OF CUSTODY

The following discrepancies occurred:

COC ID = FWGRQLmw-017C-1738-GW/GF Label ID = FWGRQLmw-017C-1638-GW/GF
COC ID = FWGRQLmw-016C-1737-GW/GF Label IDs = FWGRQLmw-016C-1637-GW/GF
COC ID = FWGRQLmw-008C-1734-GW/GF Label IDs = FWGRQLmw-008C-1634-GW/GF
Will log IDs per COC per Erik Corbin
Received MS/MSD volume for sample FWGRQLmw-008C-1734-GW/GF not marked on COC. Will log for MS/MSD per volume + per Erik Corbin.

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#* 100110-HNO_3; *Sulfuric Acid Lot#* 110410-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
1706	<2 >12	4/7/11	
1709	<2 >12		
1711	<2 >12		
1707	<2 >12		
1635	<2 >12		
1750	<2 >12		
1759	<2 <2 >12		
1743	<2 <2 >12 <2 <2 >12 <2 <2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1741	<2 <2 >12	4/7/11	Q
1742	<2 <2 >12		
1636	<2 >12		
1738	<2		
1737	<2 >12		
1734	<2 >12		
1733	<2 >12		

Cooler #	Temp. °C	Cooler #	Temp.	Method	Coolant
Bruff 1	2.8	405	1.8	IR	Ice
727	3.3	325	2.1		
317	1.9	A-1	3.2		
IC3	3.5	15	2.2		
H113	2.8	C8	2.8		
405A	2.6	C333	2.5		
ASD88	3.4	316	1.9		
S-1	2.9				
EC9	3.1				
185	3.8				
E115	1.9				
7111	2.8				

Discrepancies Cont'd:

CASE NARRATIVE

A1D070414

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 030240.0006. The samples were received April 07, 2011, according to documented sample acceptance procedures.

All analyses were performed at the TestAmerica West Sacramento Laboratory. Refer to the copy of their report included 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 April 22, 2011. 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. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

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 1.9 to 3.8° 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.

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 FWGSCFmw-003-1743-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.

Case Narrative

TestAmerica West Sacramento Project Number A1D070414

General Comments
The samples were received at 1 degrees C.

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 integration being performed. The following samples and analytes required manual integration:

LC10
8330 MRL standard (analyzed on 4/13/11 @ 11:49) - Tetryl, 3-Nitrotoluene, & PETN
8330 MRL standard (analyzed on 4/15/11 @ 12:47) - Tetryl & 2,4,6-Trinitrotoluene
8330 MRL standard (analyzed on 4/15/11 @ 21:48) - PETN
8330 MRL standard (analyzed on 4/16/11 @ 06:49) – Tetryl, 2-Nitrotoluene, 4-Nitrotoluene, & PETN
Sample 8MS - 1,3,5-Trinitrobenzene
Sample 14MS - HMX

WATER, 8330, Explosives
Sample(s): 1, 14, 14MS, 14MSD, 15
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, 8MS, 8MSD, 9, 10, 11, 12, 13, 14, 14MS, 14MSD, 15
The percent difference values for some of the following analytes are above the project specific acceptance criteria in the associated MRL standards: RDX, 4-Nitrotoluene, 4-Amino-2,6-Dinitrotoluene, 3-Nitrotoluene, 2,6-Dinitrotoluene, & 2-Nitrotoluene. For corrective action a standard at approximately 2X the MDL was analyzed and these analytes were detected.

Case Narrative

TestAmerica West Sacramento Project Number A1D070414

WATER, 353.2, Nitrate-Nitrite
Sample(s): 8, 9, 10
The matrix spikes, which were performed on sample 8, have low recoveries 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.

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, a Matrix Spike/Matrix Spike Duplicate (MS/MSD) pair or a Matrix Spike/Sample Duplicate (MS/DU) pair.
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. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch, with the exception of poor performing analytes. A list of these analytes is listed below. No corrective action is taken if these analytes do not meet criteria.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.

Poor performers

Method 8270 Water and Solid:	
4-Nitrophenol	3,3' – Dichlorobenzidine
Benzoic Acid	2,4,6 - Tribromophenol
Phenol	2,4-Dinitrophenol
Phenol-d5	Pentachlorophenol
4,6-Dinitro-2-methylphenol	Hexachlorocyclopentadiene (LCG only)
Benzyl Alcohol	4-Chloroaniline
Method 8151 Solid	
Dinoseb	
Method 8260 Water and Solid	
Dichlorodifluoromethane	Hexachlorobutadiene
Trichlorofluoromethane	Naphthalene
Chloroethane	1,2,3-Trichlorobenzene
Acetone	1,2,4-Trichlorobenzene
Bromomethane	2,2-Dichloropropane
Bromoform	Chloromethane

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 ten 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 do 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 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 or Matrix Spike/Sample Duplicate.

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, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, 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), DoD ELAP (ADE-1437) USDA Soil Permit (P33-08-00123)

WATER, 8330, Explosives

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 3, 2011

SDG: A1D070414 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 cooler temperatures were documented as being received from 1.9°C – 3.8°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 4/15/11 @1247 recovered above control limits with a %D of 32% for 4-amino-2,6-dinitrotoluene and 32% for 4-nitrotoluene. • The MRL analyzed 4/15/11 @2148 recovered above control limits with a %D of 34% for 2,6-dinitrotoluene and 35% for 3-nitrotoluene. • The MRL analyzed 4/16/11 @0649 recovered above control limits with a %D of 33% for RDX. • The MRL analyzed 4/16/11 @1551 recovered above control limits with a %D of 32% for 4-amino-2,6-dinitrotoluene and 37% for 2-nitrotoluene. No qualifications were made for the MRL outliers, as the detected 2-nitrotoluene result for sample FWGRQLmw-014c-1736-GW was bracketed by a passing MRL.	LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			LC10 1/9/11	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 1/9/11@1027	STL SOP Section 9.9, >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 3, 2011

SDG: A1D070414 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
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
15. Was a method blank prepared and analyzed with each batch?	✓			Due to excessive particulates, samples FWGBKGmw-006c-1706-GW, FWGRQLmw-008c-1734-GW and FWGRQLmw-007c-1733-GW required filtration. A filter blank was prepared and analyzed with no detected concentrations.	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%?			✓		QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Were the RPDs ≤ 40%?			✓	No second column confirmation was required as there were no detected concentrations 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%?	✓				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.	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 3, 2011

SDG: A1D070414 R0
Analysis: SW846 8330 Explosives

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.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-006C-1706-GW

HPLC

Lot-Sample #...: A1D070414-001 **Work Order #...:** MGNCW1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 09:21 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1102095
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	101	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-015C-1709-GW

HPLC

Lot-Sample #...: A1D070414-002 **Work Order #...:** MGNC11AA **Matrix.....:** WG
Date Sampled...: 04/06/11 10:35 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1102095
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: FWGBKGmw-021C-1711-GW

HPLC

Lot-Sample #...: A1D070414-003 **Work Order #...:** MGNC21AA **Matrix.....:** WG
Date Sampled...: 04/06/11 12:45 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1102095
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	100	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-008C-1707-GW

HPLC

Lot-Sample #...: A1D070414-004 **Work Order #...:** MGNC31AA **Matrix.....:** WG
Date Sampled...: 04/06/11 14:01 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1102095
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	101	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-009C-1735-GW

HPLC

Lot-Sample #...: A1D070414-005 **Work Order #...:** MGNC41AA **Matrix.....:** WG
Date Sampled...: 04/06/11 15:31 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1102095
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	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-DUP5-1750-GW

HPLC

Lot-Sample #...: A1D070414-006 **Work Order #...:** MGNC61AA **Matrix.....:** WG
Date Sampled...: 04/06/11 16:55 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1102095
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	102	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1759-GW

HPLC

Lot-Sample #...: A1D070414-007 **Work Order #...:** MGNC71AA **Matrix.....:** WQ
Date Sampled...: 04/06/11 17:35 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1102095
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: FWGSCFmw-003-1743-GW

HPLC

Lot-Sample #...: A1D070414-008 **Work Order #...:** MGNC91AC **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1102095
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	101	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1741-GW

HPLC

Lot-Sample #...: A1D070414-009 **Work Order #...:** MGNDC1AC **Matrix.....:** WG
Date Sampled...: 04/06/11 12:52 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1102095
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	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1742-GW

HPLC

Lot-Sample #...: A1D070414-010 **Work Order #...:** MGNDD1AC **Matrix.....:** WG
Date Sampled...: 04/06/11 15:48 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1102095
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	101	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-014C-1736-GW

HPLC

Lot-Sample #...: A1D070414-011 **Work Order #...:** MGNDG1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 09:16 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1102095
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	**0.32 J**	**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)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-017C-1738-GW

HPLC

Lot-Sample #...: A1D070414-012 **Work Order #...:** MGNDJ1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 10:03 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1102095
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	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	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	102	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-016C-1737-GW

HPLC

Lot-Sample #...: A1D070414-013 **Work Order #...:** MGNDL1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 11:03 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1102095
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	102	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-008C-1734-GW

HPLC

Lot-Sample #...: A1D070414-014 **Work Order #...:** MGNDN1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1102095
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: FWGRQLmw-007C-1733-GW

HPLC

Lot-Sample #...: A1D070414-015 **Work Order #...:** MGNDP1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 15:19 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1102095
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	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(50 - 150)

METHOD BLANK REPORT

HPLC

Client Lot #...: A1D070414 **Work Order #...:** MGV4M1AA **Matrix.....:** WATER
MB Lot-Sample #: G1D120000-095

Prep Date.....: 04/12/11
Analysis Date..: 04/15/11 **Prep Batch #...:** 1102095
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 #...: A1D070414 **Work Order #...:** MGV4M1AD **Matrix.....:** WATER
MB Lot-Sample #: G1D120000-095

Prep Date.....: 04/12/11
Analysis Date..: 04/15/11 **Prep Batch #...:** 1102095
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.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1D070414 **Work Order #...:** MGV4M1AC **Matrix.....:** WATER
LCS Lot-Sample#: G1D120000-095
Prep Date.....: 04/12/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1102095
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	**111**	**(53 - 135)**	**SW846 8330**
1,3-Dinitrobenzene	**113**	**(54 - 120)**	**SW846 8330**
2-Amino-4,6-dinitrotoluene	**108**	**(53 - 120)**	**SW846 8330**
2,4,6-Trinitrotoluene	**86**	**(37 - 120)**	**SW846 8330**
2,4-Dinitrotoluene	**108**	**(58 - 136)**	**SW846 8330**
2,6-Dinitrotoluene	**108**	**(52 - 144)**	**SW846 8330**
2-Nitrotoluene	**106**	**(52 - 120)**	**SW846 8330**
3-Nitrotoluene	**107**	**(48 - 136)**	**SW846 8330**
4-Amino-2,6-dinitrotoluene	**106**	**(58 - 159)**	**SW846 8330**
4-Nitrotoluene	**109**	**(46 - 136)**	**SW846 8330**
HMX	**108**	**(45 - 140)**	**SW846 8330**
Nitrobenzene	**111**	**(49 - 120)**	**SW846 8330**
Nitroglycerin	**101**	**(60 - 120)**	**SW846 8330**
RDX	**114**	**(39 - 120)**	**SW846 8330**
PETN	**98**	**(60 - 120)**	**SW846 8330**
Tetryl	**98**	**(30 - 120)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	104	(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 #...: A1D070414 Work Order #...: MGNC91AH-MS Matrix.....: WG
MS Lot-Sample #: A1D070414-008 MGNC91AJ-MSD
Date Sampled...: 04/06/11 09:22 Date Received..: 04/07/11
Prep Date.....: 04/12/11 Analysis Date..: 04/16/11
Prep Batch #...: 1102095
Dilution Factor: 0.98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	107	(50 - 150)			SW846 8330
	104	(50 - 150)	2.6	(0-50)	SW846 8330
1,3-Dinitrobenzene	111	(50 - 150)			SW846 8330
	108	(50 - 150)	2.7	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	107	(50 - 150)			SW846 8330
	106	(50 - 150)	0.76	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	85	(50 - 150)			SW846 8330
	84	(50 - 150)	1.3	(0-50)	SW846 8330
2,4-Dinitrotoluene	106	(50 - 150)			SW846 8330
	105	(50 - 150)	0.96	(0-50)	SW846 8330
2,6-Dinitrotoluene	107	(50 - 150)			SW846 8330
	106	(50 - 150)	1.6	(0-50)	SW846 8330
2-Nitrotoluene	108	(50 - 150)			SW846 8330
	107	(50 - 150)	1.6	(0-50)	SW846 8330
3-Nitrotoluene	106	(50 - 150)			SW846 8330
	105	(50 - 150)	2.0	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	105	(50 - 150)			SW846 8330
	106	(50 - 150)	0.09	(0-50)	SW846 8330
4-Nitrotoluene	109	(50 - 150)			SW846 8330
	107	(50 - 150)	2.4	(0-50)	SW846 8330
HMX	103	(50 - 150)			SW846 8330
	100	(50 - 150)	2.9	(0-50)	SW846 8330
Nitrobenzene	107	(50 - 150)			SW846 8330
	109	(50 - 150)	1.3	(0-50)	SW846 8330
Nitroglycerin	100	(50 - 150)			SW846 8330
	99	(50 - 150)	1.7	(0-50)	SW846 8330
RDX	109	(50 - 150)			SW846 8330
	106	(50 - 150)	3.4	(0-50)	SW846 8330
PETN	97	(50 - 150)			SW846 8330
	96	(50 - 150)	1.4	(0-50)	SW846 8330
Tetryl	92	(50 - 150)			SW846 8330
	96	(50 - 150)	3.2	(0-50)	SW846 8330

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MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1D070414 **Work Order #...:** MGNC91AH-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070414-008 MGNC91AJ-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(50 - 150)
	103	(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 #...: A1D070414 Work Order #...: MGNDN1AC-MS Matrix.....: WG
MS Lot-Sample #: A1D070414-014 MGNDN1AD-MSD
Date Sampled...: 04/06/11 13:09 Date Received..: 04/07/11
Prep Date.....: 04/12/11 Analysis Date..: 04/16/11
Prep Batch #...: 1102095
Dilution Factor: 1.02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	108	(50 - 150)			SW846 8330
	105	(50 - 150)	7.5	(0-50)	SW846 8330
1,3-Dinitrobenzene	110	(50 - 150)			SW846 8330
	111	(50 - 150)	4.0	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	108	(50 - 150)			SW846 8330
	104	(50 - 150)	7.0	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	85	(50 - 150)			SW846 8330
	83	(50 - 150)	7.1	(0-50)	SW846 8330
2,4-Dinitrotoluene	103	(50 - 150)			SW846 8330
	102	(50 - 150)	5.0	(0-50)	SW846 8330
2,6-Dinitrotoluene	100	(50 - 150)			SW846 8330
	101	(50 - 150)	3.5	(0-50)	SW846 8330
2-Nitrotoluene	104	(50 - 150)			SW846 8330
	104	(50 - 150)	4.2	(0-50)	SW846 8330
3-Nitrotoluene	102	(50 - 150)			SW846 8330
	101	(50 - 150)	5.1	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	107	(50 - 150)			SW846 8330
	105	(50 - 150)	5.7	(0-50)	SW846 8330
4-Nitrotoluene	104	(50 - 150)			SW846 8330
	106	(50 - 150)	2.0	(0-50)	SW846 8330
HMX	105	(50 - 150)			SW846 8330
	102	(50 - 150)	7.0	(0-50)	SW846 8330
Nitrobenzene	101	(50 - 150)			SW846 8330
	102	(50 - 150)	3.6	(0-50)	SW846 8330
Nitroglycerin	103	(50 - 150)			SW846 8330
	102	(50 - 150)	5.5	(0-50)	SW846 8330
RDX	106	(50 - 150)			SW846 8330
	102	(50 - 150)	7.5	(0-50)	SW846 8330
PETN	96	(50 - 150)			SW846 8330
	94	(50 - 150)	6.1	(0-50)	SW846 8330
Tetryl	94	(50 - 150)			SW846 8330
	92	(50 - 150)	6.3	(0-50)	SW846 8330

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MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1D070414 **Work Order #...:** MGNDN1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070414-014 MGNDN1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(50 - 150)
	102	(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: 01082011
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	Dilu	Comments
08-JAN-2011	13:00	RN	8330 PRIMER	A-000001.	0 g	0 mL	1	
08-JAN-2011	13:34	RN	8330 PRIMER	A-000002.	0 g	0 mL	1	
08-JAN-2011	14:06	RN	8330 PRIMER	A-000003.	0 g	0 mL	1	
08-JAN-2011	14:36	RN	8330 PRIMER	A-000004.	0 g	0 mL	1	
08-JAN-2011	15:20	RN	8330 PRIMER	A-000005.	0 g	0 mL	1	
08-JAN-2011	16:03	RN	8330 PRIMER	A-000006.	0 g	0 mL	1	
08-JAN-2011	16:45	RN	8330 PRIMER	A-000007.	0 g	0 mL	1	
08-JAN-2011	17:28	RN	8330 PRIMER	A-000008.	0 g	0 mL	1	
08-JAN-2011	18:11	RN	8330 PRIMER	A-000009.	0 g	0 mL	1	
08-JAN-2011	18:54	RN	8330 PRIMER	A-000010.	0 g	0 mL	1	
08-JAN-2011	19:37	RN	Nitrobenzene	A-000011.	0 g	0 mL	1	
08-JAN-2011	20:20	RN	8330 PRIMER	A-000012.	0 g	0 mL	1	
08-JAN-2011	21:03	RN	8330 PRIMER	A-000013.	0 g	0 mL	1	
08-JAN-2011	21:47	RN	8330 PRIMER	A-000014.	0 g	0 mL	1	
08-JAN-2011	22:34	RN	8330 PRIMER	A-000015.	0 g	0 mL	1	
08-JAN-2011	23:14	RN	8330 PRIMER	A-000016.	0 g	0 mL	1	
08-JAN-2011	23:59	RN	8330 PRIMER	A-000017.	0 g	0 mL	1	
09-JAN-2011	00:41	RN	Tetryl Std	A-000018.	0 g	0 mL	1	
09-JAN-2011	01:26	RN	BLANK	A-000019.	0 g	0 mL	1	
09-JAN-2011	02:11	RN	ICAL L1 10GCSV0528 8330 5ng/mL	A-000020.	0 g	0 mL	1	
09-JAN-2011	02:56	RN	ICAL L2 10GCSV0527 8330 10ng/m	A-000021.	0 g	0 mL	1	
09-JAN-2011	03:41	RN	ICAL L3 10GCSV0526 8330 20ng/m	A-000022.	0 g	0 mL	1	
09-JAN-2011	04:26	RN	ICAL L4 10GCSV0525 8330 50ng/m	A-000023.	0 g	0 mL	1	
09-JAN-2011	05:11	RN	ICAL L5 10GCSV0524 8330 100ng/	A-000024.	0 g	0 mL	1	
09-JAN-2011	05:56	RN	ICAL L6 10GCSV0523 8330 200ng/	A-000025.	0 g	0 mL	1	
09-JAN-2011	06:42	RN	ICAL L7 10GCSV0522 8330 500ng/	A-000026.	0 g	0 mL	1	
09-JAN-2011	07:27	RN	ICAL L8 10GCSV0521 8330 1000ng	A-000027.	0 g	0 mL	1	
09-JAN-2011	08:12	RN	BLANK	A-000028.	0 g	0 mL	1	
09-JAN-2011	08:57	RN	MRL 10GCSV0528 8330 5ng/mL	A-000029.	0 g	0 mL	1	
09-JAN-2011	09:42	RN	MRL 10GCSV0526 8330 20ng/mL	A-000030.	0 g	0 mL	1	
09-JAN-2011	10:27	RN	ICV 10GCSV0502 8330 200ng/mL	A-000031.	0 g	0 mL	1	

printed before end of sequence.
RDN 1/9/11

TestAmerica West Sacramento

A-000004.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 4/15/2011 12:47 **Operator:** NS
DataFile: LC10.I\04152011.B\A-000004.D **Vial Num:** 7
Instrument ID: LC10

Sample : **STD_MRL 11GCSV0086 8330 5-20ng/mL**

Method File: LC10.I\04152011.B\8330AB.M
Start Cal Date: 1/9/2011 2:11 **End Cal Date:** 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** 1_CAL.SUB **SpikeList:** 0
Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;
Misc. Info: MRL;9;;;;3;1_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	16.38	1166	21.1200<	20	6%	Acceptable		16.41	2138	20.2900	20	1%	Acceptable		(±15)	
HMX	**5.27**	**763**	**5.8960<**	**5**	**18%**	**Fails**	OK@30%				**5**	**-100%**	**Fails**		(±15)	45
RDX	7.47	442	4.8530<	5	-3%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
Picric ACID	8.62	4493	55.8100	50	12%	Acceptable		8.63	6609	55.6400<	50	11%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.72	884	5.5840<	5	12%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
1,3-Dinitrobenzene	12.35	849	5.4830<	5	10%	Acceptable					**5**	**-100%**	**Fails**		(±15)	45
TETRYL	13.31	527	5.6720<	5	13%	Acceptable	M				**5**	**-100%**	**Fails**		(±15)	45
Nitrobenzene	**13.93**	**447**	**6.2440<**	**5**	**25%**	**Fails**	OK@30%				**5**	**-100%**	**Fails**		(±15)	45
2,4,6-Trinitrotoluene	15.35	483	5.1260<	5	3%	Acceptable	M				**5**	**-100%**	**Fails**		(±15)	45
4-AM-2,6-DNT	**15.92**	**503**	**6.6070<**	**5**	**32%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
2-AM-4,6-DNT	**16.94**	**507**	**6.0440<**	**5**	**21%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
2,6-Dinitrotoluene	**18.32**	**343**	**5.8160<**	**5**	**16%**	**Fails**	OK@30%				**5**	**-100%**	**Fails**		(±15)	45
2,4-Dinitrotoluene	**19.02**	**582**	**6.1310<**	**5**	**23%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
2-Nitrotoluene	**21.97**	**256**	**6.1750<**	**5**	**24%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
4-Nitrotoluene	**23.72**	**331**	**6.6300<**	**5**	**33%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
3-Nitrotoluene	**25.41**	**292**	**5.8750<**	**5**	**18%**	**Fails**	OK@30%				**5**	**-100%**	**Fails**	OK@30%	(±15)	45
Nitroglycerin				**20**	**-100%**	**Fails**		14.44	1471	21.3800<	20	7%	Acceptable	NA	(±15)	45
PETN				**20**	**-100%**	**Fails**		27.29	888	23.7000<	**20**	**19%**	**Fails**		(±15)	45
3,5-Dinitroaniline	**13.08**	**611**	**6.0250<**	**5**	**21%**	**Fails**	M NA				**5**	**-100%**	**Fails**		(±15)	45
EGDN				**20**	**-100%**	**Fails**					**20**	**-100%**	**Fails**	NA 4/21/11	(±15)	

NA 4/18/11

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

NA 4/18/11

Printed: 4/18/2011 11:07 PM

TestAmerica West Sacramento

A-000016.D

Chromatography Summary

Injection Date: 4/15/2011 21:48 **Operator:** NS

DataFile: LC10.I\04152011.B\A-000016.D **Vial Num:** 7

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : STD_MRL 11GCSV0086 8330 5-20ng/mL

Method File: LC10.I\04152011.B\8330AB.M

Start Cal Date: 1/9/2011 2:11 **End Cal Date:** 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** 1_CAL.SUB **SpikeList:** 0

Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;

Misc. Info: MRL;9;;;;3;1_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	16.36	1138	20.6200<	20	3%	Acceptable		16.40	2179	20.6800	20	3%	Acceptable		(±15)	
HMX	5.26	775	5.9880<	5	20%	Fails					5	-100%	Fails		(±15)	45
RDX	7.49	575	6.3140<	5	26%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.62	4504	55.9500	50	12%	Acceptable		8.62	6732	56.6800<	50	13%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.70	868	5.4830<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.31	856	5.5280<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.29	532	5.7260<	5	15%	Acceptable					5	-100%	Fails		(±15)	45
Nitrobenzene	13.89	402	5.6150<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.37	505	5.3600<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.91	490	6.4360<	5	29%	Fails					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.94	535	6.3780<	5	28%	Fails					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.32	396	6.7150<	5	34%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	19.03	590	6.2150<	5	24%	Fails					5	-100%	Fails		(±15)	45
2-Nitrotoluene	22.02	253	6.1030<	5	22%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.71	294	5.8890<	5	18%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.46	335	6.7400<	5	35%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		14.41	1537	22.3400<	20	12%	Acceptable		(±15)	45
PETN				20	-100%	Fails		27.33	827	22.0700<	20	10%	Acceptable	M	(±15)	45
3,5-Dinitroaniline	13.10	580	5.7190<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				20	-100%	Fails					20	-100%	Fails		(±15)	

ok@30%

MR 4/21/11

ok@30%

ok@30%

NA

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

MR 4/21/11

Printed: 4/21/2011 7:16 PM

TestAmerica West Sacramento

A-000028.D

Chromatography Summary

Injection Date: 4/16/2011 6:49 **Operator:** NS

DataFile: LC10.R04152011.B\A-000028.D **Vial Num:** 8

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : STD_MRL 11GCSV0086 8330 5-20ng/mL

Method File: LC10.R04152011.B\8330AB.M

Start Cal Date: 1/9/2011 2:11 **End Cal Date:** 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** 1_CAL.SUB **SpikeList:** 0

Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;

Misc. Info: MRL;9;;;;3;1_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	16.43	1165	21.1000<	20	6%	Acceptable		16.41	2232	21.1800	20	6%	Acceptable		(±15)	
HMX	5.27	765	5.9110<	5	18%	Fails	OKE302				5	-100%	Fails		(±15)	45
RDX	7.48	606	6.6540<	5	33%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.64	4506	55.9800	50	12%	Acceptable		8.64	6644	55.9400<	50	12%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.75	883	5.5780<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.35	900	5.8120<	5	16%	Fails	OKE302				5	-100%	Fails		(±15)	45
TETRYL	13.30	532	5.7260<	5	15%	Acceptable	M				5	-100%	Fails		(±15)	45
Nitrobenzene	13.87	420	5.8660<	5	17%	Fails	OKE302				5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.36	499	5.2960<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.96	472	6.2000<	5	24%	Fails					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.96	505	6.0200<	5	20%	Fails					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.36	350	5.9350<	5	19%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	19.06	586	6.1730<	5	23%	Fails					5	-100%	Fails		(±15)	45
2-Nitrotoluene	22.10	265	6.3920<	5	28%	Fails	M				5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.72	308	6.1690<	5	23%	Fails	M				5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.48	308	6.1970<	5	24%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		14.48	1418	20.6100<	20	3%	Acceptable		(±15)	45
PETN				20	-100%	Fails		27.33	798	21.3000<	20	7%	Acceptable	M	(±15)	45
3,5-Dinitroaniline	13.11	651	6.4200<	5	28%	Fails	M				5	-100%	Fails		(±15)	45
EGDN				20	-100%	Fails	NA				20	-100%	Fails		(±15)	

OKE302

mm 4/21/11

OKE302

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

mm 4/21/11

Printed: 4/21/2011 7:32 PM

TestAmerica West Sacramento

A-000040.D

Chromatography Summary

Injection Date: 4/16/2011 15:51 **Operator:** NS

DataFile: LC10.I\04152011.B\A-000040.D **Vial Num:** 8

Method 8330 Target Analyte Results

Instrument ID: LC10

Sample : STD_MRL 11GCSV0086 8330 5-20ng/mL

Method File: LC10.I\04152011.B\8330AB.M

Start Cal Date: 1/9/2011 2:11 **End Cal Date:** 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** 1_CAL.SUB **SpikeList:** 0

Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;

Misc. Info: MRL;9;;;;3;1_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	16.40	1162	21.0500<	20	5%	Acceptable		16.40	2148	20.3800	20	2%	Acceptable		(±15)	
HMX	5.27	769	5.9420<	5	19%	Fails					5	-100%	Fails		(±15)	45
RDX	7.49	588	6.4560<	5	29%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.63	4603	57.1800	50	14%	Acceptable		8.64	6724	56.6100<	50	13%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.73	898	5.6720<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.33	902	5.8250<	5	17%	Fails					5	-100%	Fails		(±15)	45
TETRYL	13.34	555	5.9740<	5	19%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	13.93	387	5.4060<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.38	514	5.4560<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.95	502	6.5940<	5	32%	Fails					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.96	501	5.9720<	5	19%	Fails					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.35	378	6.4100<	5	28%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	19.05	595	6.2680<	5	25%	Fails					5	-100%	Fails		(±15)	45
2-Nitrotoluene	22.10	284	6.8510<	5	37%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.74	305	6.1090<	5	22%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.49	315	6.3370<	5	27%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		14.43	1626	23.6300<	20	18%	Fails		(±15)	45
PETN				20	-100%	Fails		27.34	836	22.3100<	20	12%	Acceptable		(±15)	45
3,5-Dinitroaniline	13.11	604	5.9560<	5	19%	Fails					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%

Printed: 4/19/2011 4:24 PM

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC10 Batch ID: 04152011
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
15-APR-2011	10:32	NS	PRIMER	A-000001.	1000 mL	20 mL	1	
15-APR-2011	11:17	NS	PRIMER	A-000002.	1000 mL	20 mL	1	
15-APR-2011	12:02	NS	STD_06 11GCSV0170 8330 200-500	A-000003.	0 g	0 mL	1	
15-APR-2011	12:47	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000004.	0 g	0 mL	1	
15-APR-2011	13:32	NS	MGLJC1AA 1101074 A1D060428-3 2	A-000005.	909.33 mL	20 mL	2	
15-APR-2011	14:17	NS	MGLJD1AA 1101074 A1D060428-4 2	A-000006.	863.58 mL	20 mL	2	
15-APR-2011	15:02	NS	MGV4M1AA 1102095 G1D120000-95	A-000007.	1000 mL	20 mL	1	
15-APR-2011	15:47	NS	MGV4M1AD 1102095 G1D120000-95	A-000008.	1000 mL	20 mL	1	
15-APR-2011	16:33	NS	MGV4M1AC 1102095 G1D120000-95	A-000009.	1000 mL	20 mL	1	
15-APR-2011	17:18	NS	MGNCW1AA 1102095 A1D070414-1 1	A-000010.	988.78 mL	20 mL	1	
15-APR-2011	18:03	NS	MGNC11AA 1102095 A1D070414-2 1	A-000011.	1015.83 mL	20 mL	1	
15-APR-2011	18:48	NS	MGNC21AA 1102095 A1D070414-3 1	A-000012.	1003.28 mL	20 mL	1	
15-APR-2011	19:33	NS	MGNC31AA 1102095 A1D070414-4 1	A-000013.	1002.35 mL	20 mL	1	
15-APR-2011	20:18	NS	MGNC41AA 1102095 A1D070414-5 1	A-000014.	996.36 mL	20 mL	1	
15-APR-2011	21:03	NS	STD_05 10GCSV0524 8330 100-200	A-000015.	0 g	0 mL	1	
15-APR-2011	21:48	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000016.	0 g	0 mL	1	
15-APR-2011	22:33	NS	MGNC61AA 1102095 A1D070414-6 1	A-000017.	983.71 mL	20 mL	1	
15-APR-2011	23:18	NS	MGNC71AA 1102095 A1D070414-7 1	A-000018.	1012.15 mL	20 mL	1	
16-APR-2011	00:03	NS	MGNC91AC 1102095 A1D070414-8 1	A-000019.	997.53 mL	20 mL	1	
16-APR-2011	00:48	NS	MGNC91AH 1102095 A1D070414-8 S	A-000020.	1017.57 mL	20 mL	1	
16-APR-2011	01:33	NS	MGNC91AJ 1102095 A1D070414-8 D	A-000021.	1023.48 mL	20 mL	1	
16-APR-2011	02:19	NS	MGNDC1AC 1102095 A1D070414-9 1	A-000022.	942.8 mL	20 mL	1	
16-APR-2011	03:04	NS	MGNDD1AC 1102095 A1D070414-10	A-000023.	952.61 mL	20 mL	1	
16-APR-2011	03:49	NS	MGNDG1AA 1102095 A1D070414-11	A-000024.	1018.2 mL	20 mL	1	
16-APR-2011	04:34	NS	MGNDJ1AA 1102095 A1D070414-12	A-000025.	924.73 mL	20 mL	1	
16-APR-2011	05:19	NS	MGNDL1AA 1102095 A1D070414-13	A-000026.	937.71 mL	20 mL	1	
16-APR-2011	06:04	NS	STD_05 10GCSV0524 8330 100-200	A-000027.	0 g	0 mL	1	
16-APR-2011	06:49	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000028.	0 g	0 mL	1	
16-APR-2011	07:35	NS	MGNDN1AA 1102095 A1D070414-14	A-000029.	1014.72 mL	20 mL	1	
16-APR-2011	08:20	NS	MGNDN1AC 1102095 A1D070414-14	A-000030.	975.67 mL	20 mL	1	
16-APR-2011	09:05	NS	MGNDN1AD 1102095 A1D070414-14	A-000031.	1016.77 mL	20 mL	1	
16-APR-2011	09:50	NS	MGNDP1AA 1102095 A1D070414-15	A-000032.	966.04 mL	20 mL	1	
16-APR-2011	10:35	NS	MGXKL1AA 1103098 G1D130000-98	A-000033.	1000 mL	20 mL	1	
16-APR-2011	11:20	NS	MGXKL1AC 1103098 G1D130000-98	A-000034.	1000 mL	20 mL	1	
16-APR-2011	12:05	NS	MGXKL1AD 1103098 G1D130000-98	A-000035.	1000 mL	20 mL	1	
16-APR-2011	12:51	NS	MGPCC1AE 1103098 A1D070566-11	A-000036.	931.65 mL	20 mL	1	
16-APR-2011	13:36	NS	MGP5R1AF 1103098 A1D080416-7 1	A-000037.	936.66 mL	20 mL	1	
16-APR-2011	14:21	NS	MGP531AF 1103098 A1D080416-9 1	A-000038.	941.31 mL	20 mL	1	
16-APR-2011	15:06	NS	STD_05 10GCSV0524 8330 100-200	A-000039.	0 g	0 mL	1	
16-APR-2011	15:51	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000040.	0 g	0 mL	1	
16-APR-2011	16:36	NS	MGX0X1AA 1103202 G1D130000-202	A-000041.	1000 mL	20 mL	1	
16-APR-2011	17:21	NS	MGX0X1AD 1103202 G1D130000-202	A-000042.	1000 mL	20 mL	1	
16-APR-2011	18:06	NS	MGX0X1AC 1103202 G1D130000-202	A-000043.	1000 mL	20 mL	1	
16-APR-2011	18:51	NS	MGP0L1AA 1103202 A1D080404-1 1	A-000044.	1012.12 mL	20 mL	1	
16-APR-2011	19:36	NS	MGP0L1AE 1103202 A1D080404-1 S	A-000045.	987.91 mL	20 mL	1	
16-APR-2011	20:22	NS	MGP0L1AF 1103202 A1D080404-1 D	A-000046.	1022.6 mL	20 mL	1	
16-APR-2011	21:07	NS	MGP0T1AA 1103202 A1D080404-2 1	A-000047.	985.75 mL	20 mL	1	
16-APR-2011	21:52	NS	MGP0X1AA 1103202 A1D080404-3 1	A-000048.	878.52 mL	20 mL	1	
16-APR-2011	22:37	NS	MGP011AA 1103202 A1D080404-4 1	A-000049.	837.26 mL	20 mL	1	
16-APR-2011	23:22	NS	MGP021AA 1103202 A1D080404-5 1	A-000050.	966.73 mL	20 mL	1	

Sequence continued on next page

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page 2 of Batch 04152011 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
17-APR-2011	00:07	NS	STD_05 10GCSV0524 8330 100-200	A-000051.	0 g	0 mL	1	
17-APR-2011	00:52	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000052.	0 g	0 mL	1	
17-APR-2011	01:38	NS	MGP041AA 1103202 A1D080404-6 1	A-000053.	896.86 mL	20 mL	1	
17-APR-2011	02:23	NS	MGP051AA 1103202 A1D080404-7 1	A-000054.	909.26 mL	20 mL	1	
17-APR-2011	03:08	NS	MGP071AA 1103202 A1D080404-8 1	A-000055.	995.99 mL	20 mL	1	
17-APR-2011	03:53	NS	MGP071AC 1103202 A1D080404-8 S	A-000056.	973.82 mL	20 mL	1	
17-APR-2011	04:38	NS	MGP071AD 1103202 A1D080404-8 D	A-000057.	964.47 mL	20 mL	1	
17-APR-2011	05:24	NS	MGP081AA 1103202 A1D080404-9 1	A-000058.	992.33 mL	20 mL	1	
17-APR-2011	06:09	NS	MGP091AA 1103202 A1D080404-10	A-000059.	933.23 mL	20 mL	1	
17-APR-2011	06:54	NS	MGP1A1AA 1103202 A1D080404-11	A-000060.	966.03 mL	20 mL	1	
17-APR-2011	07:39	NS	STD_05 10GCSV0524 8330 100-200	A-000061.	0 g	0 mL	1	
17-APR-2011	08:24	NS	STD_MRL 11GCSV0086 8330 5-20ng	A-000062.	0 g	0 mL	1	
17-APR-2011	09:10	NS	MGXKQ1AA 1103100 G1D130000-100	A-000063.	1000 mL	20 mL	1	
17-APR-2011	09:55	NS	MGXKQ1AC 1103100 G1D130000-100	A-000064.	1000 mL	20 mL	1	
17-APR-2011	10:40	NS	MGQMT1AA 1103100 G1D080474-1 1	A-000065.	995.77 mL	20 mL	1	
17-APR-2011	11:25	NS	STD_05 10GCSV0524 8330 100-200	A-000066.	0 g	0 mL	1	

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 13

Inst ID: LC12 Batch ID: 04122011
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	DilIn	Comments
12-APR-2011	11:30	NS	8330 PRIMER	C-000001.	0 g	0 mL	1	
12-APR-2011	12:36	NS	8330 PRIMER	C-000002.	0 g	0 mL	1	
12-APR-2011	13:41	NS	BLANK	C-000003.	0 g	0 mL	1	
12-APR-2011	14:46	NS	STD_01 11GCSV0085 8330 5ng/mL	C-000004.	0 g	0 mL	1	
12-APR-2011	15:51	NS	STD_02 10GCSV0527 8330 10ng/mL	C-000005.	0 g	0 mL	1	
12-APR-2011	16:57	NS	STD_03 10GCSV0526 8330 20ng/mL	C-000006.	0 g	0 mL	1	
12-APR-2011	18:02	NS	STD_04 10GCSV0525 8330 50ng/mL	C-000007.	0 g	0 mL	1	
12-APR-2011	19:08	NS	STD_05 10GCSV0524 8330 100ng/m	C-000008.	0 g	0 mL	1	
12-APR-2011	20:13	NS	STD_06 11GCSV0170 8330 200ng/m	C-000009.	0 g	0 mL	1	
12-APR-2011	21:18	NS	STD_07 10GCSV0522 8330 500ng/m	C-000010.	0 g	0 mL	1	
12-APR-2011	22:24	NS	STD_08 10GCSV0521 8330 1000ng/	C-000011.	0 g	0 mL	1	
12-APR-2011	23:29	NS	BLANK	C-000012.	0 g	0 mL	1	
13-APR-2011	00:34	NS	STD_ICV 11GCSV0169 8330 200ng/	C-000013.	0 g	0 mL	1	
13-APR-2011	01:40	NS	STD_MRL 11GCSV0086 8330 5ng/mL	C-000014.	0 g	0 mL	1	2x MDL check

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC12 Batch ID: 04182011
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
18-APR-2011	21:46	NS	PRIMER	C-000001.	0 g	0 mL	1	
18-APR-2011	22:51	NS	PRIMER	C-000002.	0 g	0 mL	1	
18-APR-2011	23:56	NS	STD_06 11GCSV0170 8330 200-500	C-000003.	0 g	0 mL	1	CCV fail for 246
19-APR-2011	01:01	NS	STD_MRL 11GCSV0086 8330 5-20ng	C-000004.	0 g	0 mL	1	
19-APR-2011	02:07	NS	MGX0X1AA 1103202 G1D130000-202	C-000005.	1000 mL	20 mL	1	RE
19-APR-2011	03:12	NS	MGP011AA 1103202 A1D080404-4 1	C-000006.	837.26 mL	20 mL	1	
19-APR-2011	04:18	NS	MGP021AA 1103202 A1D080404-5 1	C-000007.	966.73 mL	20 mL	1	
19-APR-2011	05:23	NS	MGP051AA 1103202 A1D080404-7 1	C-000008.	909.26 mL	20 mL	1	
19-APR-2011	06:29	NS	MGP081AA 1103202 A1D080404-9 1	C-000009.	992.33 mL	20 mL	1	m 4/21/11
19-APR-2011	07:34	NS	STD_05 10GCSV0524 8330 100-200	C-000010.	0 g	0 mL	1	
19-APR-2011	08:40	NS	STD_MRL 11GCSV0086 8330 5-20ng	C-000011.	0 g	0 mL	1	
19-APR-2011	09:46	NS	MGXKL1AA 1103098 G1D130000-98	C-000012.	1000 mL	20 mL	1	
19-APR-2011	10:51	NS	MGP5R2AF 1103098 A1D080416-7 2	C-000013.	936.66 mL	20 mL	2	
19-APR-2011	11:57	NS	MGV4M1AA 1102095 G1D120000-95	C-000014.	1000 mL	20 mL	1	
19-APR-2011	13:02	NS	MGNDC1AC 1102095 A1D070414-9 1	C-000015.	942.8 mL	20 mL	1	
19-APR-2011	14:07	NS	MGNDG1AA 1102095 A1D070414-11	C-000016.	1018.2 mL	20 mL	1	
19-APR-2011	15:12	NS	STD_05 10GCSV0524 8330 100-200	C-000017.	0 g	0 mL	1	
19-APR-2011	16:18	NS	STD_MRL 11GCSV0086 8330 5-20ng	C-000018.	0 g	0 mL	1	
19-APR-2011	17:23	NS	MGX0X1AA 1103202 G1D130000-202	C-000019.	1000 mL	20 mL	1	
19-APR-2011	18:29	NS	MGP011AA 1103202 A1D080404-4 1	C-000020.	837.26 mL	20 mL	1	
19-APR-2011	19:35	NS	MGP021AA 1103202 A1D080404-5 1	C-000021.	966.73 mL	20 mL	1	
19-APR-2011	20:40	NS	MGP051AA 1103202 A1D080404-7 1	C-000022.	909.26 mL	20 mL	1	
19-APR-2011	21:45	NS	QC CHECK	C-000023.	1000 mL	20 mL	1	
19-APR-2011	22:51	NS	MGP081AA 1103202 A1D080404-9 1	C-000024.	992.33 mL	20 mL	1	
19-APR-2011	23:57	NS	MGLJC1AA 1101074 A1D060428-3 1	C-000025.	909.33 mL	20 mL	1	
20-APR-2011	01:02	NS	MGLJD1AA 1101074 A1D060428-4 1	C-000026.	863.58 mL	20 mL	1	
20-APR-2011	02:07	NS	STD_05 10GCSV0524 8330 100-200	C-000027.	0 g	0 mL	1	
20-APR-2011	03:13	NS	STD_MRL 11GCSV0086 8330 5-20ng	C-000028.	0 g	0 mL	1	
20-APR-2011	04:18	NS	MGP5R1AF 1103098 A1D080416-7 1	C-000029.	936.66 mL	20 mL	1	
20-APR-2011	05:24	NS	MG4TL1AA 1105341 G1D150000-341	C-000030.	1000 mL	20 mL	1	
20-APR-2011	06:29	NS	MG3W21AA 1105341 G1D140599-1 1	C-000031.	981.56 mL	20 mL	1	
20-APR-2011	07:34	NS	STD_05 10GCSV0524 8330 100-200	C-000032.	0 g	0 mL	1	
20-APR-2011	08:40	NS	STD_MRL 11GCSV0086 8330 5-20ng	C-000033.	0 g	0 mL	1	

WATER, Nitroguanidine

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 3, 2011

SDG: A1D070414 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 cooler temperatures were documented as being received from 1.9°C – 3.8°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?	✓				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: 1/24/11 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%?	✓			1/24/11 @ 1328	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
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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 3, 2011

SDG: A1D070414 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
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%?			✓	No detections above the reporting limit.	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.

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: FWGBKGmw-006C-1706-GW

Dissolved HPLC

Lot-Sample #...:	A1D070414-001	**Work Order #...:**	MGNCW1AD	**Matrix.....:**	WG
Date Sampled...:	04/06/11 09:21	**Date Received..:**	04/07/11		
Prep Date.....:	04/12/11	**Analysis Date..:**	04/19/11		
Prep Batch #...:	1102415				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-015C-1709-GW

Dissolved HPLC

Lot-Sample #...: A1D070414-002 **Work Order #...:** MGNC11AD **Matrix.....:** WG
Date Sampled...: 04/06/11 10:35 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1102415
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-021C-1711-GW

Dissolved HPLC

Lot-Sample #...:	A1D070414-003	Work Order #...:	MGNC21AD
Date Sampled...:	04/06/11 12:45	Date Received..:	04/07/11
Prep Date.....:	04/12/11	Analysis Date..:	04/19/11
Prep Batch #...:	1102415		
Dilution Factor:	1	Method.....:	SW846 8330 (Modif

Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-008C-1707-GW

Dissolved HPLC

Lot-Sample #...: A1D070414-004 **Work Order #...:** MGNC31AD **Matrix.....:** WG
Date Sampled...: 04/06/11 14:01 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1102415
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-009C-1735-GW

Dissolved HPLC

Lot-Sample #...:	A1D070414-005	**Work Order #...:**	MGNC41AD	**Matrix.....:**	WG
Date Sampled...:	04/06/11 15:31	**Date Received..:**	04/07/11		
Prep Date.....:	04/12/11	**Analysis Date..:**	04/19/11		
Prep Batch #...:	1102415				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-DUP5-1750-GW

Dissolved HPLC

Lot-Sample #...: A1D070414-006 **Work Order #...:** MGNC61AD **Matrix.....:** WG
Date Sampled...: 04/06/11 16:55 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1102415
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1759-GW

Dissolved HPLC

Lot-Sample #...:	A1D070414-007	**Work Order #...:**	MGNC71AD	**Matrix.....:**	WQ
Date Sampled...:	04/06/11 17:35	**Date Received..:**	04/07/11		
Prep Date.....:	04/12/11	**Analysis Date..:**	04/19/11		
Prep Batch #...:	1102415				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1743-GW

Dissolved HPLC

Lot-Sample #...: A1D070414-008 **Work Order #...:** MGNC91AE **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1102415
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1741-GW

Dissolved HPLC

Lot-Sample #...: A1D070414-009 **Work Order #...:** MGNDC1AE **Matrix.....:** WG
Date Sampled...: 04/06/11 12:52 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1102415
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1742-GW

Dissolved HPLC

Lot-Sample #...:	A1D070414-010	**Work Order #...:**	MGNDD1AE	**Matrix.....:**	WG
Date Sampled...:	04/06/11 15:48	**Date Received..:**	04/07/11		
Prep Date.....:	04/12/11	**Analysis Date..:**	04/19/11		
Prep Batch #...:	1102415				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-014C-1736-GW

Dissolved HPLC

Lot-Sample #...:	A1D070414-011	**Work Order #...:**	MGNDG1AD	**Matrix.....:**	WG
Date Sampled...:	04/06/11 09:16	**Date Received..:**	04/07/11		
Prep Date.....:	04/12/11	**Analysis Date..:**	04/19/11		
Prep Batch #...:	1102415				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-017C-1738-GW

Dissolved HPLC

Lot-Sample #...:	A1D070414-012	**Work Order #...:**	MGNDJ1AD	**Matrix.....:**	WG
Date Sampled...:	04/06/11 10:03	**Date Received..:**	04/07/11		
Prep Date.....:	04/12/11	**Analysis Date..:**	04/19/11		
Prep Batch #...:	1102415				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-016C-1737-GW

Dissolved HPLC

Lot-Sample #...: A1D070414-013 **Work Order #...:** MGNDL1AD **Matrix.....:** WG
Date Sampled...: 04/06/11 11:03 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1102415
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-008C-1734-GW

Dissolved HPLC

Lot-Sample #...: A1D070414-014 **Work Order #...:** MGNDN1AH **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1102415
Dilution Factor: 1 **Method.....:** SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-007C-1733-GW

Dissolved HPLC

Lot-Sample #...:	A1D070414-015	**Work Order #...:**	MGNDP1AD	**Matrix.....:**	WG
Date Sampled...:	04/06/11 15:19	**Date Received..:**	04/07/11		
Prep Date.....:	04/12/11	**Analysis Date..:**	04/19/11		
Prep Batch #...:	1102415				
Dilution Factor:	1	**Method.....:**	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

METHOD BLANK REPORT

HPLC

Client Lot #...: A1D070414 **Work Order #...:** MGXER1AA **Matrix.....:** WATER
MB Lot-Sample #: G1D120000-415

Prep Date.....: 04/12/11
Analysis Date..: 04/19/11 **Prep Batch #...:** 1102415
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 #...: A1D070414 **Work Order #...:** MGXER1AC **Matrix.....:** WATER
LCS Lot-Sample#: G1D120000-415
Prep Date.....: 04/12/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1102415
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	**103**	**(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 #...: A1D070414 **Work Order #...:** MGNC91AM-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070414-008 MGNC91AN-MSD
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1102415
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**105**	**(73 - 117)**			**SW846 8330 (Modified**
	105	**(73 - 117)**	**0.58**	**(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 #...: A1D070414 **Work Order #...:** MGNDN1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070414-014 MGNDN1AK-MSD
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1102415
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**109**	**(73 - 117)**			**SW846 8330 (Modified**
	109	**(73 - 117)**	**0.33**	**(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 - Various Methods

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 3, 2011

SDG: A1D070414 Rev 0
Analysis: TAL SOP WS-WC-0050

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 cooler temperatures were documented as being received from 1.9°C – 3.8°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 4/15/11 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
15. Were all CCV calibration analytes within 90-110%?	✓				STL SOP Section 10.4, LCG >110%=J; 85-90%=J/UJ; <85%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 3, 2011

SDG: A1D070414 Rev 0
Analysis: TAL SOP WS-WC-0050

Review Questions:	Yes	No	N/A	Comments	Qualifier
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?	✓				
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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 3, 2011

SDG: A1D070414 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?		✓		The field blank FWGEQUIPRinse3-1759-GW was not logged or analyzed by the lab for nitrate-nitrite.	
2. Were samples preserved properly and received in good condition?	✓			Cooler was received between 1.9-3.8°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 3-9
6. Were all QAPP-specified target analytes reported?	✓				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?	✓				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, with recoveries 90-110%?	✓				Method EPA 353.2 Section 9.3.4
10. Was a method blank prepared and analyzed with each batch?	✓				Method EPA 353.2 Section 9.3.1, 9.3.4
11. Were target analytes detected in the method blank or calibration blank >1/2 the MRL?		✓		ADR checked section;	LCG Attachment A Section 11, *<5x = B*
12. Was a field blank (trip or equipment) collected and analyzed at the required frequency stated in the site-specific FSP?			✓		
13. Were target analytes reported in the field blank analyses (trip or equipment) >1/2 the MRL?			✓	ADR checked section;	*<5x=U*
14. Was a field duplicate analyzed? Were the RPDs acceptable?	✓				
15. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within 90-110%?	✓			Only a LCS is required.	Method EPA 353.2 Section 9.3.3 J/UJ; <50%= R
16. Was a MS/MSD pair prepared with each batch?	✓				*Method EPA 353.2 Section 9.4.1*

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 3, 2011

SDG: A1D070414 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
17. Was the MS/MSD parent sample a Ravenna sample?	✓				
18. Were MS/MSD recoveries and RPD within acceptance criteria?		✓		ADR checked section. The matrix spike and duplicate recovered below control limits at 87% and 88%. The nitrate-nitrite results were qualified as estimated, "UJ/J".	*Method EPA 353.2 Section 9.4.2* *Pj*
19. Were sample concentrations within calibration range?	✓				
20. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
21. Were lab comments included in report? If yes, summarize contents.	✓				

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: FWGBKGmw-006C-1706-GW

General Chemistry

Lot-Sample #...: A1D070414-001 **Work Order #...:** MGNCW **Matrix.....:** WG
Date Sampled...: 04/06/11 09:21 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-015C-1709-GW

General Chemistry

Lot-Sample #...: A1D070414-002 **Work Order #...:** MGNC1 **Matrix.....:** WG
Date Sampled...: 04/06/11 10:35 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-021C-1711-GW

General Chemistry

Lot-Sample #...: A1D070414-003 **Work Order #...:** MGNC2 **Matrix.....:** WG
Date Sampled...: 04/06/11 12:45 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-008C-1707-GW

General Chemistry

Lot-Sample #...: A1D070414-004 **Work Order #...:** MGNC3 **Matrix.....:** WG
Date Sampled...: 04/06/11 14:01 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-009C-1735-GW

General Chemistry

Lot-Sample #...: A1D070414-005 **Work Order #...:** MGNC4 **Matrix.....:** WG
Date Sampled...: 04/06/11 15:31 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-DUP5-1750-GW

General Chemistry

Lot-Sample #...: A1D070414-006 **Work Order #...:** MGNC6 **Matrix.....:** WG
Date Sampled...: 04/06/11 16:55 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1759-GW

General Chemistry

Lot-Sample #...: A1D070414-007 **Work Order #...:** MGNC7 **Matrix.....:** WQ
Date Sampled...: 04/06/11 17:35 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1743-GW

General Chemistry

Lot-Sample #...: A1D070414-008 **Work Order #...:** MGNC9 **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1		MDL.....: 0.005		
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210
		Dilution Factor: 1		MDL.....: 0.48		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1741-GW

General Chemistry

Lot-Sample #...: A1D070414-009 **Work Order #...:** MGNDC **Matrix.....:** WG
Date Sampled...: 04/06/11 12:52 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1		MDL.....: 0.005		
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210
		Dilution Factor: 1		MDL.....: 0.48		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1742-GW

General Chemistry

Lot-Sample #...: A1D070414-010 **Work Order #...:** MGNDD **Matrix.....:** WG
Date Sampled...: 04/06/11 15:48 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	**0.007 B**	**0.1**	**mg/L**	**MCAWW 353.2**	**04/12/11**	**1102390**
	Dilution Factor: 1			MDL.....: 0.005		
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210
	Dilution Factor: 1			MDL.....: 0.48		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-014C-1736-GW

General Chemistry

Lot-Sample #...: A1D070414-011 **Work Order #...:** MGNDG **Matrix.....:** WG
Date Sampled...: 04/06/11 09:16 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-017C-1738-GW

General Chemistry

Lot-Sample #...: A1D070414-012 **Work Order #...:** MGNDJ **Matrix.....:** WG
Date Sampled...: 04/06/11 10:03 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-016C-1737-GW

General Chemistry

Lot-Sample #...: A1D070414-013 **Work Order #...:** MGNDL **Matrix.....:** WG
Date Sampled...: 04/06/11 11:03 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-008C-1734-GW

General Chemistry

Lot-Sample #...: A1D070414-014 **Work Order #...:** MGNDN **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-007C-1733-GW

General Chemistry

Lot-Sample #...: A1D070414-015 **Work Order #...:** MGNDP **Matrix.....:** WG
Date Sampled...: 04/06/11 15:19 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210

Dilution Factor: 1 MDL.....: 0.48

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1D070414 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite		Work Order #: MGXCM1AA		MB Lot-Sample #:	G1D120000-390	
	ND	0.1	mg/L	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1				
Nitrocellulose		Work Order #: MGX1X1AA		MB Lot-Sample #:	G1D130000-210	
	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/13-04/15/11	1103210
		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 #...: A1D070414 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite		Work Order #: MGXCM1AC	LCS Lot-Sample#: G1D120000-390		
	100	(90 - 110)	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1			
Nitrocellulose		Work Order #: MGX1X1AC	LCS Lot-Sample#: G1D130000-210		
	73	(26 - 144)	TAL-SOP WS-WC-005	04/13-04/15/11	1103210
		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 #...: A1D070414 **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite		WO#: MGNC91AF-MS/MGNC91AG-MSD			MS Lot-Sample #: A1D070414-008		
	87 N	(90 - 110)			MCAWW 353.2	04/12/11	1102390
	88 N	(90 - 110)	0.78	(0-20)	MCAWW 353.2	04/12/11	1102390
		Dilution Factor: 1					
Nitrocellulose		WO#: MGNC91AK-MS/MGNC91AL-MSD			MS Lot-Sample #: A1D070414-008		
	72	(26 - 144)			TAL-SOP WS-WC-005	04/13-04/15/11	1103210
	68	(26 - 144)	4.5	(0-45)	TAL-SOP WS-WC-005	04/13-04/15/11	1103210
		Dilution Factor: 1					
Nitrocellulose		WO#: MGNDN1AF-MS/MGNDN1AG-MSD			MS Lot-Sample #: A1D070414-014		
	72	(26 - 144)			TAL-SOP WS-WC-005	04/13-04/15/11	1103210
	80	(26 - 144)	10	(0-45)	TAL-SOP WS-WC-005	04/13-04/15/11	1103210
		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.

Appendix 1

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1D070414										
353.2	FWGSCFmw-001-1741-GW	AQ	N	Nitrate as N (NO3-N)	0.1	0.1U		UJ	mg/L	Ms
353.2	FWGSCFmw-002-1742-GW	AQ	N	Nitrate as N (NO3-N)	0.1	0.007B		J	mg/L	Ms, RI
353.2	FWGSCFmw-003-1743-GW	AQ	N	Nitrate as N (NO3-N)	0.1	0.1U		UJ	mg/L	Ms
8330	FWGRQLmw-014C-1736-GW	AQ	N	2-Nitrotoluene	0.49	0.32J		J	ug/L	RI

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Data Qualifier Summary

Lab Reporting Batch ID: A1D070414 **Laboratory: TALCAN**

EDD Filename: A1D070414 **eQAPP Name: Ravenna 111810**

Method Category: GENCHEM

Method: 353.2 **Matrix: AQ**

Sample ID: **FWGSCFmw-001-1741-GW** ***Collected:*** **4/6/2011 12:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE AS N (NO3-N)	0.1	U	0.005	MDL	0.1	PQL	mg/L	UJ	Ms

Sample ID: **FWGSCFmw-002-1742-GW** ***Collected:*** **4/6/2011 3:48:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE AS N (NO3-N)	0.007	B	0.005	MDL	0.1	PQL	mg/L	J	RI, Ms

Sample ID: **FWGSCFmw-003-1743-GW** ***Collected:*** **4/6/2011 9:22:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE AS N (NO3-N)	0.1	U	0.005	MDL	0.1	PQL	mg/L	UJ	Ms

Method Category: SVOA

Method: 8330 **Matrix: AQ**

Sample ID: **FWGRQLmw-014C-1736-GW** ***Collected:*** **4/6/2011 9:16:00 AM** ***Analysis Type:*** **DL** ***Dilution:*** **0.98**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-NITROTOLUENE	0.32	J	0.086	MDL	0.49	PQL	ug/L	J	RI

Data Qualifier Summary

Lab Reporting Batch ID: A1D070414 **Laboratory: TALCAN**

EDD Filename: A1D070414 **eQAPP Name: Ravenna 111810**

Reason Code Legend

Reason Code	*Description*
Cb	Calibration Blank Contamination
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
Ccv	Continuing Calibration Verification Percent Difference Lower Rejection
Ccv	Continuing Calibration Verification Percent Difference Upper Estimation
Ccv	Continuing Calibration Verification Percent Difference Upper Rejection
Ccv	Continuing Calibration Verification Percent Recovery Lower Estimation
Ccv	Continuing Calibration Verification Percent Recovery Lower Rejection
Ccv	Continuing Calibration Verification Percent Recovery Upper Estimation
Ccv	Continuing Calibration Verification Percent Recovery Upper Rejection
CcvCC	Continuing Calibration Verification Correlation Coefficient
CcvRrf	Continuing Calibration Verification Relative Response Factor
ContTune	Continuing Tune
Dup=0	Duplicate Sample Count = 0
Dup>1	Duplicate Sample Count > 1
Eb	Equipment Blank Contamination
EtoA	Extraction to Analysis Estimation
EtoA	Extraction to Analysis Rejection
Fb	Field Blank Contamination
Fd	Field Duplicate Precision
IcCC	Initial Calibration Correlation Coefficient
IcRrf	Initial Calibration Relative Response Factor
IcRsd	Initial Calibration Percent Relative Standard Deviation
Icv	Initial Calibration Verification Percent Difference Lower Estimation
Icv	Initial Calibration Verification Percent Difference Lower Rejection
Icv	Initial Calibration Verification Percent Difference Upper Estimation
Icv	Initial Calibration Verification Percent Difference Upper Rejection
Icv	Initial Calibration Verification Percent Recovery Lower Estimation
Icv	Initial Calibration Verification Percent Recovery Lower Rejection
Icv	Initial Calibration Verification Percent Recovery Upper Estimation

Data Qualifier Summary

Lab Reporting Batch ID: A1D070414 **Laboratory: TALCAN**

EDD Filename: A1D070414 **eQAPP Name: Ravenna 111810**

Icv	Initial Calibration Verification Percent Recovery Upper Rejection
IcvCC	Initial Calibration Verification Correlation Coefficient
IcvRrf	Initial Calibration Verification Relative Response Factor
IllogicalFraction	Illogical Fraction
InitTune	Initial Tune
Is	Internal Standard Estimation
Is	Internal Standard Rejection
Lcs	Laboratory Control Precision
Lcs	Laboratory Control Spike Lower Estimation
Lcs	Laboratory Control Spike Lower Rejection
Lcs	Laboratory Control Spike Upper Estimation
Lcs	Laboratory Control Spike Upper Rejection
Lcs=0	Laboratory Control Sample Count = 0
Lcs>1	Laboratory Control Sample Count > 1
Ld	Laboratory Duplicate Precision
Mb	Method Blank Contamination
Mb=0	Method Blank Sample Count = 0
Mb>1	Method Blank Sample Count > 1
Moist	Percent Moisture
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Lower Rejection
Ms	Matrix Spike Precision
Ms	Matrix Spike Upper Estimation
Ms	Matrix Spike Upper Rejection
Ms=0	Matrix Spike Sample Count = 0
Ms>1	Matrix Spike Sample Count > 1
PEM	Performance Evaluation Mixture
Preservation	Preservation
ProfJudg	Professional Judgment
REM	Resolution Check Mixture
RI	Reporting Limit

Data Qualifier Summary

Lab Reporting Batch ID: A1D070414 **Laboratory: TALCAN**

EDD Filename: A1D070414 **eQAPP Name: Ravenna 111810**

RI	Reporting Limit > Project Maximum Contamination Limit
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoA	Sampling to Analysis Rejection
StoE	Sampling to Extraction Estimation
StoE	Sampling to Extraction Rejection
StoL	Sampling to Leaching Estimation
StoL	Sampling to Leaching Rejection
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Lower Rejection
Surr	Surrogate/Tracer Recovery Upper Estimation
Surr	Surrogate/Tracer Recovery Upper Rejection
Tb	Trip Blank Contamination
TempEst	Temperature Estimation
TempRej	Temperature Rejection

Reporting Limit Outliers

Lab Reporting Batch ID: A1D070414

Laboratory: TALCAN

EDD Filename: A1D070414

eQAPP Name: Ravenna 111810

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGSCFmw-002-1742-GW	NITRATE AS N (NO3-N)	B	0.007	0.1	PQL	mg/L	J (all detects)

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGRQLmw-014C-1736-GW	2-NITROTOLUENE	J	0.32	0.49	PQL	ug/L	J (all detects)

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 10, 2011
Sample Delivery Group: A1D070402 **Revision:** 0

Data Validator: Angye Dragotta /Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On April 6, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1D070402.

Field Sample ID	Analytes	Method
FWGBKGmw-006c-1706-GW	VOCs SVOCs Pesticides PCBs Cyanide	SW846 8260B SW846 8270C SW846 8081A SW846 8082 SW846 9012A
FWGBKGmw-015c-1709-GW		
FWGBKGmw-021c-1711-GW		
FWGBKGmw-008c-1707-GW		
FWGRQLmw-009c-1735-GW		
FWGRQLmw-DUP5-1750-GW		
FWGEQUIPRinse3-1759-GW		
FWGRQLmw-014c-1736-GW		
FWGRQLmw-016c-1737-GW		
FWGRQLmw-008c-1734-GW		
FWGRQLmw-007c-1733-GW		
FWGSCFmw-003-1743-GW		
FWGSCFmw-001-1741-GW		
FWGSCFmw-002-1742-GW		
FWGRQLmw-017c-1738-GW	PCBs	SW846 8082
FWGBG12mw-012c-1713-GW	Pesticides	SW846 8081A
FWGEQUIPRinse3-1759-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGBKGmw-006c-1706-GF	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGBKGmw-015c-1709-GF		
FWGBKGmw-021c-1711-GF		
FWGBKGmw-008c-1707-GF		
FWGRQLmw-009c-1735-GF		
FWGRQLmw-DUP5-1750-GF		
FWGRQLmw-014c-1736-GF		
FWGRQLmw-017c-1738-GF		
FWGRQLmw-016c-1737-GF		
FWGRQLmw-008c-1734-GF		
FWGRQLmw-007c-1733-GF		
FWGSCFmw-003-1743-GF		
FWGSCFmw-001-1741-GF		
FWGSCFmw-002-1742-GF		
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.

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 10, 2011
Sample Delivery Group: A1D070402 **Revision:** 0

The cooler temperatures were documented as being received from 1.8°C – 3.8°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, 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/ MRL verification criteria
- Method/Field/Trip blank Criteria
- Surrogate recoveries
- Field duplicate RPD criteria
- Laboratory Control Sample criteria
- Matrix Spike Recovery Criteria and RPD

MRL Recovery

4/14/2011

- The opening MRL check recovered above control limits of 70-130% for chloromethane at 132%, vinyl chloride at 133%, chloroethane at 135%, methylene chloride at 198% and bromoform at 133%.
- The closing MRL check recovered above control limits of 70-130% for 1,1,-dichloroethene at 132%, acetone at 144%, chloromethane at 141%, vinyl chloride at 146%, chloroethane at 180% and methylene chloride at 255%.

The acetone and methylene chloride results for FWGEQUIPRinse3-1759-GW and the methylene chloride result for FWGTEAM1-Trip were qualified as estimated, "J". No additional qualifications were made as the bracketed samples were nondetect for the other MRL outliers.

4/15/2011

- The opening MRL check recovered above control limits of 70-130% for chloromethane at 131%, chloroethane at 139% and methylene chloride at 201%.
- The closing MRL check recovered above control limits of 70-130% for methylene chloride at 234%.

No qualifications were made as the bracketed samples were non detect for the MRL outliers.

Blanks

- Methylene chloride was detected in the method blanks analyzed on April 14th and 15th at 1.3ug/L and 1.0ug/L, respectively. The methylene chloride results for samples FWGEQUIPRinse3-1759-GW and FWGTEAM1-Trip were qualified "B".
- FWGTEAM1-Trip had chloroform detected at 0.23ug/L and methylene chloride detected at 0.33ug/L.
- 2-butanone was detected in FWGEQUIPRinse3-1759-GW at 18ug/L, acetone at 11.0ug/L, carbon disulfide at 0.45ug/L, chloroform at 0.83ug/L, methylene chloride at 2.2ug/L and toluene at 0.45ug/L.

The chloroform and methylene chloride results for sample FWGEQUIPRinse3-1759-GW and the carbon disulfide results for samples FWGSCFmw-001-1741 and FWGSCFmw-002-1742 were qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.

LCS Recovery

- The LCS analyzed on 4/14/11 recovered above limits at 130% for carbon disulfide and 126% for methylene chloride.
- The LCS analyzed on 4/15/11 recovered above limits at 130% for carbon disulfide and methylene chloride.

Samples FWGEQUIPRinse3-1759-GW and FWGTEAM1-Trip were qualified as estimated "J" for methylene chloride and samples FWGEQUIPRinse3-1759-GW and FWGSCFmw-002-1742-GW qualified as estimated for carbon disulfide.

Matrix Spike Recovery Criteria

- The matrix spike and duplicate analyzed on sample FWGRQLmw-008c-1734-GW recovered above control limits for carbon disulfide at 135% and 136%, respectively.
- The matrix spike and duplicate analyzed on sample FWGSCFmw-003c-1743-GW recovered above control limits for carbon disulfide at 151% and 142% and below control limits for bromomethane at 69%.

No qualification was made for the carbon disulfide outliers as there were no detected carbon disulfide results reported for samples FWGRQLmw-008c-1734-GW or FWGSCFmw-003c-1743-GW. No qualification was made for bromomethane as there were no other QC outliers associated with this target.

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

MRL Recovery

The closing MRL analyzed 4/19/11 @ 1657 recovered below control limits for 4,6-dinitro-2-methylphenol at 64%, pentachlorophenol at 62% and 2,4-dinitrophenol at 45%. An MDL check was analyzed following the closing MRL with detected results for 2,4-dinitrophenol. The 4,6-dinitro-2methylphenol, pentachlorophenol and 2,4-dinitrophenol results were qualified as estimated, "UJ".

Blanks

bis(2-ethylhexyl) phthalate was detected in the method blank at 4.0ug/L. The bis(2-ethylhexyl) phthalate results for samples FWGBKGmw-015c-1709-GW, FWGBKGmw-008c-1707-GW, FWGBKGmw-021c-1711-GW, FWGRQLmw-009c-1735-GW, FWGRQLmw-007c-1733-GW, FWGRQLmw-008c-1734-GW, FWGRQLmw-014c-1736-GW, FWGRQLmw-016c-1737-GW, FWGRQLmw-DUP5-1750-GW, FWGSCFmw-001-1741-GW and FWGSCFmw-002-1742-GW were qualified, "B" as the detected concentrations were less than 5x contamination.

Matrix Spike Analysis

- For the matrix spike analysis performed on sample FWGRQLmw-008c-1734-GW, the matrix spike and spike duplicate were below control limits for 3,3'-dichlorobenzidine at 20% and 21% and below limits for hexachlorocyclopentadiene at 44% in the MS.
- For the matrix spike analysis performed on sample FWGSCFmw-003-1743-GW, the matrix spike and spike duplicate were below control limits for2,4-dinitrophenol at 35%, 3,3'-dichlorobenzidine at 29% and 27% hexachlorocyclopentadiene at 38% and 41%.

Except for 2,4-dinitrophenol, no qualifications were made for the matrix spike outliers since there were no additional QC outliers associated with the samples. The 2,4-dintrophenol result for sample FWGSCFmw-003-1743-GW, was qualified as estimated, "UJ"

Surrogate Recovery

For sample FWGRQLmw-014c-1736-GW, the surrogates 2-fluorophenol and nitrobenze-d5 recovered below control limits at 49% and 48%, respectively. The surrogate, terphenyl-d14, recovered below control limits in sample FWGRQLmw-DUP5-1750-GW at 42%. No qualification was made as LCG allows for one outlier per fraction without qualification. The surrogates for the method blank appear to have been double spiked. No qualification was made as there were no detected concentrations above the RL in the method blank.

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 10, 2011
Sample Delivery Group: A1D070402 **Revision:** 0

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
- Method/Field blank Criteria
- LCS Recoveries
- Field Duplicate Criteria
- MDL/MRL verification criteria
- Matrix Spike Recovery Criteria and RPD
- Surrogate Recoveries
- Second Column confirmation criteria

Sample FWGSCFmw-001-1742-GW was diluted and reanalyzed due to matrix.

Surrogate Recovery
The surrogate, DCB, recovered below control limits for FWGB12mw-012c-1713-GW at 38%, FWGBKGmw-006c-1706-GW at 45%, FWGRQLmw-008c-1734-GW at 34%, FWGRQLmw-016c-1737-GW at 41% and FWGRQLmw-DUP5-1750-GW at 42%. The surrogate, TCMX, recovered above control limits at 407% and 292% in sample FWGSCFmw-001-1742-GW. The results for FWGB12mw-012c-1713-GW, FWGBKGmw-006c-1706-GW, FWGRQLmw-008c-1734-GW, FWGRQLmw-016c-1737-GW and FWGRQLmw-DUP5-1750-GW were qualified as estimated, "UJ". The endrin result for sample FWGSCFmw-001-1742-GW was qualified as estimated, "J".

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
- Method/Field blank Criteria
- 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 Recovery
The surrogate, DCB, recovered below control limits for FWGBKGmw-006c-1706-GW at 48%, FWGBKGmw-008c-1707-GW at 46%, FWGRQLmw-008c-1734-GW at 35%, FWGRQLmw-009c-1735-GW at 44%, FWGRQLmw-014c-1736-GW at 45%, FWGRQLmw-016c-1737-GW at 32%, FWGRQLmw-DUP5-1750-GW at 40% and FWGSCFmw-001-1741-GW at 21%. The sample results for FWGBKGmw-006c-1706-GW, FWGBKGmw-008c-1707-GW, FWGRQLmw-008c-1734-GW, FWGRQLmw-009c-1735-GW, FWGRQLmw-014c-1736-GW, FWGRQLmw-016c-1737-GW, FWGRQLmw-DUP5-1750-GW and FWGSCFmw-001-1741-GW were qualified as estimated, "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 criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS percent recovery criteria

- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

Blanks
The CCBs analyzed 4/14/11 @1650 had detected arsenic at 5.2ug/L, chromium at 2.2ug/L, cobalt at 2.3ug/L, nickel at 3.1ug/L, silver at 2.9ug/L and vanadium at 2.6ug/L. The nickel result for samples FWGRQLmw-009c-1735-GF and FWGRQLmw-DUP5-1750-GF were qualified "B". The arsenic result for samples FWGRQLmw-009c-1735-GF, FWGBKGmw-008c-1707-GF and FWGSCFmw-001-1741-GF were qualified "B". No additional qualifications were made for the other contaminates, as there were no detected concentrations reported for the associated field samples. 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.

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 criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

Blanks

- The ICB analyzed 4/11/11 had sodium detected at 34.5ug/L and thallium detected at 0.2ug/L. There were no sodium concentrations reported <5x contamination, so no qualifications were made for sodium. The thallium results for samples FWGSCFmw-001-1741-GF, FWGRQLmw-014c-1736-GF, FWGRQLmw-017c-1738-GF and FWGRQLmw-007c-1733-GF were qualified "U" as the detected concentrations were <5x the thallium contamination.
- The CCBs analyzed 4/11/11 had detected thallium from 0.16ug/L to 0.26ug/L and sodium at 57.5ug/L to 93ug/L. There were no sodium concentrations reported for the associated field samples <5x contamination, so no sodium qualifications were made. No additional qualifications were made for thallium other than those made for the ICB contamination.
- The method blank had zinc detected at 5.9ug/L. All zinc sample results were qualified, "B", due to sample results <5x blank contamination with the exception of FWGSCFmw-002-1742-GF.
- FWGEQUIPRinse3-1759-GW had zinc detected at 5.4ug/L. All zinc sample results were qualified, "B", due to sample results <5x blank contamination with the exception of FWGSCFmw-002-1742-GF.

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

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 criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

No qualifications were made for due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 10, 2011
Sample Delivery Group: A1D070402 **Revision:** 0

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
- ICB /CCBs criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria and RPD

No outliers noted.

SAMPLE SUMMARY

A1D070402

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MGM67	001	FWGTEAM1-TRIP	04/06/11	08:00
MGM68	002	FWGBKGmw-006C-1706-GW	04/06/11	09:21
MGM69	003	FWGBKGmw-006C-1706-GF	04/06/11	09:21
MGM7A	004	FWGBKGmw-015C-1709-GW	04/06/11	10:35
MGM7C	005	FWGBKGmw-015C-1709-GF	04/06/11	10:35
MGM7E	006	FWGBKGmw-021C-1711-GW	04/06/11	12:45
MGM7F	007	FWGBKGmw-021C-1711-GF	04/06/11	12:45
MGM7G	008	FWGBKGmw-008C-1707-GW	04/06/11	14:01
MGM7H	009	FWGBKGmw-008C-1707-GF	04/06/11	14:01
MGM7J	010	FWGRQLmw-009C-1735-GW	04/06/11	15:31
MGM7K	011	FWGRQLmw-009C-1735-GF	04/06/11	15:31
MGM7L	012	FWGRQLmw-DUP5-1750-GW	04/06/11	16:55
MGM7M	013	FWGRQLmw-DUP5-1750-GF	04/06/11	16:55
MGM7N	014	FWGEQUIPRINSE3-1759-GW	04/06/11	17:35
MGM7P	015	FWGTEAM2-TRIP	04/06/11	08:00
MGM7Q	016	FWGSCFmw-003-1743-GW	04/06/11	09:22
MGM7R	017	FWGSCFmw-003-1743-GF	04/06/11	09:22
MGM7T	018	FWGSCFmw-001-1741-GW	04/06/11	12:52
MGM7V	019	FWGSCFmw-001-1741-GF	04/06/11	12:52
MGM7W	020	FWGSCFmw-002-1742-GW	04/06/11	15:48
MGM7X	021	FWGSCFmw-002-1742-GF	04/06/11	15:48
MGM71	022	FWGTEAM3-TRIP	04/06/11	08:00
MGM72	023	FWGRQLmw-014C-1736-GW	04/06/11	09:16
MGM74	024	FWGRQLmw-014C-1736-GF	04/06/11	09:16
MGM8T	025	FWGB12mw-012C-1713-GW	04/06/11	09:33
MGM81	026	FWGRQLmw-017C-1738-GW	04/06/11	10:03
MGM82	027	FWGRQLmw-017C-1738-GF	04/06/11	10:03
MGM87	028	FWGRQLmw-016C-1737-GW	04/06/11	11:03
MGM88	029	FWGRQLmw-016C-1737-GF	04/06/11	11:03
MGM89	030	FWGRQLmw-008C-1734-GW	04/06/11	13:09
MGM9D	031	FWGRQLmw-008C-1734-GF	04/06/11	13:09
MGM9E	032	FWGRQLmw-007C-1733-GW	04/06/11	15:19
MGM9G	033	FWGRQLmw-007C-1733-GF	04/06/11	15:19

(Continued on next page)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	4/6/11	000493
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 2
1800 Carillon Blvd	513-825-7500		
City / State / Zip Code	**Site Contact / Lab Contact**		
Cincinnati / OH / 45240	E. Corbin / M. Loeb		
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP OH	Lab Pickup		
Contract/Purchase Order/Quote No.			
030240.0006 PO16726			

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: VOCs 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/6020/7470	Special Instructions/ Conditions of Receipt
																					Cooler ID
FWGTeam1-Trip	4/6/11	08:00		X						3			X								727
FWGBKGmw-006C-1706-GW	4/6/11	09:21		X			9			3	1		X	X	X	X	X	X	X		BRUFF1
FWGBKGmw-006C-1706-GF	4/6/11	09:21		X					1											X	BRUFF1
FWGBKGmw-015C-1709-GW	4/6/11	10:35		X			9			3	1		X	X	X	X	X	X	X		727
FWGBKGmw-015C-1709-GF	4/6/11	10:35		X					1											X	727
FWGBKGmw-021C-1711-GW	4/6/11	12:45		X			9			3	1		X	X	X	X	X	X	X		317
FWGBKGmw-021C-1711-GF	4/6/11	12:45		X					1											X	317
FWGBKGmw-008C-1707-GW	4/6/11	14:01		X			9			3	1		X	X	X	X	X	X	X		IC3
FWGBKGmw-008C-1707-GF	4/6/11	14:01		X					1											X	IC3
FWGRQLmw-009C-1635-GW	4/6/11	15:31		X			9			3	1		X	X	X	X	X	X	X		H113
FWGRQLmw-009C-1635-GF	4/6/11	15:31		X					1											X	H113
FWGRQLmw-DUP5-1750-GW	4/6/11	16:55		X			9			3	1		X	X	X	X	X	X	X		405A

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 are field filtered

1. Relinquished By	Date	Time	1. Received By	Date	Time
Erik Corbin EQ	4/6/11	18:30	TC FedEx	4/6/11	1830
2. Relinquished By	**Date**	**Time**	**2. Received By**	**Date**	**Time**
TC FedEx	4/6/11	1944	JL Vega	4/7/11	0700
3. Relinquished By	**Date**	**Time**	**3. Received By**	**Date**	**Time**

Comments
Temps may not meet requirements if sample collection time is close to lab pickup time
All VOCs in Cooler 727

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

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/6/11	Chain of Custody Number: 000494
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513-825-7500	Lab Number:	Page 2 of 2
City: Cincinnati / State: OH / Zip Code: 45240	Site Contact: E. Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP OH	Carrier/Waybill Number: Lab Pickup		
Contract/Purchase Order/Quote No.: 030240.0006 PO # 16726			

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: VOCs 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/7470	NO3/NO2 353.2
FWGRQLmw-DUP5-1750-GF	4/6/11	16:55		X					1											X	
FWGEQUIPRinse3-1759-GW	4/6/11	17:35		X			9	1	1	3	1		X	X	X	X	X	X	X	X	X

Special Instructions/ Conditions of Receipt

Cooler ID
405A
ASD88 metals not Filtered.

EQ 4/6/11

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 are field filtered

	Date	Time		Date	Time
1. Relinquished By: Emily Corbin EQ	4/6/11	18:30	1. Received By: TC Fedex	4/6/11	1830
2. Relinquished By: TC Fedex	4/6/11	1944	2. Received By:	4/7/11	0700
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments
Temps may not meet requirements if sample collection time is close to lab pickup time.
All VOCs in cooler 727

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

Chain of Custody Record

TestAmerica 29
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Canton, Ohio
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	019330
Address: 1800 CARILLON BLVD	Telephone: 513 825 7500	Telephone: 513 825 7500	Telephone: 330 497 9396	1 of ___ COCs
City/State/Zip: Cincinnati OH 45240	Email: clear-ecorbin@eqm.com			
Phone: 513 825-7500		TAT if different from Below: ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP	Method of Shipment/Carrier: Lab Pickup.			
Project Number: 30240.0006	Shipping/Tracking No: N/A			
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Analyses: VOC	SVOC	Pest	PCB	Explo	Propellant	Cyanide	ONO2 NO3	Methane, Ethane, Ethene	Field	Sample Specific Notes / Special Instructions:
FWG Team 2 - Trip	4/6/11	0800		1						2					N		X										7111
FWG SCFmw-003-1743 GW		0922		1				3		9	3				N	G	X	X	X	X	X	X	X	X			S-1, EC9, 185
FWG SCFmw-003-1743 GF		0922		1					3						X	G									X		S1, EC9, 185
FWG SCFmw-001-1741-GW		1252		1				1		3	1				N	G	X	X	X	X	X	X	X	X			partial EC15
FWG SCFmw-001-1741-GF		1252		1					1						Y	G									X		volume EC15
FWG SCFmw-002-1742-GW		1548		1				1		3	1		9		N	G	X	X	X	X	X	X	X	X			7111
FWG SCFmw-002-1742-GF		1548		1					1						Y	G									X		7111

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 of collection time is close to lab pickup.
Metals (GF) were field filtered.
All VOAs in Cooler ID 7111

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	4/6/11 18:30	TC Todic	TAL-NC	4/6/11 - 1830
TC Todic	TAL-NC	4/6/11 - 1944	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA NC	4/7/11 0700

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North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/6/11	Chain of Custody Number: 000467
Address: 1800 Carillon	Telephone Number (Area Code)/Fax Number: 513825-7500	Lab Number: 330497936	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 OH	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 30240.0006			

Analysis (Attach list if more space is needed)

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 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010 6020 7470	Special Instructions/ Conditions of Receipt
FWG Team 3 - Trip	4-6-11	0800		X									X								405
FWGRQLmw-014C-1636-GW	4-6-11	0916		X			9			3	1		X	X	X	X	X	X	X		405
FWGRQLmw-014C-1636-GF	↓	↓		X					1											X	405
FWGB12mw-012C-1713-GW	4/6/11	0933		X											X						325 **
FWGRQLmw-017C-1738-GW		1003		X			3									X	X	X			~~CHI~~ 325
FWGRQLmw-017C-1738-GF		↓		X					1											X	~~CHI~~ 325
* FWGRQLmw-016C-1637-GW		1103		X			9			3	1		X	X	X	X	X	X	X		A-1
* FWGRQLmw-016C-1637-GF		↓		X					1											X	A-1
FWGRQLmw-008C-1734-GW		1309		X			27			9	3		X	X	X	X	X	X	X		15
FWGRQLmw-008C-1734-GF		↓		X					3											X	15
FWGRQLmw-~~010C~~ 007C-1733-GW		1519		X			9			3	1		X	X	X	X	X	X	X		316
FWGRQLmw-007C-1733-GF	↓	↓		X					1											X	316

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 [X] Other SOW

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	4/6/11	18:30	1. Received By: RC Robis	4/6/11	1830
2. Relinquished By: RC Robis	4/6/11	1944	2. Received By: [signature]	4/7/11	0700
3. Relinquished By			3. Received By		

Comments: Metals (GF) were field filtered
Temps may not meet requirements if sample collection time is close to lab pickup time.
* ~~Change is incorrect - keep 1637~~ 4/6/11
* labels are incorrect 8 hours be FWGRQLmw-016C-1737

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

** Additional Vol. other than pesticide bottle to supplement Vol. rec'd 4/5/11

All VOAs in cooler 405

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** ATD070402
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 4/2/11 Opened on 4/2/11
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 19 Quantity Unsalvageable 1
   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~~ 4/7/11 ~~☒~~ 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 4/7/11 by gm via Verbal ☐ Voice Mail ☐ Other ☒ Email
Concerning #14

14. CHAIN OF CUSTODY

The following discrepancies occurred:

COC ID = FWGRQLmw-017C-1738-GW/GF Label ID = FWGRQLmw-017C-1638-GW/GF
COC ID = FWGRQLmw-016C-1737-GW/GF Label IDs = FWGRQLmw-016C-1637-GW/GF
COC ID = FWGRQLmw-008C-1734-GW/GF Label IDs = FWGRQLmw-008C-1634-GW/GF
Will log IDs per COC per Erik Corbin
Received MS/MSD volume for sample FWGRQLmw-008C-1734-GW/GF not marked on COC. Will log for MS/MSD per volume per Erik Corbin.

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#* 100110-HNO_3; *Sulfuric Acid Lot#* 110410-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
1706	<2 >12	4/7/11	gm
1709	<2 >12		
1711	<2 >12		
1707	<2 >12		
1635	<2 >12		
1750	<2 >12		
1759	<2 <2 >12		
1743	<2 <2 >12 <2 <2 >12 <2 <2 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1741	<2 <2 >12	4/2/11	T
1742	<2 <2 >12		
1636	<2 >12		
1738	<2		
1737	<2 >12		
1734	<2 >12		
1733	<2 >12		

Cooler #	Temp. °C	Cooler #	Temp.	Method	Coolant
Bruff 1	2.8	405	1.8	IR	Ice
727	3.3	325	2.1		
317	1.9	A-1	3.2		
IC3	3.5	15	2.2		
H113	2.8	C8	2.8		
405A	2.6	C333	2.5		
ASD88	3.4	316	1.9		
S-1	2.9				
EC9	3.1				
185	3.8				
E115	1.9				
711	2.8				

Discrepancies Cont'd:

ANALYTICAL METHODS SUMMARY

A1D070402

PARAMETER	ANALYTICAL METHOD
Cyanide, Total	SW846 9012A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
ICP-MS (6020)	SW846 6020
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Organochlorine Pesticides	SW846 8081A
PCBs by SW-846 8082	SW846 8082
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B
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.

CASE NARRATIVE

A1D070402

The following report contains the analytical results for thirty 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 April 07, 2011, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods and Louisville Corps Guidelines version 5, where applicable, in all analytical reports. 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 April 27, 2011. 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. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

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 1.8 to 3.8° 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.

The matrix spike/matrix spike duplicate(s) for FWGSCFmw-003-1743-GW and FWGRQLmw-008C-1734-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 matrix spike/matrix spike duplicate(s) for batch(es) 1104189 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 batches 1104189 and 1105156 was recovered high and outside of criteria for Methylene Chloride and Carbon Disulfide. Since the analyte was not detected in any of the samples above reporting limits, the results were accepted. Slight positive bias is not believed to have impacted data quality.

CASE NARRATIVE (continued)

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 FWGSCFmw-003-1743-GW and FWGRQLmw-008C-1734-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.

3-Methylphenol (m-Cresol) and 4-Methylphenol (p-Cresol) co-elute and cannot be reported as separate analytes. When these analytes are requested, the reported result represents a probable combination of the two analytes.

For sample(s)FWGRQLmw-DUP5-1750-GW and FWGRQLmw-014C-1736-GW, the recovery for surrogate compound(s) are outside acceptance criteria. Since LCG criterion is that all surrogates be above 10%, no corrective action is required.

The method blank for batch 1104189 was double surrogated.

The LCS associated with batch 1104189 had a Benzoic Acid recovery of 29.37%.

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 reporting limits are elevated due to matrix interference for sample FWGSCFmw-001-1741-GW.

CASE NARRATIVE (continued)

PESTICIDES-8081(cont)

Two analyses were used to report sample(s) FWGSCFmw-001-1741-GW due to matrix interference of Sulfur in the extract.

For sample(s) FWGBKGmw-006C-1706-GW, FWGRQLmw-DUP5-1750-GW, FWGSCFmw-001-1741-GW, FWGB12mw-012C-1713-GW, FWGRQLmw-016C-1737-GW, FWGRQLmw-008C-1734-GW, FWGRQLmw-008C-1734-GWMS, FWGRQLmw-008C-1734-GWMSD and the LCS for batch 1099014 the recovery for surrogate compound(s) are outside acceptance criteria. Since LCG criterion is that all surrogates be above 10%, no corrective action is required.

The opening CCV failed Methoxychlor biased high for samplesFWGBKGmw-006C-1706-GW, FWGBKGmw-015C-1709-GW, FWGBKGmw-021C-1711-GW, FWGBKGmw-008C-1707-GW, FWGRQLmw-009C-1735-GW, FWGRQLmw-DUP5-1750-GW, FWGEQUIPRINSE3-1759-GW, FWGSCFmw-003-1743-GW, and FWGSCFmw-001-1741-GW since the samples were non-detect (or J flag values), no corrective action is needed.

The opening CCV failed Methoxychlor biased high for samples FWGSCFmw-003-1743-GWMS, FWGSCFmw-003-1743-GWMSD, FWGSCFmw-001-1741-GW, FWGSCFmw-002-1742-GW, FWGRQLmw-014C-1736-GW, FWGB12mw-012C-1713-GW, FWGRQLmw-016C-1737-GW, and FWGRQLmw-008C-1734-GW. Since the samples were non-detect (or J-flag values), no corrective action is needed.

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGBKGmw-006C-1706-GW, FWGBKGmw-008C-1707-GW, FWGBKGmw-008C-1707-GWMS, FWGBKGmw-008C-1707-GWMSD, FWGRQLmw-009C-1735-GW, FWGRQLmw-DUP5-1750-GW, FWGSCFmw-001-1741-GW, FWGRQLmw-014C-1736-GW, FWGRQLmw-016C-1737-GW, FWGRQLmw-008C-1734-GW, LCS associated with batch 1099015 and the LCS associated with batch 1102047 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%).

There was no client requested matrix spike / matrix spike duplicate (MS/MSD) in batch 1102047.

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 CCB associated with batch 1098019 was greater than or equal to the requested reporting for Arsenic. Since the sample result(s) was/were below the requested reporting limit the result(s) was/were accepted.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

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, a Matrix Spike/Matrix Spike Duplicate (MS/MSD) pair or a Matrix Spike/Sample Duplicate (MS/DU) pair.
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. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch, with the exception of poor performing analytes. A list of these analytes is listed below. No corrective action is taken if these analytes do not meet criteria.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.

Poor performers

Method 8270 Water and Solid:	
4-Nitrophenol	3,3' – Dichlorobenzidine
Benzoic Acid	2,4,6 - Tribromophenol
Phenol	2,4-Dinitrophenol
Phenol-d5	Pentachlorophenol
4,6-Dinitro-2-methylphenol	Hexachlorocyclopentadiene (LCG only)
Benzyl Alcohol	4-Chloroaniline
Method 8151 Solid	
Dinoseb	
Method 8260 Water and Solid	
Dichlorodifluoromethane	Hexachlorobutadiene
Trichlorofluoromethane	Naphthalene
Chloroethane	1,2,3-Trichlorobenzene
Acetone	1,2,4-Trichlorobenzene
Bromomethane	2,2-Dichloropropane
Bromoform	Chloromethane

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 ten fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

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 do 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 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 or Matrix Spike/Sample Duplicate.

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, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, 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), DoD ELAP (ADE-1437) USDA Soil Permit (P33-08-00123)

MANUAL INTEGRATION SUMMARY

Lot A1D070402

Client ID: FWGSCFmw-003-1743-G
Compound Name: Pyridine
Instrument ID: a4hp10.i
File Name: MGM7Q1AF.D
Inj. Date and Time: 19-APR-2011 11:21
Manual Integration Reason: Peak not found

Client ID: FWGSCFmw-003-1743-G
Compound Name: Acetophenone
Instrument ID: a4hp10.i
File Name: MGM7Q1AF.D
Inj. Date and Time: 19-APR-2011 11:21
Manual Integration Reason: Peak not found

Client ID: FWGSCFmw-003-1743-G
Compound Name: Benzoic Acid
Instrument ID: a4hp10.i
File Name: MGM7Q1AF.D
Inj. Date and Time: 19-APR-2011 11:21
Manual Integration Reason: Poor Chromatography

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: P1341583.D
Inj. Date and Time: 16-APR-2011 05:17
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: P1341822.D
Inj. Date and Time: 18-APR-2011 11:03
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGSCFmw-003-1743-G
Compound Name: Pyridine
Instrument ID: a4hp10.i
File Name: MGM7Q1AG.D
Inj. Date and Time: 19-APR-2011 11:40
Manual Integration Reason: Peak not found

Client ID: FWGSCFmw-003-1743-G
Compound Name: Acetophenone
Instrument ID: a4hp10.i
File Name: MGM7Q1AG.D
Inj. Date and Time: 19-APR-2011 11:40
Manual Integration Reason: Peak not found

MANUAL INTEGRATION SUMMARY

Lot A1D070402 (Continued)

Client ID: FWGSCFmw-003-1743-G
Compound Name: Benzoic Acid
Instrument ID: a4hp10.i
File Name: MGM7Q1AG.D
Inj. Date and Time: 19-APR-2011 11:40
Manual Integration Reason: Poor Chromatography

Client ID: FWGRQLmw-016C-1737-
Compound Name: bis(2-ethylhexyl)Phthalate
Instrument ID: a4hp10.i
File Name: MGM871AC.D
Inj. Date and Time: 19-APR-2011 14:09
Manual Integration Reason: Poor Chromatography

Client ID: FWGRQLmw-008C-1734-
Compound Name: Pyridine
Instrument ID: a4hp10.i
File Name: MGM891AF.D
Inj. Date and Time: 19-APR-2011 12:17
Manual Integration Reason: Peak not found

Client ID: FWGRQLmw-008C-1734-
Compound Name: Acetophenone
Instrument ID: a4hp10.i
File Name: MGM891AF.D
Inj. Date and Time: 19-APR-2011 12:17
Manual Integration Reason: Peak not found

Client ID: FWGRQLmw-008C-1734-
Compound Name: Pyridine
Instrument ID: a4hp10.i
File Name: MGM891AG.D
Inj. Date and Time: 15-APR-2011 11:23
Manual Integration Reason: Poor Chromatography

Client ID: FWGRQLmw-008C-1734-
Compound Name: Pyridine
Instrument ID: a4hp10.i
File Name: MGM891AG.D
Inj. Date and Time: 19-APR-2011 12:36
Manual Integration Reason: Peak not found

Client ID: FWGRQLmw-008C-1734-
Compound Name: Acetophenone
Instrument ID: a4hp10.i
File Name: MGM891AG.D
Inj. Date and Time: 19-APR-2011 12:36
Manual Integration Reason: Peak not found

MANUAL INTEGRATION SUMMARY

Lot A1D070402 (Continued)

Client ID: FWGSCFmw-001-1741-G
Compound Name: Tetrachloro-m-xylene
Instrument ID: a2hp9.i
File Name: P9416032.D
Inj. Date and Time: 16-APR-2011 23:42
Manual Integration Reason: Unknown

Client ID: FWGSCFmw-001-1741-G
Compound Name: Diallate
Instrument ID: a2hp9.i
File Name: P9416032.D
Inj. Date and Time: 16-APR-2011 23:42
Manual Integration Reason: Unknown

Client ID: FWGSCFmw-001-1741-G
Compound Name: Hexachlorobenzene
Instrument ID: a2hp9.i
File Name: P9416032.D
Inj. Date and Time: 16-APR-2011 23:42
Manual Integration Reason: Unknown

Client ID: FWGSCFmw-001-1741-G
Compound Name: alpha-BHC
Instrument ID: a2hp9.i
File Name: P9416032.D
Inj. Date and Time: 16-APR-2011 23:42
Manual Integration Reason: Unknown

Client ID: FWGSCFmw-001-1741-G
Compound Name: gamma-BHC (Lindane)
Instrument ID: a2hp9.i
File Name: P9416032.D
Inj. Date and Time: 16-APR-2011 23:42
Manual Integration Reason: Unknown

Client ID: FWGSCFmw-001-1741-G
Compound Name: beta-BHC
Instrument ID: a2hp9.i
File Name: P9416032.D
Inj. Date and Time: 16-APR-2011 23:42
Manual Integration Reason: Unknown

Client ID: FWGSCFmw-001-1741-G
Compound Name: delta-BHC
Instrument ID: a2hp9.i
File Name: P9416032.D
Inj. Date and Time: 16-APR-2011 23:42
Manual Integration Reason: Unknown

MANUAL INTEGRATION SUMMARY

Lot A1D070402 (Continued)

Client ID: FWGSCFmw-001-1741-G
Compound Name: Isodrin
Instrument ID: a2hp9.i
File Name: P9416032.D
Inj. Date and Time: 16-APR-2011 23:42

Client ID: FWGSCFmw-001-1741-G
Compound Name: alpha-Chlordane
Instrument ID: a2hp9.i
File Name: P9416032.D
Inj. Date and Time: 16-APR-2011 23:42

Client ID: INTRA-LAB CHECK
Compound Name: Pyridine
Instrument ID: a4hp10.i
File Name: MGPXW1AC.D
Inj. Date and Time: 15-APR-2011 09:29
Manual Integration Reason: Peak not found

Client ID: INTRA-LAB CHECK
Compound Name: 1,4-Dioxane
Instrument ID: a4hp10.i
File Name: MGPXW1AC.D
Inj. Date and Time: 19-APR-2011 10:25
Manual Integration Reason: Poor Chromatography

Client ID: INTRA-LAB CHECK
Compound Name: Pyridine
Instrument ID: a4hp10.i
File Name: MGPXW1AC.D
Inj. Date and Time: 19-APR-2011 10:25
Manual Integration Reason: Peak not found

Client ID: INTRA-LAB CHECK
Compound Name: Acetophenone
Instrument ID: a4hp10.i
File Name: MGPXW1AC.D
Inj. Date and Time: 19-APR-2011 10:25
Manual Integration Reason: Peak not found

Client ID: INTRA-LAB CHECK
Compound Name: Benzoic Acid
Instrument ID: a4hp10.i
File Name: MGPXW1AC.D
Inj. Date and Time: 19-APR-2011 10:25
Manual Integration Reason: Poor Chromatography

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 6, 2011

SDG: A1D070402 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 1.8 and 3.8 °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–March 8, 2011 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 and bromoform used a weighted linear curve.	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?	✓			4/14/11 @ 2017	LCG Table 1 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 6, 2011

SDG: A1D070402 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%?		✓		4/14/2011 • The opening MRL check recovered above control limits of 70-130% for chloromethane at 132%, vinyl chloride at 133%, chloroethane at 135%, methylene chloride at 198% and bromoform at 133%. • The closing MRL check recovered above control limits of 70-130% for 1,1,-dichloroethene at 132%, acetone at 144%, chloromethane at 141%, vinyl chloride at 146%, chloroethane at 180% and methylene chloride at 255%. The acetone and methylene chloride results for FWGEQUIPRinse3-1759-GW and the methylene chloride result for FWGTEAM1-Trip were qualified as estimated, "J". No additional qualifications were made as the bracketed samples were nondetect for the other MRL outliers. 4/15/2011 • The opening MRL check recovered above control limits of 70-130% for chloromethane at 131%, chloroethane at 139% and methylene chloride at 201%. • The closing MRL check recovered above control limits of 70-130% for methylene chloride at 234%. No qualifications were made as the bracketed samples were non detect for the MRL outliers.	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed? Were results 80-120%?	✓			3/8/2011 @1059	LCG Table 1, <60%=J/R >120%=J; 60-80%=J/UJ
18. Was a CCV run every 12 hours?	✓			4/14/11 @ 1041, 4/15/11 @1038	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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 6, 2011

SDG: A1D070402 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓			4/14/11-Carbon disulfide had a %D above control limits at 22.5%. No qualifications were made as the avg %D was <20%. 4/15/11-Carbon disulfide had a %D above control limits at 26%, 4-methyl-2-pentanone at 24% and 2-hexanone at 23%. No qualifications were made as the avg %D was <20%.	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 blanks analyzed on April 14th and 15th at 1.3ug/L and 1.0ug/L, respectively. The methylene chloride results for samples FWGEQUIPRinse3-1759-GW and FWGTEAM1-Trip were qualified "B".	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse3-1759-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGTEAM1-Trip had chloroform detected at 0.23ug/L and methylene chloride detected at 0.33ug/L. • 2-butanone was detected in FWGEQUIPRinse3-1759-GW at 18ug/L, acetone at 11.0ug/L, carbon disulfide at 0.45ug/L, chloroform at 0.83ug/L, methylene chloride at 2.2ug/L and toluene at 0.45ug/L. The chloroform and methylene chloride results for sample FWGEQUIPRinse3-1759-GW and the carbon disulfide results for samples FWGSCFmw-001-1741 and FWGSCFmw-002-1742 were qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.	<5/10X =B
29. Was a field duplicate analyzed?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 6, 2011

SDG: A1D070402 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
30. Were the field duplicates RPDs within ±30%?	✓				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; The LCS analyzed on 4/14/11 recovered above limits at 130% for carbon disulfide and 126% for methylene chloride. The LCS analyzed on 4/15/11 recovered above limits at 130% for carbon disulfide and methylene chloride. Samples FWGEQUIPRinse3-1759-GW and FWGTEAM1-Trip were qualified as estimated "J" for methylene chloride and samples FWGEQUIPRinse3-1759-GW and FWGSCFmw-002-1742-GW qualified as estimated for carbon disulfide.	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%?		✓		The matrix spike and duplicate analyzed on sample FWGRQLmw-008c-1734-GW recovered above control limits for carbon disulfide at 135% and 136%, respectively. The matrix spike and duplicate analyzed on sample FWGSCFmw-003c-1743-GW recovered above control limits for carbon disulfide at 151% and 142% and below control limits for bromomethane at 69%. No qualification was made for the carbon disulfide outliers as there were no detected carbon disulfide results reported for samples FWGRQLmw-008c-1734-GW or FWGSCFmw-003c-1743-GW. No qualification was made for bromomethane as there were no other QC outliers associated with this target.	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.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 6, 2011

SDG: A1D070402 R0
Analysis: SW846 8260B

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 #...: A1D070402-001 **Work Order #...:** MGM671AA **Matrix.....:** WQ
Date Sampled...: 04/06/11 08:00 **Date Received..:** 04/07/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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	**0.33 J,B**	**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	**0.23 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	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 #...: A1D070402-001 **Work Order #...:** MGM671AA **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	86	(50 - 150)
Toluene-d8	81	(50 - 150)
4-Bromofluorobenzene	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: FWGBKGmw-006C-1706-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-002 **Work Order #...:** MGM681AA **Matrix.....:** WG
Date Sampled...: 04/06/11 09:21 **Date Received..:** 04/07/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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: FWGBKGmw-006C-1706-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-002 **Work Order #...:** MGM681AA **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	85	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-015C-1709-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-004 **Work Order #...:** MGM7A1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 10:35 **Date Received..:** 04/07/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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: FWGBKGmw-015C-1709-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-004 **Work Order #...:** MGM7A1AA **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	85	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	80	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-021C-1711-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-006 **Work Order #...:** MGM7E1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 12:45 **Date Received..:** 04/07/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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: FWGBKGmw-021C-1711-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-006 Work Order #...: MGM7E1AA 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	85	(50 - 150)
1,2-Dichloroethane-d4	87	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-008C-1707-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-008 **Work Order #...:** MGM7G1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 14:01 **Date Received..:** 04/07/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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: FWGBKGmw-008C-1707-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-008 **Work Order #...:** MGM7G1AA **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	85	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-009C-1735-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-010 **Work Order #...:** MGM7J1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 15:31 **Date Received..:** 04/07/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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: FWGRQLmw-009C-1735-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-010 **Work Order #...:** MGM7J1AA **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	85	(50 - 150)
Toluene-d8	76	(50 - 150)
4-Bromofluorobenzene	77	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-DUP5-1750-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-012 **Work Order #...:** MGM7L1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 16:55 **Date Received..:** 04/07/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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: FWGRQLmw-DUP5-1750-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-012 **Work Order #...:** MGM7L1AA **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	88	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	77	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1759-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-014 **Work Order #...:** MGM7N1AA **Matrix.....:** WQ
Date Sampled...: 04/06/11 17:35 **Date Received..:** 04/07/11
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104189
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	**2.2 B**	**2.0**	**ug/L**	**0.33**
Acetone	**11**	**10**	**ug/L**	**1.1**
Carbon disulfide	**0.45 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	**0.83 J**	**1.0**	**ug/L**	**0.16**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**18**	**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	**0.45 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: FWGEQUIPRINSE3-1759-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-014 **Work Order #...:** MGM7N1AA **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	83	(50 - 150)
1,2-Dichloroethane-d4	81	(50 - 150)
Toluene-d8	80	(50 - 150)
4-Bromofluorobenzene	80	(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: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1D070402-015	**Work Order #...:** MGM7P1AA	**Matrix.....:** WQ	
Date Sampled...: 04/06/11 08:00	**Date Received..:** 04/07/11		
Prep Date.....: 04/15/11	**Analysis Date..:** 04/15/11		
Prep Batch #...: 1105156			
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	**0.22 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	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 #...: A1D070402-015 **Work Order #...:** MGM7P1AA **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	83	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1743-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-016 **Work Order #...:** MGM7Q1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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-003-1743-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-016 **Work Order #...:** MGM7Q1AA **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	84	(50 - 150)
Toluene-d8	80	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1741-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-018 **Work Order #...:** MGM7T1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 12:52 **Date Received..:** 04/07/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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	**0.44 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-001-1741-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-018 **Work Order #...:** MGM7T1AA **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	90	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	80	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1742-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-020 **Work Order #...:** MGM7W1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 15:48 **Date Received..:** 04/07/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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	**0.28 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-002-1742-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-020 **Work Order #...:** MGM7W1AA **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	85	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	79	(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 #...: A1D070402-022 **Work Order #...:** MGM711AA **Matrix.....:** WQ
Date Sampled...: 04/06/11 08:00 **Date Received..:** 04/07/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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	**0.22 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	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 #...: A1D070402-022 **Work Order #...:** MGM711AA **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	86	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	80	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-014C-1736-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-023 **Work Order #...:** MGM721AA **Matrix.....:** WG
Date Sampled...: 04/06/11 09:16 **Date Received..:** 04/07/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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: FWGRQLmw-014C-1736-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-023 **Work Order #...:** MGM721AA **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	85	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-016C-1737-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-028 **Work Order #...:** MGM871AA **Matrix.....:** WG
Date Sampled...: 04/06/11 11:03 **Date Received..:** 04/07/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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: FWGRQLmw-016C-1737-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-028 Work Order #...: MGM871AA 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	90	(50 - 150)
1,2-Dichloroethane-d4	87	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-008C-1734-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-030 **Work Order #...:** MGM891AA **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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: FWGRQLmw-008C-1734-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-030 **Work Order #...:** MGM891AA **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	85	(50 - 150)
Toluene-d8	80	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-007C-1733-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-032 **Work Order #...:** MGM9E1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 15:19 **Date Received..:** 04/07/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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: FWGRQLmw-007C-1733-GW

GC/MS Volatiles

Lot-Sample #...: A1D070402-032 **Work Order #...:** MGM9E1AA **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	85	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1D070402 **Work Order #...:** MG1FL1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D140000-189

Prep Date.....: 04/14/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/14/11 **Prep Batch #...:** 1104189
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
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
Bromochloromethane	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	**1.3 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 #...: A1D070402 **Work Order #...:** MG1FL1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	83	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	79	(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 #...: A1D070402 **Work Order #...:** MG3AC1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D150000-156

Prep Date.....: 04/15/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/15/11 **Prep Batch #...:** 1105156
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	**1.0 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 #...: A1D070402 **Work Order #...:** MG3AC1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	86	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	81	(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 #...: A1D070402 Work Order #...: MG1FL1AC Matrix.....: WATER
LCS Lot-Sample#: A1D140000-189
Prep Date.....: 04/14/11 Analysis Date..: 04/14/11
Prep Batch #...: 1104189
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
cis-1,2-Dichloroethene	104	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	105	(75 - 134)	SW846 8260B
1,2-Dibromoethane	105	(75 - 127)	SW846 8260B
Bromochloromethane	105	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	102	(75 - 122)	SW846 8260B
o-Xylene	104	(75 - 118)	SW846 8260B
Chloromethane	100	(58 - 135)	SW846 8260B
Bromomethane	93	(35 - 153)	SW846 8260B
Vinyl chloride	96	(73 - 134)	SW846 8260B
Chloroethane	104	(72 - 129)	SW846 8260B
Methylene chloride	126 a	(69 - 118)	SW846 8260B
Acetone	101	(51 - 157)	SW846 8260B
Carbon disulfide	130 a	(74 - 123)	SW846 8260B
1,1-Dichloroethene	119	(75 - 125)	SW846 8260B
1,1-Dichloroethane	103	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	104	(85 - 111)	SW846 8260B
Chloroform	105	(74 - 127)	SW846 8260B
1,2-Dichloroethane	105	(67 - 132)	SW846 8260B
2-Butanone	109	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	103	(70 - 127)	SW846 8260B
Carbon tetrachloride	104	(71 - 132)	SW846 8260B
Bromodichloromethane	108	(70 - 130)	SW846 8260B
1,2-Dichloropropane	107	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	110	(73 - 132)	SW846 8260B
Trichloroethene	102	(67 - 128)	SW846 8260B
Dibromochloromethane	107	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	104	(75 - 136)	SW846 8260B
Benzene	106	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	118	(74 - 131)	SW846 8260B
Bromoform	104	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	116	(59 - 150)	SW846 8260B
2-Hexanone	115	(53 - 139)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D070402 **Work Order #...:** MG1FL1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D140000-189

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	94	(75 - 129)	**SW846 8260B**
1,1,2,2-Tetrachloroethane	102	(68 - 129)	**SW846 8260B**
Toluene	101	(75 - 125)	**SW846 8260B**
Chlorobenzene	100	(75 - 127)	**SW846 8260B**
Ethylbenzene	104	(75 - 120)	**SW846 8260B**
Styrene	110	(75 - 130)	**SW846 8260B**
Xylenes (total)	103	(90 - 114)	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	81	(50 - 150)
1,2-Dichloroethane-d4	78	(50 - 150)
Toluene-d8	81	(50 - 150)
4-Bromofluorobenzene	93	(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 #...: A1D070402 Work Order #...: MG3AC1AC Matrix.....: WATER
LCS Lot-Sample#: A1D150000-156
Prep Date.....: 04/15/11 Analysis Date..: 04/15/11
Prep Batch #...: 1105156
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
m-Xylene & p-Xylene	103	(75 - 122)	SW846 8260B
o-Xylene	105	(75 - 118)	SW846 8260B
cis-1,2-Dichloroethene	102	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	107	(75 - 134)	SW846 8260B
1,2-Dibromoethane	105	(75 - 127)	SW846 8260B
Bromochloromethane	103	(75 - 127)	SW846 8260B
Chloromethane	99	(58 - 135)	SW846 8260B
Bromomethane	102	(35 - 153)	SW846 8260B
Vinyl chloride	95	(73 - 134)	SW846 8260B
Chloroethane	107	(72 - 129)	SW846 8260B
Methylene chloride	130 a	(69 - 118)	SW846 8260B
Acetone	99	(51 - 157)	SW846 8260B
Carbon disulfide	130 a	(74 - 123)	SW846 8260B
1,1-Dichloroethene	116	(75 - 125)	SW846 8260B
1,1-Dichloroethane	105	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	105	(85 - 111)	SW846 8260B
Chloroform	104	(74 - 127)	SW846 8260B
1,2-Dichloroethane	106	(67 - 132)	SW846 8260B
2-Butanone	108	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	104	(70 - 127)	SW846 8260B
Carbon tetrachloride	106	(71 - 132)	SW846 8260B
Bromodichloromethane	108	(70 - 130)	SW846 8260B
1,2-Dichloropropane	106	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	105	(73 - 132)	SW846 8260B
Trichloroethene	100	(67 - 128)	SW846 8260B
Dibromochloromethane	106	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	106	(75 - 136)	SW846 8260B
Benzene	104	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	116	(74 - 131)	SW846 8260B
Bromoform	108	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	116	(59 - 150)	SW846 8260B
2-Hexanone	115	(53 - 139)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D070402 **Work Order #...:** MG3AC1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D150000-156

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	94	(75 - 129)	**SW846 8260B**
1,1,2,2-Tetrachloroethane	100	(68 - 129)	**SW846 8260B**
Toluene	102	(75 - 125)	**SW846 8260B**
Chlorobenzene	99	(75 - 127)	**SW846 8260B**
Ethylbenzene	102	(75 - 120)	**SW846 8260B**
Styrene	111	(75 - 130)	**SW846 8260B**
Xylenes (total)	104	(90 - 114)	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	81	(50 - 150)
1,2-Dichloroethane-d4	81	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	98	(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 #...: A1D070402 Work Order #...: MGK3H1AC-MS Matrix.....: WATER
MS Lot-Sample #: A1D060402-029 MGK3H1AD-MSD
Date Sampled...: 04/05/11 11:23 Date Received..: 04/06/11
Prep Date.....: 04/14/11 Analysis Date..: 04/14/11
Prep Batch #...: 1104189
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	98	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.65	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	102	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.88	(0-30)	SW846 8260B
1,2-Dibromoethane	104	(70 - 130)			SW846 8260B
	99	(70 - 130)	4.5	(0-30)	SW846 8260B
Bromochloromethane	101	(70 - 130)			SW846 8260B
	104	(70 - 130)	3.2	(0-30)	SW846 8260B
m-Xylene & p-Xylene	96	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.6	(0-30)	SW846 8260B
o-Xylene	100	(70 - 130)			SW846 8260B
	97	(70 - 130)	2.4	(0-30)	SW846 8260B
Chloromethane	100	(70 - 130)			SW846 8260B
	106	(70 - 130)	6.0	(0-30)	SW846 8260B
Bromomethane	95	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.5	(0-30)	SW846 8260B
Vinyl chloride	96	(70 - 130)			SW846 8260B
	102	(70 - 130)	6.8	(0-30)	SW846 8260B
Chloroethane	104	(70 - 130)			SW846 8260B
	117	(70 - 130)	12	(0-30)	SW846 8260B
Methylene chloride	120	(70 - 130)			SW846 8260B
	126	(70 - 130)	5.0	(0-30)	SW846 8260B
Acetone	118	(70 - 130)			SW846 8260B
	106	(70 - 130)	12	(0-30)	SW846 8260B
Carbon disulfide	130	(70 - 130)			SW846 8260B
	140 a	(70 - 130)	7.6	(0-30)	SW846 8260B
1,1-Dichloroethene	115	(70 - 130)			SW846 8260B
	125	(70 - 130)	8.4	(0-30)	SW846 8260B
1,1-Dichloroethane	102	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.90	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.76	(0-30)	SW846 8260B
Chloroform	100	(70 - 130)			SW846 8260B
	103	(70 - 130)	3.1	(0-30)	SW846 8260B
1,2-Dichloroethane	103	(70 - 130)			SW846 8260B
	105	(70 - 130)	2.0	(0-30)	SW846 8260B
2-Butanone	111	(70 - 130)			SW846 8260B
	116	(70 - 130)	4.0	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D070402 Work Order #...: MGK3H1AC-MS Matrix.....: WATER
MS Lot-Sample #: A1D060402-029 MGK3H1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.2	(0-30)	SW846 8260B
Carbon tetrachloride	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.9	(0-30)	SW846 8260B
Bromodichloromethane	102	(70 - 130)			SW846 8260B
	107	(70 - 130)	5.0	(0-30)	SW846 8260B
1,2-Dichloropropane	103	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.5	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.3	(0-30)	SW846 8260B
Trichloroethene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.7	(0-30)	SW846 8260B
Dibromochloromethane	106	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.8	(0-30)	SW846 8260B
1,1,2-Trichloroethane	104	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.72	(0-30)	SW846 8260B
Benzene	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.8	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	108	(70 - 130)			SW846 8260B
	107	(70 - 130)	1.1	(0-30)	SW846 8260B
Bromoform	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.8	(0-30)	SW846 8260B
4-Methyl-2-pentanone	119	(70 - 130)			SW846 8260B
	121	(70 - 130)	1.3	(0-30)	SW846 8260B
2-Hexanone	122	(70 - 130)			SW846 8260B
	122	(70 - 130)	0.56	(0-30)	SW846 8260B
Tetrachloroethene	89	(70 - 130)			SW846 8260B
	89	(70 - 130)	0.25	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	99	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.9	(0-30)	SW846 8260B
Toluene	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.1	(0-30)	SW846 8260B
Chlorobenzene	95	(70 - 130)			SW846 8260B
	93	(70 - 130)	1.9	(0-30)	SW846 8260B
Ethylbenzene	96	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.4	(0-30)	SW846 8260B
Styrene	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.3	(0-30)	SW846 8260B
Xylenes (total)	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.9	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D070402 **Work Order #...:** MGK3H1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D060402-029 MGK3H1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	82	(50 - 150)
	82	(50 - 150)
1,2-Dichloroethane-d4	81	(50 - 150)
	85	(50 - 150)
Toluene-d8	84	(50 - 150)
	82	(50 - 150)
4-Bromofluorobenzene	97	(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

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D070402 Work Order #...: MGM7Q1AC-MS Matrix.....: WG
MS Lot-Sample #: A1D070402-016 MGM7Q1AD-MSD
Date Sampled...: 04/06/11 09:22 Date Received..: 04/07/11
Prep Date.....: 04/15/11 Analysis Date..: 04/15/11
Prep Batch #...: 1105156
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	101	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.04	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.99	(0-30)	SW846 8260B
1,2-Dibromoethane	103	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.5	(0-30)	SW846 8260B
Bromochloromethane	103	(70 - 130)			SW846 8260B
	108	(70 - 130)	3.8	(0-30)	SW846 8260B
m-Xylene & p-Xylene	99	(70 - 130)			SW846 8260B
	91	(70 - 130)	7.9	(0-30)	SW846 8260B
o-Xylene	101	(70 - 130)			SW846 8260B
	95	(70 - 130)	6.3	(0-30)	SW846 8260B
Chloromethane	82	(70 - 130)			SW846 8260B
	91	(70 - 130)	11	(0-30)	SW846 8260B
Bromomethane	76	(70 - 130)			SW846 8260B
	69 a	(70 - 130)	9.2	(0-30)	SW846 8260B
Vinyl chloride	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.4	(0-30)	SW846 8260B
Chloroethane	109	(70 - 130)			SW846 8260B
	104	(70 - 130)	4.4	(0-30)	SW846 8260B
Methylene chloride	121	(70 - 130)			SW846 8260B
	119	(70 - 130)	1.5	(0-30)	SW846 8260B
Acetone	103	(70 - 130)			SW846 8260B
	107	(70 - 130)	3.5	(0-30)	SW846 8260B
Carbon disulfide	151 a	(70 - 130)			SW846 8260B
	142 a	(70 - 130)	5.8	(0-30)	SW846 8260B
1,1-Dichloroethene	123	(70 - 130)			SW846 8260B
	119	(70 - 130)	3.0	(0-30)	SW846 8260B
1,1-Dichloroethane	103	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.08	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	103	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.48	(0-30)	SW846 8260B
Chloroform	102	(70 - 130)			SW846 8260B
	100	(70 - 130)	2.1	(0-30)	SW846 8260B
1,2-Dichloroethane	106	(70 - 130)			SW846 8260B
	104	(70 - 130)	1.8	(0-30)	SW846 8260B
2-Butanone	111	(70 - 130)			SW846 8260B
	115	(70 - 130)	3.1	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM7Q1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-016 MGM7Q1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	104	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.3	(0-30)	SW846 8260B
Carbon tetrachloride	105	(70 - 130)			SW846 8260B
	100	(70 - 130)	5.0	(0-30)	SW846 8260B
Bromodichloromethane	108	(70 - 130)			SW846 8260B
	105	(70 - 130)	3.2	(0-30)	SW846 8260B
1,2-Dichloropropane	102	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.81	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	96	(70 - 130)			SW846 8260B
	98	(70 - 130)	2.8	(0-30)	SW846 8260B
Trichloroethene	99	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.5	(0-30)	SW846 8260B
Dibromochloromethane	104	(70 - 130)			SW846 8260B
	101	(70 - 130)	3.0	(0-30)	SW846 8260B
1,1,2-Trichloroethane	102	(70 - 130)			SW846 8260B
	98	(70 - 130)	4.0	(0-30)	SW846 8260B
Benzene	104	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.0	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	106	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.4	(0-30)	SW846 8260B
Bromoform	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	115	(70 - 130)			SW846 8260B
	116	(70 - 130)	1.1	(0-30)	SW846 8260B
2-Hexanone	113	(70 - 130)			SW846 8260B
	114	(70 - 130)	0.93	(0-30)	SW846 8260B
Tetrachloroethene	91	(70 - 130)			SW846 8260B
	82	(70 - 130)	10	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	96	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.2	(0-30)	SW846 8260B
Toluene	98	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.3	(0-30)	SW846 8260B
Chlorobenzene	94	(70 - 130)			SW846 8260B
	91	(70 - 130)	3.6	(0-30)	SW846 8260B
Ethylbenzene	98	(70 - 130)			SW846 8260B
	91	(70 - 130)	7.0	(0-30)	SW846 8260B
Styrene	105	(70 - 130)			SW846 8260B
	100	(70 - 130)	4.6	(0-30)	SW846 8260B
Xylenes (total)	99	(70 - 130)			SW846 8260B
	92	(70 - 130)	7.4	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM7Q1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-016 MGM7Q1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	86	(50 - 150)
	84	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
	81	(50 - 150)
Toluene-d8	80	(50 - 150)
	81	(50 - 150)
4-Bromofluorobenzene	98	(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

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D070402 Work Order #...: MGM891AC-MS Matrix.....: WG
MS Lot-Sample #: A1D070402-030 MGM891AD-MSD
Date Sampled...: 04/06/11 13:09 Date Received..: 04/07/11
Prep Date.....: 04/15/11 Analysis Date..: 04/15/11
Prep Batch #...: 1105156
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	96	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.4	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	103	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.33	(0-30)	SW846 8260B
1,2-Dibromoethane	102	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.89	(0-30)	SW846 8260B
Bromochloromethane	101	(70 - 130)			SW846 8260B
	107	(70 - 130)	6.2	(0-30)	SW846 8260B
m-Xylene & p-Xylene	92	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.66	(0-30)	SW846 8260B
o-Xylene	97	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.63	(0-30)	SW846 8260B
Chloromethane	88	(70 - 130)			SW846 8260B
	90	(70 - 130)	2.2	(0-30)	SW846 8260B
Bromomethane	88	(70 - 130)			SW846 8260B
	89	(70 - 130)	1.9	(0-30)	SW846 8260B
Vinyl chloride	95	(70 - 130)			SW846 8260B
	99	(70 - 130)	4.0	(0-30)	SW846 8260B
Chloroethane	104	(70 - 130)			SW846 8260B
	107	(70 - 130)	2.4	(0-30)	SW846 8260B
Methylene chloride	119	(70 - 130)			SW846 8260B
	120	(70 - 130)	1.4	(0-30)	SW846 8260B
Acetone	102	(70 - 130)			SW846 8260B
	108	(70 - 130)	5.9	(0-30)	SW846 8260B
Carbon disulfide	135 a	(70 - 130)			SW846 8260B
	136 a	(70 - 130)	0.97	(0-30)	SW846 8260B
1,1-Dichloroethene	115	(70 - 130)			SW846 8260B
	116	(70 - 130)	1.7	(0-30)	SW846 8260B
1,1-Dichloroethane	99	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.6	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.0	(0-30)	SW846 8260B
Chloroform	101	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.75	(0-30)	SW846 8260B
1,2-Dichloroethane	103	(70 - 130)			SW846 8260B
	104	(70 - 130)	1.0	(0-30)	SW846 8260B
2-Butanone	109	(70 - 130)			SW846 8260B
	113	(70 - 130)	3.8	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM891AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-030 MGM891AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.2	(0-30)	SW846 8260B
Carbon tetrachloride	103	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.9	(0-30)	SW846 8260B
Bromodichloromethane	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.48	(0-30)	SW846 8260B
1,2-Dichloropropane	104	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.35	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	95	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.2	(0-30)	SW846 8260B
Trichloroethene	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.60	(0-30)	SW846 8260B
Dibromochloromethane	101	(70 - 130)			SW846 8260B
	103	(70 - 130)	1.8	(0-30)	SW846 8260B
1,1,2-Trichloroethane	99	(70 - 130)			SW846 8260B
	103	(70 - 130)	4.1	(0-30)	SW846 8260B
Benzene	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.75	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	107	(70 - 130)			SW846 8260B
	108	(70 - 130)	1.4	(0-30)	SW846 8260B
Bromoform	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.8	(0-30)	SW846 8260B
4-Methyl-2-pentanone	120	(70 - 130)			SW846 8260B
	123	(70 - 130)	3.1	(0-30)	SW846 8260B
2-Hexanone	119	(70 - 130)			SW846 8260B
	119	(70 - 130)	0.59	(0-30)	SW846 8260B
Tetrachloroethene	85	(70 - 130)			SW846 8260B
	84	(70 - 130)	0.46	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	91	(70 - 130)			SW846 8260B
	98	(70 - 130)	7.0	(0-30)	SW846 8260B
Toluene	94	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.0	(0-30)	SW846 8260B
Chlorobenzene	92	(70 - 130)			SW846 8260B
	92	(70 - 130)	0.42	(0-30)	SW846 8260B
Ethylbenzene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.2	(0-30)	SW846 8260B
Styrene	98	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.5	(0-30)	SW846 8260B
Xylenes (total)	94	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.22	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM891AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-030 MGM891AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	84	(50 - 150)
	84	(50 - 150)
1,2-Dichloroethane-d4	80	(50 - 150)
	79	(50 - 150)
Toluene-d8	82	(50 - 150)
	79	(50 - 150)
4-Bromofluorobenzene	98	(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

a Spiked analyte recovery is outside stated control limits.

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\UXJ6642.D
Report Date: 14-Apr-2011 10:58

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 14-APR-2011 10:41
Lab File ID: UXJ6642.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 4 Dibromofluoromethane	0.25974	0.21468	0.21468	0.010	17.34976	50.00000	Averaged	
$ 5 1,2-Dichloroethane-d4	0.36608	0.31414	0.31414	0.010	14.18739	50.00000	Averaged	
$ 6 Toluene-d8	1.58383	1.30111	1.30111	0.010	17.85071	50.00000	Averaged	
$ 7 Bromofluorobenzene	0.46792	0.43321	0.43321	0.010	7.41850	50.00000	Averaged	
8 Dichlorodifluoromethane	0.17985	0.14945	0.14945	0.010	16.90334	50.00000	Averaged	
9 Chloromethane	0.28503	0.32687	0.32687	0.100	-14.67915	50.00000	Averaged	
10 Vinyl Chloride	0.29220	0.32336	0.32336	0.010	-10.66278	20.00000	Averaged	
11 Bromomethane	0.11098	0.12490	0.12490	0.010	-12.54287	50.00000	Averaged	
12 Chloroethane	0.13415	0.14045	0.14045	0.010	-4.69505	50.00000	Averaged	
13 Trichlorofluoromethane	0.23588	0.28913	0.28913	0.010	-22.57532	50.00000	Averaged	
15 Acrolein	0.03332	0.02871	0.02871	0.010	13.84452	50.00000	Averaged	
16 Acetone	100	98.26525	0.07746	0.010	1.73475	0.000e+000	Wt Linear	
17 1,1-Dichloroethene	0.18050	0.18529	0.18529	0.010	-2.65531	20.00000	Averaged	
18 Freon-113	0.10774	0.09425	0.09425	0.010	12.52024	50.00000	Averaged	
19 Iodomethane	0.18442	0.22935	0.22935	0.010	-24.36689	50.00000	Averaged	
20 Carbon Disulfide	0.39346	0.48202	0.48202	0.010	-22.50965	50.00000	Averaged	
21 Methylene Chloride	0.19948	0.23971	0.23971	0.010	-20.17148	50.00000	Averaged	
22 Acetonitrile	0.02417	0.02581	0.02581	0.010	-6.78647	50.00000	Averaged	
23 Acrylonitrile	0.09347	0.10306	0.10306	0.010	-10.25220	50.00000	Averaged	
24 Methyl tert-butyl ether	0.75233	0.73839	0.73839	0.010	1.85402	50.00000	Averaged	
25 trans-1,2-Dichloroethene	0.28939	0.29230	0.29230	0.010	-1.00422	50.00000	Averaged	
26 Hexane	0.07922	0.06341	0.06341	0.010	19.95760	20.00000	Averaged	
27 Vinyl acetate	0.48325	0.39623	0.39623	0.010	18.00767	50.00000	Averaged	
28 1,1-Dichloroethane	0.54218	0.52391	0.52391	0.100	3.37113	50.00000	Averaged	
29 tert-Butyl Alcohol	0.01466	0.01417	0.01417	0.010	3.28862	50.00000	Averaged	
30 2-Butanone	0.11189	0.11916	0.11916	0.010	-6.49483	50.00000	Averaged	
M 31 1,2-Dichloroethene (total)	0.30104	0.29926	0.29926	0.010	0.59275	50.00000	Averaged	
32 cis-1,2-dichloroethene	0.31269	0.30622	0.30622	0.010	2.07068	50.00000	Averaged	
33 2,2-Dichloropropane	0.21702	0.22013	0.22013	0.010	-1.43353	50.00000	Averaged	
34 Bromochloromethane	0.14161	0.13991	0.13991	0.010	1.20003	50.00000	Averaged	
35 Chloroform	0.50905	0.50654	0.50654	0.010	0.49315	20.00000	Averaged	
36 Tetrahydrofuran	0.07305	0.07402	0.07402	0.010	-1.32480	50.00000	Averaged	
37 1,1,1-Trichloroethane	0.32666	0.32311	0.32311	0.010	1.08484	50.00000	Averaged	
38 1,1-Dichloropropene	0.42519	0.40717	0.40717	0.010	4.23630	50.00000	Averaged	
39 Carbon Tetrachloride	0.29162	0.27891	0.27891	0.010	4.35947	50.00000	Averaged	
40 1,2-Dichloroethane	0.43979	0.44374	0.44374	0.010	-0.89855	50.00000	Averaged	
41 Benzene	1.25459	1.24852	1.24852	0.010	0.48354	50.00000	Averaged	
42 Trichloroethene	0.30048	0.28384	0.28384	0.010	5.53784	50.00000	Averaged	
43 1,2-Dichloropropane	0.31378	0.32172	0.32172	0.010	-2.53084	20.00000	Averaged	
44 1,4-Dioxane	0.00202	0.00182	0.00182	0.010	9.55504	50.00000	Averaged	<-
45 Dibromomethane	0.16625	0.17729	0.17729	0.010	-6.63769	50.00000	Averaged	
46 Bromodichloromethane	0.34286	0.35254	0.35254	0.010	-2.82476	50.00000	Averaged	
47 2-Chloroethyl vinyl ether	0.17112	0.17992	0.17992	0.010	-5.14436	50.00000	Averaged	

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\UXJ6642.D
Report Date: 14-Apr-2011 10:58

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 14-APR-2011 10:41
Lab File ID: UXJ6642.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
48 cis-1,3-Dichloropropene	0.40462	0.44688	0.44688	0.010	-10.44427	50.00000	Averaged
49 4-Methyl-2-pentanone	0.21859	0.25102	0.25102	0.010	-14.83308	50.00000	Averaged
50 Toluene	1.86792	1.80920	1.80920	0.010	3.14355	20.00000	Averaged
51 trans-1,3-Dichloropropene	0.48234	0.52511	0.52511	0.010	-8.86599	50.00000	Averaged
52 Ethyl Methacrylate	0.46666	0.48398	0.48398	0.010	-3.71166	50.00000	Averaged
53 1,1,2-Trichloroethane	0.34340	0.34260	0.34260	0.010	0.23156	50.00000	Averaged
54 1,3-Dichloropropane	0.66131	0.66059	0.66059	0.010	0.10811	50.00000	Averaged
55 Tetrachloroethene	0.33197	0.30331	0.30331	0.010	8.63364	50.00000	Averaged
56 2-Hexanone	0.19815	0.22200	0.22200	0.010	-12.03647	50.00000	Averaged
57 Dibromochloromethane	0.31240	0.32534	0.32534	0.010	-4.14089	50.00000	Averaged
58 1,2-Dibromoethane	0.32344	0.32753	0.32753	0.010	-1.26355	50.00000	Averaged
59 Chlorobenzene	1.16010	1.08097	1.08097	0.300	6.82113	50.00000	Averaged
60 1,1,1,2-Tetrachloroethane	0.35359	0.35802	0.35802	0.010	-1.25129	50.00000	Averaged
61 Ethylbenzene	0.60603	0.59380	0.59380	0.010	2.01800	20.00000	Averaged
62 m + p-Xylene	0.76602	0.74767	0.74767	0.010	2.39643	50.00000	Averaged
M 63 Xylenes (total)	0.74685	0.73535	0.73535	0.010	1.53931	50.00000	Averaged
64 Xylene-o	0.70850	0.71072	0.71072	0.010	-0.31412	50.00000	Averaged
65 Styrene	1.10338	1.15815	1.15815	0.010	-4.96460	50.00000	Averaged
66 Bromoform	50.00000	47.18435	0.15614	0.100	5.63130	0.000e+000	Wt Linear
67 Isopropylbenzene	1.75232	1.68928	1.68928	0.010	3.59759	50.00000	Averaged
68 1,1,2,2-Tetrachloroethane	0.99123	0.97763	0.97763	0.300	1.37202	50.00000	Averaged
69 1,4-Dichloro-2-butene	50.00000	56.51434	0.25834	0.010	-13.02868	0.000e+000	Wt Linear
70 1,2,3-Trichloropropane	0.32774	0.30040	0.30040	0.010	8.34415	50.00000	Averaged
71 Bromobenzene	1.15566	1.02212	1.02212	0.010	11.55530	50.00000	Averaged
72 n-Propylbenzene	1.27783	1.12865	1.12865	0.010	11.67441	50.00000	Averaged
73 2-Chlorotoluene	1.11057	1.02044	1.02044	0.010	8.11576	50.00000	Averaged
74 1,3,5-Trimethylbenzene	3.47092	3.15314	3.15314	0.010	9.15537	50.00000	Averaged
75 4-Chlorotoluene	1.14500	1.08681	1.08681	0.010	5.08229	50.00000	Averaged
76 tert-Butylbenzene	2.93625	2.45914	2.45914	0.010	16.24919	50.00000	Averaged
77 1,2,4-Trimethylbenzene	3.27311	3.03496	3.03496	0.010	7.27599	50.00000	Averaged
78 sec-Butylbenzene	3.90997	3.38405	3.38405	0.010	13.45075	50.00000	Averaged
79 4-Isopropyltoluene	2.91119	2.51037	2.51037	0.010	13.76836	50.00000	Averaged
80 1,3-Dichlorobenzene	1.70300	1.59559	1.59559	0.010	6.30711	50.00000	Averaged
81 1,4-Dichlorobenzene	1.71671	1.59462	1.59462	0.010	7.11213	50.00000	Averaged
82 n-Butylbenzene	2.24550	1.85564	1.85564	0.010	17.36212	50.00000	Averaged
83 1,2-Dichlorobenzene	1.38991	1.29980	1.29980	0.010	6.48300	50.00000	Averaged
84 1,2-Dibromo-3-chloropropane	50.00000	36.71060	0.05991	0.010	26.57881	0.000e+000	Wt Linear
85 1,2,4-Trichlorobenzene	0.72673	0.39330	0.39330	0.010	45.88063	50.00000	Averaged
86 Hexachlorobutadiene	0.29980	0.16491	0.16491	0.010	44.99182	50.00000	Averaged
87 Naphthalene	1.52045	0.73551	0.73551	0.010	51.62544	50.00000	Averaged <-
88 1,2,3-Trichlorobenzene	0.67411	0.31528	0.31528	0.010	53.23019	50.00000	Averaged <-
98 Cyclohexane	0.41389	0.39007	0.39007	0.010	5.75403	50.00000	Averaged
143 Methyl Acetate	0.20101	0.22789	0.22789	0.010	-13.37423	50.00000	Averaged

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\UXJ6642.D
Report Date: 14-Apr-2011 10:58

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 14-APR-2011 10:41
Lab File ID: UXJ6642.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
144 Methylcyclohexane	0.47028	0.39767	0.39767	0.010	15.43950	50.00000	Averaged
141 1,3,5-Trichlorobenzene	0.80914	0.51591	0.51591	0.010	36.23875	50.00000	Averaged
150 Vinyl Acetate-86	0.04983	0.03980	0.03980	0.010	20.13456	50.00000	Averaged

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\UXJ6643.D
Report Date: 14-Apr-2011 11:25

4/14/11 @ 1104 Opener

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: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\8260LLUX11.m
Misc Info: J10414A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: MRL
Quant Type: ISTD

Spike

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.029	102.92	70-130
	42	Trichloroethene	1.000	1.012	101.21	70-130
	59	Chlorobenzene	1.000	1.029	102.87	70-130
	50	Toluene	1.000	0.9987	99.87	70-130
	41	Benzene	1.000	1.034	103.41	70-130
	16	Acetone	2.000	1.850	92.52	70-130
	20	Carbon Disulfide	1.000	1.220	122.03	70-130
	9	Chloromethane	1.000	1.318	131.76*	70-130
	11	Bromomethane	1.000	1.217	121.70	70-130
	10	Vinyl Chloride	1.000	1.330	133.00*	70-130
	12	Chloroethane	1.000	1.345	134.50*	70-130
	21	Methylene Chloride	1.000	1.985	198.47*	70-130
	28	1,1-Dichloroethane	1.000	1.030	103.04	70-130
M	31	1,2-Dichloroethene	2.000	2.037	101.84	70-130
	35	Chloroform	1.000	1.074	107.41	70-130
	40	1,2-Dichloroethane	1.000	1.118	111.78	70-130
	30	2-Butanone	2.000	2.318	115.91	70-130
	37	1,1,1-Trichloroeth	1.000	1.020	101.99	70-130
	39	Carbon Tetrachlori	1.000	0.9849	98.49	70-130
	46	Bromodichlorometha	1.000	0.9872	98.72	70-130
	43	1,2-Dichloropropan	1.000	1.030	102.95	70-130
	48	cis-1,3-Dichloropr	1.000	0.8735	87.35	70-130
	54	1,3-Dichloropropan	1.000	1.044	104.39	70-130
	57	Dibromochlorometha	1.000	0.9533	95.33	70-130
	53	1,1,2-Trichloroeth	1.000	1.018	101.76	70-130
	51	trans-1,3-Dichloro	1.000	0.8027	80.27	70-130
	49	4-Methyl-2-pentano	2.000	1.876	93.82	70-130
	56	2-Hexanone	2.000	1.885	94.25	70-130
	55	Tetrachloroethene	1.000	0.9307	93.07	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.092	109.19	70-130
	66	Bromoform	1.000	1.329	132.90*	70-130
	61	Ethylbenzene	1.000	0.9502	95.02	70-130
	65	Styrene	1.000	0.8646	86.46	70-130
M	63	Xylenes (total)	3.000	2.644	88.15	70-130
	32	cis-1,2-dichloroet	1.000	0.9936	99.37	70-130
	25	trans-1,2-Dichloro	1.000	1.043	104.32	70-130
	8	Dichlorodifluorome	1.000	0.9578	NT 95.78	70-130
	13	Trichlorofluoromet	1.000	1.330	133.02*	70-130
	70	1,2,3-Trichloropro	1.000	1.103	110.32	70-130
	18	Freon-113	1.000	1.017	101.71	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\UXJ6643.D
Report Date: 14-Apr-2011 11:25

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.9379	93.79	70-130
58 1,2-Dibromoethane	1.000	1.004	100.35	70-130
67 Isopropylbenzene	1.000	0.8103	81.03	70-130
80 1,3-Dichlorobenzen	1.000	1.008	100.82	70-130
81 1,4-Dichlorobenzen	1.000	1.072	107.19	70-130
83 1,2-Dichlorobenzen	1.000	1.014	101.45	70-130
84 1,2-Dibromo-3-chlo	1.000	1.534	NT 153.39*	70-130
85 1,2,4-Trichloroben	1.000	1.097	109.70	70-130
98 Cyclohexane	1.000	0.8447	84.47	70-130
143 Methyl Acetate	2.000	2.589	129.46	70-130
144 Methylcyclohexane	1.000	0.7785	77.85	70-130
71 Bromobenzene	1.000	0.9605	96.05	70-130
34 Bromochloromethane	1.000	1.082	108.16	70-130
82 n-Butylbenzene	1.000	0.8431	84.31	70-130
78 sec-Butylbenzene	1.000	0.8452	84.52	70-130
76 tert-Butylbenzene	1.000	0.7726	77.26	70-130
73 2-Chlorotoluene	1.000	0.8855	88.55	70-130
75 4-Chlorotoluene	1.000	0.9178	91.78	70-130
45 Dibromomethane	1.000	1.045	104.49	70-130
33 2,2-Dichloropropan	1.000	0.9246	92.46	70-130
38 1,1-Dichloropropen	1.000	0.9126	91.26	70-130
86 Hexachlorobutadien	1.000	1.230	123.02	70-130
19 Iodomethane	1.000	1.350	NT 135.03*	70-130
79 4-Isopropyltoluene	1.000	0.8024	80.24	70-130
87 Naphthalene	1.000	1.236	123.64	70-130
72 n-Propylbenzene	1.000	0.8598	85.98	70-130
60 1,1,1,2-Tetrachlor	1.000	0.8896	88.96	70-130
88 1,2,3-Trichloroben	1.000	1.515	NT 151.49*	70-130
77 1,2,4-Trimethylben	1.000	0.8554	85.54	70-130
74 1,3,5-Trimethylben	1.000	0.8480	84.80	70-130
150 Vinyl Acetate-86	1.000	0.5485	NT 54.85*	70-130
62 m + p-Xylene	2.000	1.808	90.40	70-130
64 Xylene-o	1.000	0.8366	83.66	70-130
49 4-Methyl-2-pentano	2.000	1.876	93.82	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	8.158	81.58	75-121
$ 5 1,2-Dichloroethane	10.000	8.000	80.00	63-129
$ 6 Toluene-d8	10.000	8.022	80.22	74-115
$ 7 Bromofluorobenzene	10.000	8.494	84.94	66-117

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\UXJ6669.D
Report Date: 15-Apr-2011 08:25

TestAmerica North Canton

4/14/11 @ 2054
QCMRL
Chsm

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: QCMRL
Level: LOW
Data Type: MS DATA
SpikeList File: MRL.spk
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\8260LLUX11.m
Misc Info: J10414A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: MRL
Quant Type: ISTD

Sup/Spe

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.317	131.67*	70-130
	42	Trichloroethene	1.000	0.9544	95.45	70-130
	59	Chlorobenzene	1.000	1.010	100.97	70-130
	50	Toluene	1.000	1.021	102.09	70-130
	41	Benzene	1.000	1.032	103.20	70-130
	16	Acetone	2.000	2.872	143.62*	70-130
	20	Carbon Disulfide	1.000	1.252	125.18	70-130
	9	Chloromethane	1.000	1.408	140.80*	70-130
	11	Bromomethane	1.000	1.234	123.38	70-130
	10	Vinyl Chloride	1.000	1.451	145.09*	70-130
	12	Chloroethane	1.000	1.800	180.04*	70-130
	21	Methylene Chloride	1.000	2.545	254.47*	70-130
	28	1,1-Dichloroethane	1.000	1.043	104.32	70-130
M	31	1,2-Dichloroethene	2.000	2.052	102.58	70-130
	35	Chloroform	1.000	1.085	108.51	70-130
	40	1,2-Dichloroethane	1.000	1.117	111.71	70-130
	30	2-Butanone	2.000	2.140	107.01	70-130
	37	1,1,1-Trichloroeth	1.000	1.052	105.20	70-130
	39	Carbon Tetrachlori	1.000	0.9878	98.78	70-130
	46	Bromodichlorometha	1.000	0.9514	95.15	70-130
	43	1,2-Dichloropropan	1.000	1.108	110.85	70-130
	48	cis-1,3-Dichloropr	1.000	0.8762	87.63	70-130
	54	1,3-Dichloropropan	1.000	1.038	103.83	70-130
	57	Dibromochlorometha	1.000	0.9093	90.93	70-130
	53	1,1,2-Trichloroeth	1.000	1.124	112.40	70-130
	51	trans-1,3-Dichloro	1.000	0.8216	82.16	70-130
	49	4-Methyl-2-pentano	2.000	1.781	89.06	70-130
	56	2-Hexanone	2.000	1.641	82.06	70-130
	55	Tetrachloroethene	1.000	0.8816	88.16	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.109	110.90	70-130
	66	Bromoform	1.000	1.175	117.52	70-130
	61	Ethylbenzene	1.000	0.8530	85.30	70-130
	65	Styrene	1.000	0.8385	83.85	70-130
M	63	Xylenes (total)	3.000	2.501	83.37	70-130
	32	cis-1,2-dichloroet	1.000	0.9963	99.63	70-130
	25	trans-1,2-Dichloro	1.000	1.055	105.52	70-130
	8	Dichlorodifluorome	1.000	1.008	100.78	70-130
	13	Trichlorofluoromet	1.000	1.399	NT 139.90*	70-130
	70	1,2,3-Trichloropro	1.000	1.061	106.09	70-130
	18	Freon-113	1.000	0.9981	99.81	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10414A.b\UXJ6669.D
Report Date: 15-Apr-2011 08:25

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24	Methyl tert-butyl	1.000	1.017	101.67	70-130
58	1,2-Dibromoethane	1.000	1.050	105.06	70-130
67	Isopropylbenzene	1.000	0.6963	69.63*	70-130
80	1,3-Dichlorobenzen	1.000	0.9181	91.81	70-130
81	1,4-Dichlorobenzen	1.000	1.023	102.33	70-130
83	1,2-Dichlorobenzen	1.000	0.9213	92.13	70-130
84	1,2-Dibromo-3-chlo	1.000	1.462	146.24*	70-130
85	1,2,4-Trichloroben	1.000	0.8148	81.48	70-130
98	Cyclohexane	1.000	0.8100	81.00	70-130
143	Methyl Acetate	2.000	2.393	119.65	70-130
144	Methylcyclohexane	1.000	0.7891	78.91	70-130
71	Bromobenzene	1.000	0.9529	95.29	70-130
34	Bromochloromethane	1.000	1.065	106.52	70-130
82	n-Butylbenzene	1.000	0.7466	74.66	70-130
78	sec-Butylbenzene	1.000	0.7123	71.23	70-130
76	tert-Butylbenzene	1.000	0.8112	81.12	70-130
73	2-Chlorotoluene	1.000	0.8279	82.79	70-130
75	4-Chlorotoluene	1.000	0.8385	83.85	70-130
45	Dibromomethane	1.000	1.116	111.66	70-130
33	2,2-Dichloropropan	1.000	0.9601	96.01	70-130
38	1,1-Dichloropropen	1.000	0.9262	92.62	70-130
86	Hexachlorobutadien	1.000	1.069	106.91	70-130
19	Iodomethane	1.000	1.429	142.87*	70-130
79	4-Isopropyltoluene	1.000	0.6889	68.89*	70-130
87	Naphthalene	1.000	0.9980	99.80	70-130
72	n-Propylbenzene	1.000	0.7686	76.86	70-130
60	1,1,1,2-Tetrachlor	1.000	0.9516	95.16	70-130
88	1,2,3-Trichloroben	1.000	1.256	125.63	70-130
77	1,2,4-Trimethylben	1.000	0.7296	72.96	70-130
74	1,3,5-Trimethylben	1.000	0.7313	73.13	70-130
150	Vinyl Acetate-86	1.000	0.3740	37.40*	70-130
62	m + p-Xylene	2.000	1.632	81.60	70-130
64	Xylene-o	1.000	0.8692	86.92	70-130
49	4-Methyl-2-pentano	2.000	1.781	89.06	70-130

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4	Dibromofluorometha	10.000	8.220	82.20	75-121
$ 5	1,2-Dichloroethane	10.000	8.000	80.00	63-129
$ 6	Toluene-d8	10.000	8.038	80.38	74-115
$ 7	Bromofluorobenzene	10.000	8.432	84.33	66-117

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\UXJ6671.D
Report Date: 15-Apr-2011 11:19

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 15-APR-2011 10:38
Lab File ID: UXJ6671.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 4 Dibromofluoromethane	0.25974	0.21636	0.21636	0.010	16.70180	50.00000	Averaged	
$ 5 1,2-Dichloroethane-d4	0.36608	0.28415	0.28415	0.010	22.38104	50.00000	Averaged	
$ 6 Toluene-d8	1.58383	1.31171	1.31171	0.010	17.18126	50.00000	Averaged	
$ 7 Bromofluorobenzene	0.46792	0.43804	0.43804	0.010	6.38657	50.00000	Averaged	
8 Dichlorodifluoromethane	0.17985	0.14828	0.14828	0.010	17.55359	50.00000	Averaged	
9 Chloromethane	0.28503	0.31657	0.31657	0.100	-11.06480	50.00000	Averaged	
10 Vinyl Chloride	0.29220	0.30608	0.30608	0.010	-4.74957	20.00000	Averaged	
11 Bromomethane	0.11098	0.11592	0.11592	0.010	-4.45652	50.00000	Averaged	
12 Chloroethane	0.13415	0.13526	0.13526	0.010	-0.82346	50.00000	Averaged	
13 Trichlorofluoromethane	0.23588	0.27307	0.27307	0.010	-15.76851	50.00000	Averaged	
15 Acrolein	0.03332	0.04454	0.04454	0.010	NT -33.66147	50.00000	Averaged	
16 Acetone	100	112	0.08783	0.010	-12.20969	0.000e+000	Wt Linear	
17 1,1-Dichloroethene	0.18050	0.19589	0.19589	0.010	-8.52613	20.00000	Averaged	
18 Freon-113	0.10774	0.10365	0.10365	0.010	3.79719	50.00000	Averaged	
19 Iodomethane	0.18442	0.22218	0.22218	0.010	-20.47968	50.00000	Averaged	
20 Carbon Disulfide	0.39346	0.49591	0.49591	0.010	-26.03827	50.00000	Averaged	
21 Methylene Chloride	0.19948	0.23999	0.23999	0.010	-20.30798	50.00000	Averaged	
22 Acetonitrile	0.02417	0.02838	0.02838	0.010	-17.42127	50.00000	Averaged	
23 Acrylonitrile	0.09347	0.11333	0.11333	0.010	NT -21.24833	50.00000	Averaged	
24 Methyl tert-butyl ether	0.75233	0.71647	0.71647	0.010	4.76685	50.00000	Averaged	
25 trans-1,2-Dichloroethene	0.28939	0.27923	0.27923	0.010	3.51141	50.00000	Averaged	
26 Hexane	0.07922	0.06168	0.06168	0.010	NT 22.14714	20.00000	Averaged	<-
27 Vinyl acetate	0.48325	0.59118	0.59118	0.010	NT 22.33393	50.00000	Averaged	
28 1,1-Dichloroethane	0.54218	0.52522	0.52522	0.100	3.12813	50.00000	Averaged	
29 tert-Butyl Alcohol	0.01466	0.01381	0.01381	0.010	5.77538	50.00000	Averaged	
30 2-Butanone	0.11189	0.13469	0.13469	0.010	-20.37763	50.00000	Averaged	
M 31 1,2-Dichloroethene (total)	0.30104	0.28924	0.28924	0.010	3.92005	50.00000	Averaged	
32 cis-1,2-dichloroethene	0.31269	0.29925	0.29925	0.010	4.29810	50.00000	Averaged	
33 2,2-Dichloropropane	0.21702	0.22034	0.22034	0.010	-1.52943	50.00000	Averaged	
34 Bromochloromethane	0.14161	0.14018	0.14018	0.010	1.00709	50.00000	Averaged	
35 Chloroform	0.50905	0.49879	0.49879	0.010	2.01425	20.00000	Averaged	
36 Tetrahydrofuran	0.07305	0.07270	0.07270	0.010	0.48094	50.00000	Averaged	
37 1,1,1-Trichloroethane	0.32666	0.31638	0.31638	0.010	3.14614	50.00000	Averaged	
38 1,1-Dichloropropene	0.42519	0.39929	0.39929	0.010	6.09082	50.00000	Averaged	
39 Carbon Tetrachloride	0.29162	0.29437	0.29437	0.010	-0.94455	50.00000	Averaged	
40 1,2-Dichloroethane	0.43979	0.43405	0.43405	0.010	1.30617	50.00000	Averaged	
41 Benzene	1.25459	1.21693	1.21693	0.010	3.00153	50.00000	Averaged	
42 Trichloroethene	0.30048	0.28282	0.28282	0.010	5.87540	50.00000	Averaged	
43 1,2-Dichloropropane	0.31378	0.30867	0.30867	0.010	1.62846	20.00000	Averaged	
44 1,4-Dioxane	0.00202	0.00176	0.00176	0.010	12.93579	50.00000	Averaged	<-
45 Dibromomethane	0.16625	0.16972	0.16972	0.010	-2.08403	50.00000	Averaged	
46 Bromodichloromethane	0.34286	0.35248	0.35248	0.010	-2.80684	50.00000	Averaged	
47 2-Chloroethyl vinyl ether	0.17112	0.19733	0.19733	0.010	-15.32035	50.00000	Averaged	

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\UXJ6671.D
Report Date: 15-Apr-2011 11:19

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 15-APR-2011 10:38
Lab File ID: UXJ6671.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\8260LLUX11.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
48 cis-1,3-Dichloropropene	0.40462	0.43116	0.43116	0.010	-6.55769	50.00000	Averaged
49 4-Methyl-2-pentanone	0.21859	0.27168	0.27168	0.010	-24.28667	50.00000	Averaged
50 Toluene	1.86792	1.75499	1.75499	0.010	6.04565	20.00000	Averaged
51 trans-1,3-Dichloropropene	0.48234	0.51833	0.51833	0.010	-7.46089	50.00000	Averaged
52 Ethyl Methacrylate	0.46666	0.45693	0.45693	0.010	2.08354	50.00000	Averaged
53 1,1,2-Trichloroethane	0.34340	0.33673	0.33673	0.010	1.94327	50.00000	Averaged
54 1,3-Dichloropropane	0.66131	0.64207	0.64207	0.010	2.90858	50.00000	Averaged
55 Tetrachloroethene	0.33197	0.30010	0.30010	0.010	9.60112	50.00000	Averaged
56 2-Hexanone	0.19815	0.24464	0.24464	0.010	-23.46494	50.00000	Averaged
57 Dibromochloromethane	0.31240	0.31454	0.31454	0.010	-0.68424	50.00000	Averaged
58 1,2-Dibromoethane	0.32344	0.31095	0.31095	0.010	3.86198	50.00000	Averaged
59 Chlorobenzene	1.16010	1.05468	1.05468	0.300	9.08702	50.00000	Averaged
60 1,1,1,2-Tetrachloroethane	0.35359	0.35515	0.35515	0.010	-0.43854	50.00000	Averaged
61 Ethylbenzene	0.60603	0.58404	0.58404	0.010	3.62768	20.00000	Averaged
62 m + p-Xylene	0.76602	0.72278	0.72278	0.010	5.64566	50.00000	Averaged
M 63 Xylenes (total)	0.74685	0.70949	0.70949	0.010	5.00241	50.00000	Averaged
64 Xylene-o	0.70850	0.68291	0.68291	0.010	3.61136	50.00000	Averaged
65 Styrene	1.10338	1.14420	1.14420	0.010	-3.69969	50.00000	Averaged
66 Bromoform	50.00000	49.98374	0.16595	0.100	0.03253	0.000e+000	Wt Linear
67 Isopropylbenzene	1.75232	1.60184	1.60184	0.010	8.58771	50.00000	Averaged
68 1,1,2,2-Tetrachloroethane	0.99123	0.87926	0.87926	0.300	11.29549	50.00000	Averaged
69 1,4-Dichloro-2-butene	50.00000	49.38692	0.22376	0.010	1.22616	0.000e+000	Wt Linear
70 1,2,3-Trichloropropane	0.32774	0.29489	0.29489	0.010	10.02491	50.00000	Averaged
71 Bromobenzene	1.15566	0.95459	0.95459	0.010	17.39889	50.00000	Averaged
72 n-Propylbenzene	1.27783	1.01669	1.01669	0.010	20.43637	50.00000	Averaged
73 2-Chlorotoluene	1.11057	0.92063	0.92063	0.010	17.10353	50.00000	Averaged
74 1,3,5-Trimethylbenzene	3.47092	2.85865	2.85865	0.010	17.64001	50.00000	Averaged
75 4-Chlorotoluene	1.14500	1.01475	1.01475	0.010	11.37575	50.00000	Averaged
76 tert-Butylbenzene	2.93625	2.25180	2.25180	0.010	23.31054	50.00000	Averaged
77 1,2,4-Trimethylbenzene	3.27311	2.83306	2.83306	0.010	13.44441	50.00000	Averaged
78 sec-Butylbenzene	3.90997	3.11815	3.11815	0.010	20.25127	50.00000	Averaged
79 4-Isopropyltoluene	2.91119	2.41683	2.41683	0.010	16.98153	50.00000	Averaged
80 1,3-Dichlorobenzene	1.70300	1.47624	1.47624	0.010	13.31562	50.00000	Averaged
81 1,4-Dichlorobenzene	1.71671	1.50452	1.50452	0.010	12.36037	50.00000	Averaged
82 n-Butylbenzene	2.24550	1.71720	1.71720	0.010	23.52728	50.00000	Averaged
83 1,2-Dichlorobenzene	1.38991	1.23696	1.23696	0.010	11.00460	50.00000	Averaged
84 1,2-Dibromo-3-chloropropane	50.00000	33.83295	0.05479	0.010	32.33410	0.000e+000	Wt Linear
85 1,2,4-Trichlorobenzene	0.72673	0.36049	0.36049	0.010	50.39554	50.00000	Averaged <-
86 Hexachlorobutadiene	0.29980	0.15081	0.15081	0.010	49.69479	50.00000	Averaged
87 Naphthalene	1.52045	0.68661	0.68661	0.010	54.84182	50.00000	Averaged <-
88 1,2,3-Trichlorobenzene	0.67411	0.29570	0.29570	0.010	56.13496	50.00000	Averaged <-
98 Cyclohexane	0.41389	0.38269	0.38269	0.010	7.53783	50.00000	Averaged
143 Methyl Acetate	0.20101	0.21990	0.21990	0.010	-9.39759	50.00000	Averaged

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\UXJ6671.D
Report Date: 15-Apr-2011 11:19

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 15-APR-2011 10:38
Lab File ID: UXJ6671.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
144 Methylcyclohexane	0.47028	0.38472	0.38472	0.010	18.19387	50.00000	Averaged
141 1,3,5-Trichlorobenzene	0.80914	0.46752	0.46752	0.010	42.22003	50.00000	Averaged
150 Vinyl Acetate-86	0.04983	0.06080	0.06080	0.010	-22.00167	50.00000	Averaged

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\UXJ6673.D
Report Date: 15-Apr-2011 11:46

TestAmerica North Canton 4/15/11 @ 1123

RECOVERY REPORT

DCMRL opener

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: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\8260LLUX11.m
Misc Info: J10415A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.106	110.55	70-130
	42	Trichloroethene	1.000	0.9300	93.00	70-130
	59	Chlorobenzene	1.000	0.8865	88.65	70-130
	50	Toluene	1.000	0.9108	91.08	70-130
	41	Benzene	1.000	0.9584	95.84	70-130
	16	Acetone	2.000	2.324	116.19	70-130
	20	Carbon Disulfide	1.000	1.169	116.90	70-130
	9	Chloromethane	1.000	1.308	130.78*	70-130
	11	Bromomethane	1.000	1.180	118.05	70-130
	10	Vinyl Chloride	1.000	1.268	126.81	70-130
	12	Chloroethane	1.000	1.387	138.69*	70-130
	21	Methylene Chloride	1.000	2.056	205.66*	70-130
	28	1,1-Dichloroethane	1.000	0.9644	96.44	70-130
M	31	1,2-Dichloroethene	2.000	1.804	90.19	70-130
	35	Chloroform	1.000	0.9261	92.61	70-130
	40	1,2-Dichloroethane	1.000	0.9334	93.35	70-130
	30	2-Butanone	2.000	2.507	125.34	70-130
	37	1,1,1-Trichloroeth	1.000	0.9438	94.38	70-130
	39	Carbon Tetrachlori	1.000	0.9008	90.08	70-130
	46	Bromodichlorometha	1.000	0.9107	91.07	70-130
	43	1,2-Dichloropropan	1.000	0.9508	95.08	70-130
	48	cis-1,3-Dichloropr	1.000	0.7890	78.90	70-130
	54	1,3-Dichloropropan	1.000	0.9135	91.35	70-130
	57	Dibromochlorometha	1.000	0.7982	79.83	70-130
	53	1,1,2-Trichloroeth	1.000	0.9758	97.58	70-130
	51	trans-1,3-Dichloro	1.000	0.7532	75.32	70-130
	49	4-Methyl-2-pentano	2.000	2.065	103.23	70-130
	56	2-Hexanone	2.000	1.978	98.92	70-130
	55	Tetrachloroethene	1.000	0.8925	89.25	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.012	101.19	70-130
	66	Bromoform	1.000	1.246	124.59	70-130
	61	Ethylbenzene	1.000	0.8258	82.58	70-130
	65	Styrene	1.000	0.7132	71.32	70-130
M	63	Xylenes (total)	3.000	2.266	75.53	70-130
	32	cis-1,2-dichloroet	1.000	0.8668	86.68	70-130
	25	trans-1,2-Dichloro	1.000	0.9370	93.71	70-130
	8	Dichlorodifluorome	1.000	1.056	105.56	70-130
	13	Trichlorofluoromet	1.000	1.466	146.56*	70-130
	70	1,2,3-Trichloropro	1.000	0.9297	NT 92.97	70-130
	18	Freon-113	1.000	0.8575	85.75	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\UXJ6673.D
Report Date: 15-Apr-2011 11:46

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.8444	84.44	70-130
58 1,2-Dibromoethane	1.000	0.8957	89.57	70-130
67 Isopropylbenzene	1.000	0.6711	67.11*	70-130
80 1,3-Dichlorobenzen	1.000	0.8156	81.56	70-130
81 1,4-Dichlorobenzen	1.000	0.8972	89.72	70-130
83 1,2-Dichlorobenzen	1.000	0.8698	86.98	70-130
84 1,2-Dibromo-3-chlo	1.000	1.301	130.11*	70-130
85 1,2,4-Trichloroben	1.000	0.5564	55.64*	70-130
98 Cyclohexane	1.000	0.9022	90.22	70-130
143 Methyl Acetate	2.000	2.302	115.08	70-130
144 Methylcyclohexane	1.000	0.8086	80.86	70-130
71 Bromobenzene	1.000	0.7813	78.13	70-130
34 Bromochloromethane	1.000	0.9510	95.10	70-130
82 n-Butylbenzene	1.000	0.6216	62.16*	70-130
78 sec-Butylbenzene	1.000	0.6695	66.95*	70-130
76 tert-Butylbenzene	1.000	0.6386	63.86*	70-130
73 2-Chlorotoluene	1.000	0.8370	83.70	70-130
75 4-Chlorotoluene	1.000	0.7831	78.31	70-130
45 Dibromomethane	1.000	1.002	100.16	70-130
33 2,2-Dichloropropan	1.000	0.9225	92.25	70-130
38 1,1-Dichloropropen	1.000	0.8899	88.99	70-130
86 Hexachlorobutadien	1.000	0.6549	65.49*	70-130
19 Iodomethane	1.000	1.226	122.55	70-130
79 4-Isopropyltoluene	1.000	0.6247	62.47*	70-130
87 Naphthalene	1.000	0.4006	40.07*	70-130
72 n-Propylbenzene	1.000	0.6947	69.47*	70-130
60 1,1,1,2-Tetrachlor	1.000	0.8841	88.41	70-130
88 1,2,3-Trichloroben	1.000	0.5133	51.33*	70-130
77 1,2,4-Trimethylben	1.000	0.6435	64.35*	70-130
74 1,3,5-Trimethylben	1.000	0.6945	69.45*	70-130
150 Vinyl Acetate-86	1.000	0.9388	93.88	70-130
62 m + p-Xylene	2.000	1.519	75.94	70-130
64 Xylene-o	1.000	0.7472	74.73	70-130
49 4-Methyl-2-pentano	2.000	2.065	103.23	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	8.174	81.74	75-121
$ 5 1,2-Dichloroethane	10.000	8.270	82.70	63-129
$ 6 Toluene-d8	10.000	8.251	82.51	74-115
$ 7 Bromofluorobenzene	10.000	8.800	88.00	66-117

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\UXJ6699.D
Report Date: 18-Apr-2011 08:29

4/15/11 @ 2111

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: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\8260LLUX11.m
Misc Info: J10415A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: MRL
Quant Type: ISTD

Remove close

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.158	115.76	70-130
	42	Trichloroethene	1.000	0.9354	93.54	70-130
	59	Chlorobenzene	1.000	0.9719	97.19	70-130
	50	Toluene	1.000	0.9770	97.70	70-130
	41	Benzene	1.000	0.9947	99.47	70-130
	16	Acetone	2.000	1.921	96.05	70-130
	20	Carbon Disulfide	1.000	1.250	125.04	70-130
	9	Chloromethane	1.000	1.258	125.81	70-130
	11	Bromomethane	1.000	1.194	119.39	70-130
	10	Vinyl Chloride	1.000	1.188	118.83	70-130
	12	Chloroethane	1.000	1.175	117.52	70-130
	21	Methylene Chloride	1.000	2.343	234.30*	70-130
	28	1,1-Dichloroethane	1.000	1.047	104.72	70-130
M	31	1,2-Dichloroethene	2.000	2.020	100.99	70-130
	35	Chloroform	1.000	1.050	105.04	70-130
	40	1,2-Dichloroethane	1.000	1.109	110.91	70-130
	30	2-Butanone	2.000	2.268	113.38	70-130
	37	1,1,1-Trichloroeth	1.000	0.9678	96.78	70-130
	39	Carbon Tetrachlori	1.000	0.9300	93.00	70-130
	46	Bromodichlorometha	1.000	0.9705	97.05	70-130
	43	1,2-Dichloropropan	1.000	1.034	103.37	70-130
	48	cis-1,3-Dichloropr	1.000	0.8696	86.96	70-130
	54	1,3-Dichloropropan	1.000	1.064	106.46	70-130
	57	Dibromochlorometha	1.000	0.8922	89.22	70-130
	53	1,1,2-Trichloroeth	1.000	1.040	103.98	70-130
	51	trans-1,3-Dichloro	1.000	0.7360	73.60	70-130
	49	4-Methyl-2-pentano	2.000	2.007	100.34	70-130
	56	2-Hexanone	2.000	1.848	92.43	70-130
	55	Tetrachloroethene	1.000	0.8762	87.62	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.089	108.92	70-130
	66	Bromoform	1.000	1.304	OK 130.42*	70-130
	61	Ethylbenzene	1.000	0.8993	89.93	70-130
	65	Styrene	1.000	0.7659	76.59	70-130
M	63	Xylenes (total)	3.000	2.470	82.33	70-130
	32	cis-1,2-dichloroet	1.000	0.9924	99.24	70-130
	25	trans-1,2-Dichloro	1.000	1.027	102.73	70-130
	8	Dichlorodifluorome	1.000	0.6854	NT 68.54*	70-130
	13	Trichlorofluoromet	1.000	1.030	102.95	70-130
	70	1,2,3-Trichloropro	1.000	1.065	106.52	70-130
	18	Freon-113	1.000	0.8829	88.29	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10415A.b\UXJ6699.D
Report Date: 18-Apr-2011 08:29

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24	Methyl tert-butyl	1.000	0.9813	98.13	70-130
58	1,2-Dibromoethane	1.000	0.9495	94.95	70-130
67	Isopropylbenzene	1.000	0.6773	67.73*	70-130
80	1,3-Dichlorobenzen	1.000	0.9508	95.08	70-130
81	1,4-Dichlorobenzen	1.000	0.9462	94.62	70-130
83	1,2-Dichlorobenzen	1.000	0.8772	87.72	70-130
84	1,2-Dibromo-3-chlo	1.000	1.336	133.63*	70-130
85	1,2,4-Trichloroben	1.000	0.9954	99.54	70-130
98	Cyclohexane	1.000	0.7218	72.19	70-130
143	Methyl Acetate	2.000	2.355	117.76	70-130
144	Methylcyclohexane	1.000	0.6977	69.77*	70-130
71	Bromobenzene	1.000	0.9276	92.76	70-130
34	Bromochloromethane	1.000	0.9786	97.86	70-130
82	n-Butylbenzene	1.000	0.6719	67.19*	70-130
78	sec-Butylbenzene	1.000	0.6939	69.39*	70-130
76	tert-Butylbenzene	1.000	0.7524	75.24	70-130
73	2-Chlorotoluene	1.000	0.7646	76.46	70-130
75	4-Chlorotoluene	1.000	0.8151	81.51	70-130
45	Dibromomethane	1.000	1.067	106.74	70-130
33	2,2-Dichloropropan	1.000	0.7922	79.22	70-130
38	1,1-Dichloropropen	1.000	0.8743	87.43	70-130
86	Hexachlorobutadien	1.000	1.081	108.13	70-130
19	Iodomethane	1.000	1.378	137.85*	70-130
79	4-Isopropyltoluene	1.000	0.7059	70.59	70-130
87	Naphthalene	1.000	0.9821	98.21	70-130
72	n-Propylbenzene	1.000	0.7236	72.36	70-130
60	1,1,1,2-Tetrachlor	1.000	0.8944	89.44	70-130
88	1,2,3-Trichloroben	1.000	1.375	137.52*	70-130
77	1,2,4-Trimethylben	1.000	0.7777	77.77	70-130
74	1,3,5-Trimethylben	1.000	0.7153	71.53	70-130
150	Vinyl Acetate-86	1.000	0.6727	67.27*	70-130
62	m + p-Xylene	2.000	1.674	83.73	70-130
64	Xylene-o	1.000	0.7955	79.55	70-130
49	4-Methyl-2-pentano	2.000	2.007	100.34	70-130

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4	Dibromofluorometha	10.000	8.164	81.64	75-121
$ 5	1,2-Dichloroethane	10.000	7.862	78.62	63-129
$ 6	Toluene-d8	10.000	8.099	80.99	74-115
$ 7	Bromofluorobenzene	10.000	8.716	87.16	66-117

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: MG1FL1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALCAN — SDG Number:

Lab File ID: UXJ6646.D — Lot Number: A1D070402

Date Analyzed: 04/14/11 — Time Analyzed: 12:12

Matrix: WATER — Date Extracted: 04/14/11

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	MGK3H1AA	UXJ6655.D	04/14/11	15:37
02	LAB MS/MSD	MGK3H1AC S	UXJ6667.D	04/14/11	20:09
03	LAB MS/MSD	MGK3H1AD D	UXJ6668.D	04/14/11	20:31
04	FWGTEAM1-TRIP	MGM671AA	UXJ6659.D	04/14/11	17:08
05	FWGBKGmw-006C-1706-GW ✓	MGM681AA	UXJ6660.D	04/14/11	17:30
06	FWGBKGmw-015C-1709-GW ✓	MGM7A1AA	UXJ6661.D	04/14/11	17:53
07	FWGBKGmw-021C-1711-GW ✓	MGM7E1AA	UXJ6662.D	04/14/11	18:15
08	FWGBKGmw-008C-1707-GW ✓	MGM7G1AA	UXJ6663.D	04/14/11	18:38
09	FWGRQLmw-009C-1735-GW ✓	MGM7J1AA	UXJ6664.D	04/14/11	19:01
10	FWGRQLmw-DUP5-1750-GW ✓	MGM7L1AA	UXJ6665.D	04/14/11	19:23
11	FWGEQUIPRINSE3-1759-GW	MGM7N1AA	UXJ6666.D	04/14/11	19:46
12	CHECK SAMPLE	MG1FL1AC C	UXJ6644.D	04/14/11	11:27
13					
14					
15					
16				Closed	
17					
18	Open				
19	Chloromethane			1,1-DCE	
20					
21				Acetone	
22		Chloroethane		Chloromethane	
23	VC				
24				VC	
25					
26		Meets		Meets	
27					Chloroethane
28		Bromoform		Chloroethane	
29					
30					

COMMENTS:

FORM IV

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: MG3AC1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALCAN | SDG Number:

Lab File ID: UXJ6676.D | Lot Number: A1D070402

Date Analyzed: 04/15/11 | Time Analyzed: 12:31

Matrix: WATER | Date Extracted: 04/15/11

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	FWGTEAM2-TRIP	MGM7P1AA	UXJ6677.D	04/15/11	12:54
02	FWGSCFmw-003-1743-GW	MGM7Q1AA	UXJ6678.D	04/15/11	13:16
03	FWGSCFmw-003-1743-GW	MGM7Q1AC S	UXJ6695.D	04/15/11	19:41
04	FWGSCFmw-003-1743-GW	MGM7Q1AD D	UXJ6696.D	04/15/11	20:04
05	FWGSCFmw-001-1741-GW	MGM7T1AA	UXJ6679.D	04/15/11	13:39
06	FWGSCFmw-002-1742-GW	MGM7W1AA	UXJ6680.D	04/15/11	14:01
07	FWGTEAM3-TRIP	MGM711AA	UXJ6681.D	04/15/11	14:24
08	FWGRQLmw-014C-1736-GW	MGM721AA	UXJ6682.D	04/15/11	14:47
09	FWGRQLmw-016C-1737-GW	MGM871AA	UXJ6683.D	04/15/11	15:09
10	FWGRQLmw-008C-1734-GW	MGM891AA	UXJ6684.D	04/15/11	15:32
11	FWGRQLmw-008C-1734-GW	MGM891AC S	UXJ6697.D	04/15/11	20:26
12	FWGRQLmw-008C-1734-GW	MGM891AD D	UXJ6698.D	04/15/11	20:49
13	FWGRQLmw-007C-1733-GW	MGM9E1AA	UXJ6685.D	04/15/11	15:54
14	CHECK SAMPLE	MG3AC1AC C	UXJ6674.D	04/15/11	11:46
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Chloromethane
Chloroethane
MeCl2

Closing
MeCl2

COMMENTS:

FORM IV

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 9, 2011

SDG: A1D070402 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 1.8 and 3.8 °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?	✓			A4HP10-4/12/2011 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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 9, 2011

SDG: A1D070402 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 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?	✓			1/21/11	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓				LCG Table 2
18. Were the QC/MRL recoveries 70-130%?	✓			The closing MRL analyzed 4/19/11 @ 1657 recovered below control limits for 4,6-dinitro-2-methylphenol at 64%, pentachlorophenol at 62% and 2,4-dinitrophenol at 45%. An MDL check was analyzed following the closing MRL with detected results for 2,4-dinitrophenol. The 4,6-dinitro-2methylphenol, pentachlorophenol and 2,4-dinitrophenol results were qualified as estimated, "UJ".	LCG Table 2 >130%=J; <50%=J/R 50-70%=J/UJ
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			4/12/11 @ 2000	LCG Table 2 >130%=J; <50%=J/R 50-70%=J/UJ;
20. Was a CCV analyzed every 12 hours?	✓			4/19/11 @0910	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 9, 2011

SDG: A1D070402 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 4.0ug/L. The bis(2-ethylhexyl) phthalate results for samples FWGBKGmw-015c-1709-GW, FWGBKGmw-008c-1707-GW, FWGBKGmw-021c-1711-GW, FWGRQLmw-009c-1735-GW, FWGRQLmw-007c-1733-GW, FWGRQLmw-008c-1734-GW, FWGRQLmw-014c-1736-GW, FWGRQLmw-016c-1737-GW, FWGRQLmw-DUP5-1750-GW, FWGSCFmw-001-1741-GW and FWGSCFmw-002-1742-GW were qualified, "B" as the detected concentrations were less than 5x contamination.	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?	✓				
32. Were the field duplicate RPDs ≤30%?	✓				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?	✓				
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		Checked by ADR. For the matrix spike analysis performed on sample FWGRQLmw-008c-1734-GW, the matrix spike and spike duplicate were below control limits for 3,3'-dichlorobenzidine at 20% and 21% and below limits for hexachlorocyclopentadiene at 44% in the MS.	LCG Table 2 Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 9, 2011

SDG: A1D070402 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
				For the matrix spike analysis performed on sample FWGSCFmw-003-1743-GW, the matrix spike and spike duplicate were below control limits for2,4-dinitrophenol at 35%, 3,3'-dichlorobenzidine at 29% and 27% hexachlorocyclopentadiene at 38% and 41%. Except for 2,4-dinitrophenol, no qualifications were made for the matrix spike outliers since there were no additional QC outliers associated with the samples. The 2,4-dintrophenol result for sample FWGSCFmw-003-1743-GW, was qualified as estimated, "UJ"	
38. Were surrogate recoveries within 50-150%?		✓		Checked by ADR. For sample FWGRQLmw-014c-1736-GW, the surrogates 2-fluorophenol and nitrobenze-d5 recovered below control limits at 49% and 48%, respectively. The surrogate, terphenyl-d14, recovered below control limits in sample FWGRQLmw-DUP5-1750-GW at 42%. No qualification was made as LCG allows for one outlier per fraction without qualification. The surrogates for the method blank appear to have been double spiked. No qualification was made as there were no detected concentrations above the RL in the method blank.	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.	✓				

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 Compounds	Acid Compounds
Acenaphthalene	4-Chloro-3-methylphenol
1,4-Dichlorobenzene	2,4-Dichlorophenol
Hexachlorobutadiene	2-Nitrophenol
N-Nitrosodiphehylamine	Phenol

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 9, 2011

SDG: A1D070402 R0
Analysis: SW846 8270C (including PAHs)

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: FWGBKGmw-006C-1706-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-002 **Work Order #...:** MGM681AC **Matrix.....:** WG
Date Sampled...: 04/06/11 09:21 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
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	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: FWGBKGmw-006C-1706-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-002 **Work Order #...:** MGM681AC **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: FWGBKGmw-006C-1706-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-002 **Work Order #...:** MGM681AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	78	(50 - 150)
2-Fluorophenol	77	(50 - 150)
2,4,6-Tribromophenol	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-015C-1709-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-004 **Work Order #...:** MGM7A1AC **Matrix.....:** WG
Date Sampled...: 04/06/11 10:35 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
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	**1.2 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: FWGBKGmw-015C-1709-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-004 **Work Order #...:** MGM7A1AC **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: FWGBKGmw-015C-1709-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-004 **Work Order #...:** MGM7A1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	74	(50 - 150)
Terphenyl-d14	87	(50 - 150)
Phenol-d5	79	(50 - 150)
2-Fluorophenol	76	(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: FWGBKGmw-021C-1711-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-006 Work Order #...: MGM7E1AC Matrix.....: WG
Date Sampled...: 04/06/11 12:45 Date Received..: 04/07/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098032
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	**1.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	**0.82 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: FWGBKGmw-021C-1711-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-006 **Work Order #...:** MGM7E1AC **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: FWGBKGmw-021C-1711-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-006 **Work Order #...:** MGM7E1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	68	(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: FWGBKGmw-008C-1707-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-008 **Work Order #...:** MGM7G1AC **Matrix.....:** WG
Date Sampled...: 04/06/11 14:01 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
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: FWGBKGmw-008C-1707-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-008 Work Order #...: MGM7G1AC 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: FWGBKGmw-008C-1707-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-008 **Work Order #...:** MGM7G1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	62	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	70	(50 - 150)
2-Fluorophenol	67	(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: FWGRQLmw-009C-1735-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-010 **Work Order #...:** MGM7J1AC **Matrix.....:** WG
Date Sampled...: 04/06/11 15:31 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
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	**1.3 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: FWGRQLmw-009C-1735-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-010 Work Order #...: MGM7J1AC 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: FWGRQLmw-009C-1735-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-010 **Work Order #...:** MGM7J1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	53	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	72	(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: FWGRQLmw-DUP5-1750-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-012 **Work Order #...:** MGM7L1AC **Matrix.....:** WG
Date Sampled...: 04/06/11 16:55 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
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) phtbalate	**0.97 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: FWGRQLmw-DUP5-1750-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-012 Work Order #...: MGM7L1AC 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: FWGRQLmw-DUP5-1750-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-012 Work Order #...: MGM7L1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	42 *	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	80	(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: FWGEQUIPRINSE3-1759-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-014 **Work Order #...:** MGM7N1AC **Matrix.....:** WQ
Date Sampled...: 04/06/11 17:35 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
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: FWGEQUIPRINSE3-1759-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-014 Work Order #...: MGM7N1AC 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: FWGEQUIPRINSE3-1759-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-014 **Work Order #...:** MGM7N1AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	62	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1743-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-016 **Work Order #...:** MGM7Q1AE **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
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	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: FWGSCFmw-003-1743-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-016 **Work Order #...:** MGM7Q1AE **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-003-1743-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-016 **Work Order #...:** MGM7Q1AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	**77**	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: **FWGSCFmw-001-1741-GW**

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-018 **Work Order #...:** MGM7T1AC **Matrix.....:** WG
Date Sampled...: 04/06/11 12:52 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
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	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: FWGSCFmw-001-1741-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-018 **Work Order #...:** MGM7T1AC **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-001-1741-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-018 **Work Order #...:** MGM7T1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	59	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	88	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	67	(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: FWGSCFmw-002-1742-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-020 **Work Order #...:** MGM7W1AC **Matrix.....:** WG
Date Sampled...: 04/06/11 15:48 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
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	**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: FWGSCFmw-002-1742-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-020 **Work Order #...:** MGM7W1AC **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-002-1742-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-020 **Work Order #...:** MGM7W1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	60	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	67	(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: FWGRQLmw-014C-1736-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-023 **Work Order #...:** MGM721AC **Matrix.....:** WG
Date Sampled...: 04/06/11 09:16 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
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	**1.9 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: FWGRQLmw-014C-1736-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-023 **Work Order #...:** MGM721AC **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: FWGRQLmw-014C-1736-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-023 **Work Order #...:** MGM721AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	48 *	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
Terphenyl-d14	65	(50 - 150)
Phenol-d5	51	(50 - 150)
2-Fluorophenol	49 *	(50 - 150)
2,4,6-Tribromophenol	60	(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: FWGRQLmw-016C-1737-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-028	**Work Order #...:** MGM871AC	**Matrix.....:** WG	
Date Sampled...: 04/06/11 11:03	**Date Received..:** 04/07/11		
Prep Date.....: 04/08/11	**Analysis Date..:** 04/19/11		
Prep Batch #...: 1098032			
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	**1.1 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: FWGRQLmw-016C-1737-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-028 Work Order #...: MGM871AC 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: FWGRQLmw-016C-1737-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-028 Work Order #...: MGM871AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	68	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	84	(50 - 150)
Phenol-d5	79	(50 - 150)
2-Fluorophenol	76	(50 - 150)
2,4,6-Tribromophenol	89	(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: FWGRQLmw-008C-1734-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-030 **Work Order #...:** MGM891AE **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
Dilution Factor: 1 **Initial Wgt/Vol:** 970 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: FWGRQLmw-008C-1734-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-030 **Work Order #...:** MGM891AE **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: FWGRQLmw-008C-1734-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-030 Work Order #...: MGM891AE Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	66	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	80	(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: FWGRQLmw-007C-1733-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-032 **Work Order #...:** MGM9E1AC **Matrix.....:** WG
Date Sampled...: 04/06/11 15:19 **Date Received..:** 04/07/11
Prep Date.....: 04/08/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1098032
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: FWGRQLmw-007C-1733-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-032 Work Order #...: MGM9E1AC 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: FWGRQLmw-007C-1733-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D070402-032 **Work Order #...:** MGM9E1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
Terphenyl-d14	69	(50 - 150)
Phenol-d5	78	(50 - 150)
2-Fluorophenol	76	(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.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 Work Order #...: MGPXW1AA Matrix.....: WATER
MB Lot-Sample #: A1D080000-032

Prep Date.....: 04/08/11 Final Wgt/Vol..: 2 mL
Analysis Date..: 04/19/11 Prep Batch #...: 1098032
Dilution Factor: 1 Initial Wgt/Vol: 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzoic acid	ND	10	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
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	**4.0 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 #...: A1D070402 **Work Order #...:** MGPXW1AA **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	144	(50 - 150)
2-Fluorobiphenyl	146	(50 - 150)
Terphenyl-d14	171 *	(50 - 150)
Phenol-d5	163 *	(50 - 150)
2-Fluorophenol	155 *	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGPXW1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	169 *	(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 #...: A1D070402 Work Order #...: MGPXW1AC Matrix.....: WATER
LCS Lot-Sample#: A1D080000-032
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098032
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	73	(30 - 120)	SW846 8270C
Acenaphthene	79	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	83	(34 - 151)	SW846 8270C
Pyrene	77	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	72	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	78	(30 - 115)	SW846 8270C
Pentachlorophenol	49	(30 - 150)	SW846 8270C
Phenol	84	(30 - 115)	SW846 8270C
2-Chlorophenol	82	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	85	(31 - 121)	SW846 8270C
4-Nitrophenol	87	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	78	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	74	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	80	(36 - 135)	SW846 8270C
4-Methylphenol	81	(31 - 115)	SW846 8270C
4-Nitroaniline	72	(30 - 140)	SW846 8270C
Acenaphthylene	78	(37 - 115)	SW846 8270C
Anthracene	79	(45 - 118)	SW846 8270C
Benzo(a)anthracene	74	(43 - 138)	SW846 8270C
Benzo(a)pyrene	66	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	70	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	79	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	91	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	82	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	78	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	78	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	55	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 Work Order #...: MGPXW1AC Matrix.....: WATER
LCS Lot-Sample#: A1D080000-032

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	81	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	82	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	65	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	36	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	82	(43 - 122)	SW846 8270C
2-Chloronaphthalene	77	(35 - 115)	SW846 8270C
2-Methylnaphthalene	91	(32 - 115)	SW846 8270C
2-Methylphenol	81	(30 - 116)	SW846 8270C
2-Nitroaniline	72	(36 - 140)	SW846 8270C
2-Nitrophenol	86	(33 - 115)	SW846 8270C
3,3'-Dichlorohenzidine	46	(30 - 160)	SW846 8270C
3-Nitroaniline	66	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	76	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	86	(43 - 118)	SW846 8270C
4-Chloroaniline	62	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	79	(40 - 115)	SW846 8270C
Butyl henzyl phthalate	78	(37 - 136)	SW846 8270C
Carbazole	79	(49 - 126)	SW846 8270C
Chrysene	79	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	74	(38 - 130)	SW846 8270C
Dihenzofuran	77	(40 - 115)	SW846 8270C
Diethyl phthalate	80	(43 - 132)	SW846 8270C
Dimethyl phthalate	80	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	49	(36 - 151)	SW846 8270C
Fluoranthene	81	(47 - 132)	SW846 8270C
Fluorene	77	(41 - 115)	SW846 8270C
Hexachlorobenzene	85	(42 - 123)	SW846 8270C
Hexachlorobutadiene	74	(30 - 120)	SW846 8270C
Hexachloroethane	74	(30 - 120)	SW846 8270C
Isophorone	78	(33 - 115)	SW846 8270C
Naphthalene	77	(30 - 119)	SW846 8270C
Nitrobenzene	81	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	70	(35 - 124)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGPXW1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D080000-032

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	**79**	**(45 - 117)**	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	**76**	**(37 - 130)**	**SW846 8270C**
Di-n-butyl phthalate	**82**	**(46 - 123)**	**SW846 8270C**
Hexachlorocyclopenta-diene	**41**	**(30 - 115)**	**SW846 8270C**
Benzoic acid	**29 a**	**(30 - 136)**	**SW846 8270C**
Benzyl alcohol	**83**	**(29 - 115)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	77	(50 - 150)
Terphenyl-d14	90	(50 - 150)
Phenol-d5	85	(50 - 150)
2-Fluorophenol	82	(50 - 150)
2,4,6-Tribromophenol	88	(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 #...: A1D070402 Work Order #...: MGM7Q1AF-MS Matrix.....: WG
MS Lot-Sample #: A1D070402-016 MGM7Q1AG-MSD
Date Sampled...: 04/06/11 09:22 Date Received..: 04/07/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098032
Dilution Factor: 1 Initial Wgt/Vol: 490 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	66	(45 - 135)			SW846 8270C
	69	(45 - 135)	4.5	(0-40)	SW846 8270C
Acenaphthene	74	(45 - 135)			SW846 8270C
	75	(45 - 135)	2.0	(0-40)	SW846 8270C
2,4-Dinitrotoluene	76	(45 - 135)			SW846 8270C
	79	(45 - 135)	3.8	(0-40)	SW846 8270C
Pyrene	71	(45 - 135)			SW846 8270C
	72	(45 - 135)	1.7	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	67	(45 - 135)			SW846 8270C
	69	(45 - 135)	3.0	(0-40)	SW846 8270C
1,4-Dichlorobenzene	71	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.3	(0-40)	SW846 8270C
Pentachlorophenol	50	(45 - 135)			SW846 8270C
	47	(45 - 135)	6.6	(0-40)	SW846 8270C
Pbenol	77	(45 - 135)			SW846 8270C
	81	(45 - 135)	5.1	(0-40)	SW846 8270C
2-Chlorophenol	76	(45 - 135)			SW846 8270C
	79	(45 - 135)	3.8	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	76	(45 - 135)			SW846 8270C
	79	(45 - 135)	3.9	(0-40)	SW846 8270C
4-Nitrophenol	80	(45 - 135)			SW846 8270C
	78	(45 - 135)	1.4	(0-40)	SW846 8270C
Acenaphthylene	72	(45 - 135)			SW846 8270C
	74	(45 - 135)	3.4	(0-40)	SW846 8270C
Anthracene	71	(45 - 135)			SW846 8270C
	75	(45 - 135)	4.8	(0-40)	SW846 8270C
Benzo(a)anthracene	67	(45 - 135)			SW846 8270C
	68	(45 - 135)	1.8	(0-40)	SW846 8270C
Benzo(b)fluoranthene	68	(45 - 135)			SW846 8270C
	66	(45 - 135)	4.2	(0-40)	SW846 8270C
Benzo(k)fluoranthene	78	(45 - 135)			SW846 8270C
	91	(45 - 135)	15	(0-40)	SW846 8270C
Benzo(ghi)perylene	74	(45 - 135)			SW846 8270C
	75	(45 - 135)	1.6	(0-40)	SW846 8270C
Benzo(a)pyrene	59	(45 - 135)			SW846 8270C
	64	(45 - 135)	7.4	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM7Q1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-016 MGM7Q1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	75	(45 - 135)			SW846 8270C
	76	(45 - 135)	1.2	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	71	(45 - 135)			SW846 8270C
	79	(45 - 135)	9.4	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	71	(45 - 135)			SW846 8270C
	76	(45 - 135)	5.8	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	77	(45 - 135)			SW846 8270C
	78	(45 - 135)	1.9	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	77	(45 - 135)			SW846 8270C
	82	(45 - 135)	6.6	(0-40)	SW846 8270C
Butyl benzyl phthalate	74	(45 - 135)			SW846 8270C
	74	(45 - 135)	0.11	(0-40)	SW846 8270C
Carbazole	73	(45 - 135)			SW846 8270C
	76	(45 - 135)	4.2	(0-40)	SW846 8270C
4-Chloroaniline	57	(45 - 135)			SW846 8270C
	58	(45 - 135)	2.6	(0-40)	SW846 8270C
2-Chloronaphthalene	73	(45 - 135)			SW846 8270C
	74	(45 - 135)	2.0	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	75	(45 - 135)			SW846 8270C
	78	(45 - 135)	4.4	(0-40)	SW846 8270C
Chrysene	75	(45 - 135)			SW846 8270C
	72	(45 - 135)	4.9	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	73	(45 - 135)			SW846 8270C
	76	(45 - 135)	4.3	(0-40)	SW846 8270C
Dibenzofuran	72	(45 - 135)			SW846 8270C
	75	(45 - 135)	4.2	(0-40)	SW846 8270C
Di-n-butyl phthalate	76	(45 - 135)			SW846 8270C
	78	(45 - 135)	3.0	(0-40)	SW846 8270C
1,2-Dichlorobenzene	73	(45 - 135)			SW846 8270C
	76	(45 - 135)	4.0	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 Work Order #...: MGM7Q1AF-MS Matrix.....: WG
MS Lot-Sample #: A1D070402-016 MGM7Q1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	68	(45 - 135)			SW846 8270C
	71	(45 - 135)	4.3	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	29 a	(45 - 135)			SW846 8270C
	27 a	(45 - 135)	6.3	(0-40)	SW846 8270C
2,4-Dichlorophenol	76	(45 - 135)			SW846 8270C
	78	(45 - 135)	3.3	(0-40)	SW846 8270C
Diethyl phthalate	75	(45 - 135)			SW846 8270C
	78	(45 - 135)	4.3	(0-40)	SW846 8270C
2,4-Dimethylphenol	61	(45 - 135)			SW846 8270C
	60	(45 - 135)	1.7	(0-40)	SW846 8270C
Dimethyl phthalate	73	(45 - 135)			SW846 8270C
	76	(45 - 135)	4.2	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	71	(45 - 135)			SW846 8270C
	71	(45 - 135)	0.04	(0-40)	SW846 8270C
2,4-Dinitrophenol	35 a	(45 - 135)			SW846 8270C
	35 a	(45 - 135)	0.90	(0-40)	SW846 8270C
2,6-Dinitrotoluene	76	(45 - 135)			SW846 8270C
	79	(45 - 135)	3.8	(0-40)	SW846 8270C
Di-n-octyl phthalate	69	(45 - 135)			SW846 8270C
	71	(45 - 135)	2.6	(0-40)	SW846 8270C
Fluoranthene	75	(45 - 135)			SW846 8270C
	78	(45 - 135)	4.5	(0-40)	SW846 8270C
Fluorene	71	(45 - 135)			SW846 8270C
	75	(45 - 135)	4.9	(0-40)	SW846 8270C
Hexachlorobenzene	76	(45 - 135)			SW846 8270C
	80	(45 - 135)	5.3	(0-40)	SW846 8270C
Hexachlorobutadiene	66	(45 - 135)			SW846 8270C
	69	(45 - 135)	5.1	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	38 a	(45 - 135)			SW846 8270C
	41 a	(45 - 135)	9.2	(0-40)	SW846 8270C
Hexachloroethane	66	(45 - 135)			SW846 8270C
	70	(45 - 135)	5.2	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	71	(45 - 135)			SW846 8270C
	74	(45 - 135)	4.3	(0-40)	SW846 8270C
Isophorone	71	(45 - 135)			SW846 8270C
	73	(45 - 135)	3.5	(0-40)	SW846 8270C
2-Methylnaphthalene	83	(45 - 135)			SW846 8270C
	87	(45 - 135)	4.9	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM7Q1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-016 MGM7Q1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	74	(45 - 135)			SW846 8270C
	76	(45 - 135)	2.9	(0-40)	SW846 8270C
4-Methylphenol	75	(45 - 135)			SW846 8270C
	78	(45 - 135)	4.3	(0-40)	SW846 8270C
Naphthalene	70	(45 - 135)			SW846 8270C
	71	(45 - 135)	2.2	(0-40)	SW846 8270C
2-Nitroaniline	66	(45 - 135)			SW846 8270C
	69	(45 - 135)	4.1	(0-40)	SW846 8270C
3-Nitroaniline	64	(45 - 135)			SW846 8270C
	65	(45 - 135)	1.5	(0-50)	SW846 8270C
4-Nitroaniline	67	(45 - 135)			SW846 8270C
	69	(45 - 135)	3.1	(0-40)	SW846 8270C
Nitrobenzene	72	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.7	(0-40)	SW846 8270C
2-Nitrophenol	75	(45 - 135)			SW846 8270C
	81	(45 - 135)	7.8	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	61	(45 - 135)			SW846 8270C
	62	(45 - 135)	2.1	(0-40)	SW846 8270C
Phenanthrene	73	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.0	(0-40)	SW846 8270C
2,4,5-Trichlorophenol	76	(45 - 135)			SW846 8270C
	75	(45 - 135)	1.3	(0-40)	SW846 8270C
2,4,6-Trichlorophenol	70	(45 - 135)			SW846 8270C
	74	(45 - 135)	6.0	(0-40)	SW846 8270C
Benzoic acid	25 a	(45 - 135)			SW846 8270C
	29 a	(45 - 135)	15	(0-40)	SW846 8270C
Benzyl alcohol	80	(45 - 135)			SW846 8270C
	76	(45 - 135)	5.2	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
	70	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
	72	(50 - 150)
Terphenyl-d14	81	(50 - 150)
	83	(50 - 150)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM7Q1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-016 MGM7Q1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	77	(50 - 150)
	79	(50 - 150)
2-Fluorophenol	75	(50 - 150)
	76	(50 - 150)
2,4,6-Tribromophenol	79	(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

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 Work Order #...: MGM891AF-MS Matrix.....: WG
MS Lot-Sample #: A1D070402-030 MGM891AG-MSD
Date Sampled...: 04/06/11 13:09 Date Received..: 04/07/11
Prep Date.....: 04/08/11 Analysis Date..: 04/19/11
Prep Batch #...: 1098032
Dilution Factor: 1 Initial Wgt/Vol: 490 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
	68	(45 - 135)	1.1	(0-40)	SW846 8270C
Acenaphthene	76	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.78	(0-40)	SW846 8270C
2,4-Dinitrotoluene	80	(45 - 135)			SW846 8270C
	78	(45 - 135)	1.9	(0-40)	SW846 8270C
Pyrene	72	(45 - 135)			SW846 8270C
	73	(45 - 135)	1.8	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	67	(45 - 135)			SW846 8270C
	68	(45 - 135)	1.5	(0-40)	SW846 8270C
1,4-Dichlorobenzene	73	(45 - 135)			SW846 8270C
	72	(45 - 135)	0.73	(0-40)	SW846 8270C
Pentachlorophenol	71	(45 - 135)			SW846 8270C
	70	(45 - 135)	1.9	(0-40)	SW846 8270C
Phenol	78	(45 - 135)			SW846 8270C
	78	(45 - 135)	0.11	(0-40)	SW846 8270C
2-Chlorophenol	78	(45 - 135)			SW846 8270C
	77	(45 - 135)	0.30	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	81	(45 - 135)			SW846 8270C
	83	(45 - 135)	2.7	(0-40)	SW846 8270C
4-Nitrophenol	83	(45 - 135)			SW846 8270C
	85	(45 - 135)	2.1	(0-40)	SW846 8270C
Acenaphthylene	74	(45 - 135)			SW846 8270C
	73	(45 - 135)	1.7	(0-40)	SW846 8270C
Anthracene	73	(45 - 135)			SW846 8270C
	72	(45 - 135)	1.5	(0-40)	SW846 8270C
Benzo(a)anthracene	67	(45 - 135)			SW846 8270C
	69	(45 - 135)	3.6	(0-40)	SW846 8270C
Benzo(b)fluoranthene	63	(45 - 135)			SW846 8270C
	67	(45 - 135)	6.7	(0-40)	SW846 8270C
Benzo(k)fluoranthene	78	(45 - 135)			SW846 8270C
	79	(45 - 135)	0.98	(0-40)	SW846 8270C
Benzo(ghi)perylene	70	(45 - 135)			SW846 8270C
	72	(45 - 135)	2.9	(0-40)	SW846 8270C
Benzo(a)pyrene	59	(45 - 135)			SW846 8270C
	61	(45 - 135)	3.9	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM891AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-030 MGM891AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	76	(45 - 135)			SW846 8270C
	76	(45 - 135)	0.38	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	77	(45 - 135)			SW846 8270C
	74	(45 - 135)	2.7	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	73	(45 - 135)			SW846 8270C
	73	(45 - 135)	0.05	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	67	(45 - 135)			SW846 8270C
	73	(45 - 135)	7.8	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	80	(45 - 135)			SW846 8270C
	77	(45 - 135)	3.7	(0-40)	SW846 8270C
Butyl benzyl phthalate	76	(45 - 135)			SW846 8270C
	80	(45 - 135)	5.2	(0-40)	SW846 8270C
Carbazole	76	(45 - 135)			SW846 8270C
	75	(45 - 135)	1.2	(0-40)	SW846 8270C
4-Chloroaniline	53	(45 - 135)			SW846 8270C
	54	(45 - 135)	1.4	(0-40)	SW846 8270C
2-Chloronaphthalene	75	(45 - 135)			SW846 8270C
	74	(45 - 135)	0.98	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	79	(45 - 135)			SW846 8270C
	77	(45 - 135)	1.8	(0-40)	SW846 8270C
Chrysene	70	(45 - 135)			SW846 8270C
	72	(45 - 135)	3.4	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	70	(45 - 135)			SW846 8270C
	72	(45 - 135)	2.3	(0-40)	SW846 8270C
Dibenzofuran	75	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.46	(0-40)	SW846 8270C
Di-n-butyl phthalate	79	(45 - 135)			SW846 8270C
	78	(45 - 135)	1.6	(0-40)	SW846 8270C
1,2-Dichlorobenzene	74	(45 - 135)			SW846 8270C
	75	(45 - 135)	1.2	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 Work Order #...: MGM891AF-MS Matrix.....: WG
MS Lot-Sample #: A1D070402-030 MGM891AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	69	(45 - 135)			SW846 8270C
	70	(45 - 135)	1.3	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	20 a	(45 - 135)			SW846 8270C
	21 a	(45 - 135)	1.5	(0-40)	SW846 8270C
2,4-Dichlorophenol	80	(45 - 135)			SW846 8270C
	80	(45 - 135)	0.15	(0-40)	SW846 8270C
Diethyl phthalate	79	(45 - 135)			SW846 8270C
	76	(45 - 135)	2.6	(0-40)	SW846 8270C
2,4-Dimethylphenol	67	(45 - 135)			SW846 8270C
	69	(45 - 135)	2.4	(0-40)	SW846 8270C
Dimethyl phthalate	78	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.0	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	73	(45 - 135)			SW846 8270C
	75	(45 - 135)	2.1	(0-40)	SW846 8270C
2,4-Dinitrophenol	52	(45 - 135)			SW846 8270C
	52	(45 - 135)	1.0	(0-40)	SW846 8270C
2,6-Dinitrotoluene	80	(45 - 135)			SW846 8270C
	79	(45 - 135)	1.3	(0-40)	SW846 8270C
Di-n-octyl phthalate	60	(45 - 135)			SW846 8270C
	62	(45 - 135)	3.9	(0-40)	SW846 8270C
Fluoranthene	77	(45 - 135)			SW846 8270C
	77	(45 - 135)	0.13	(0-40)	SW846 8270C
Fluorene	76	(45 - 135)			SW846 8270C
	75	(45 - 135)	2.3	(0-40)	SW846 8270C
Hexachlorobenzene	76	(45 - 135)			SW846 8270C
	78	(45 - 135)	2.2	(0-40)	SW846 8270C
Hexachlorobutadiene	69	(45 - 135)			SW846 8270C
	69	(45 - 135)	0.08	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	44 a	(45 - 135)			SW846 8270C
	46	(45 - 135)	4.8	(0-40)	SW846 8270C
Hexachloroethane	69	(45 - 135)			SW846 8270C
	68	(45 - 135)	1.1	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	69	(45 - 135)			SW846 8270C
	72	(45 - 135)	4.0	(0-40)	SW846 8270C
Isophorone	72	(45 - 135)			SW846 8270C
	74	(45 - 135)	2.6	(0-40)	SW846 8270C
2-Methylnaphthalene	86	(45 - 135)			SW846 8270C
	86	(45 - 135)	0.07	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 Work Order #...: MGM891AF-MS Matrix.....: WG
MS Lot-Sample #: A1D070402-030 MGM891AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	75	(45 - 135)			SW846 8270C
	76	(45 - 135)	1.2	(0-40)	SW846 8270C
4-Methylphenol	78	(45 - 135)			SW846 8270C
	77	(45 - 135)	0.96	(0-40)	SW846 8270C
Naphthalene	71	(45 - 135)			SW846 8270C
	72	(45 - 135)	0.83	(0-40)	SW846 8270C
2-Nitroaniline	68	(45 - 135)			SW846 8270C
	69	(45 - 135)	1.1	(0-40)	SW846 8270C
3-Nitroaniline	65	(45 - 135)			SW846 8270C
	60	(45 - 135)	8.5	(0-50)	SW846 8270C
4-Nitroaniline	70	(45 - 135)			SW846 8270C
	67	(45 - 135)	4.4	(0-40)	SW846 8270C
Nitrobenzene	75	(45 - 135)			SW846 8270C
	76	(45 - 135)	1.4	(0-40)	SW846 8270C
2-Nitrophenol	79	(45 - 135)			SW846 8270C
	79	(45 - 135)	0.57	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	66	(45 - 135)			SW846 8270C
	65	(45 - 135)	1.9	(0-40)	SW846 8270C
Phenanthrene	75	(45 - 135)			SW846 8270C
	74	(45 - 135)	0.82	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	82	(45 - 135)			SW846 8270C
	78	(45 - 135)	4.6	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	79	(45 - 135)			SW846 8270C
	77	(45 - 135)	2.1	(0-40)	SW846 8270C
Benzoic acid	64	(45 - 135)			SW846 8270C
	62	(45 - 135)	2.8	(0-40)	SW846 8270C
Benzyl alcohol	80	(45 - 135)			SW846 8270C
	82	(45 - 135)	2.9	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
	70	(50 - 150)
2-Fluorobiphenyl	76	(50 - 150)
	73	(50 - 150)
Terphenyl-d14	81	(50 - 150)
	82	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM891AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-030 MGM891AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	79	(50 - 150)
	78	(50 - 150)
2-Fluorophenol	76	(50 - 150)
	75	(50 - 150)
2,4,6-Tribromophenol	86	(50 - 150)
	83	(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.

Good for everything except:
4,6 Dinitro-2-methylphenol
2,4-Dinitrophenol
Pentachlorophenol

TestAmerica North Canton

RECOVERY REPORT

4/19/11 @ 1057

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: qcmrlcl
Level: LOW
Data Type: MS DATA
SpikeList File: qcmrl.spk
Sublist File: qcmrl.sub
Method File: \\cansvr11\dd\chem\MSS\a4hp10.i\10419a.b\8270C-625A.m
Misc Info:

Client SDG: SDGa00195
Fraction: SV

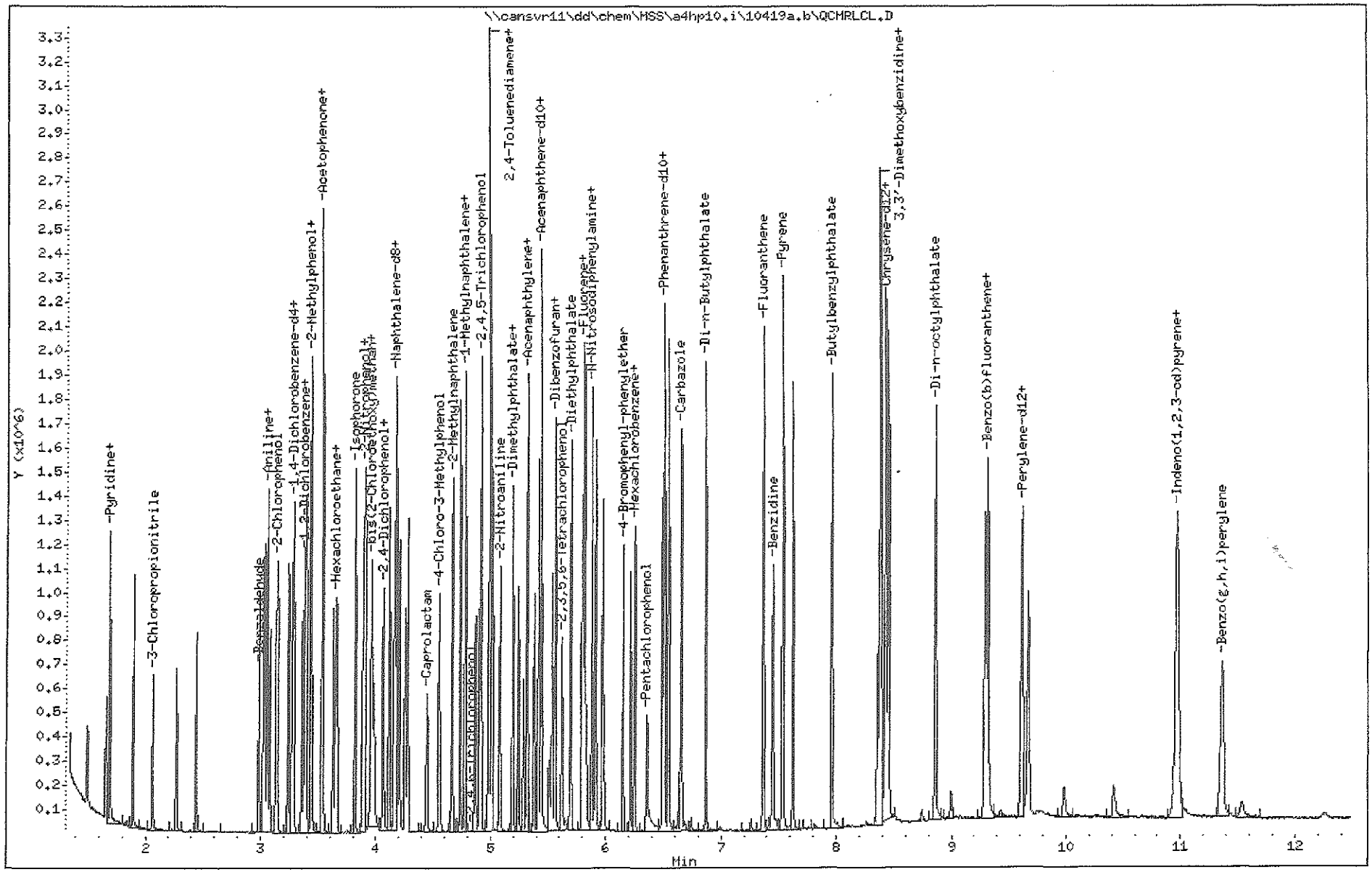
Operator: 001710
SampleType: mrl
Quant Type: ISTD

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
82	Acenaphthene	10.000	10.389	103.89	70-130
79	Acenaphthylene	10.000	10.053	100.53	70-130
116	Anthracene	10.000	10.235	102.35	70-130
136	Benzo(a)Anthracene	10.000	9.8461	98.46	70-130
141	Benzo(b)fluoranthe	10.000	9.1896	91.90	70-130
151	Benzo(g,h,i)peryle	10.000	10.282	102.83	70-130
146	Benzo(a)pyrene	10.000	10.058	100.58	70-130
29	Benzyl Alcohol	10.000	10.181	101.81	70-130
44	bis(2-Chloroethoxy	10.000	10.449	104.49	70-130
23	bis(2-Chloroethyl)	10.000	9.9277	99.28	70-130
31	bis(2-Chloroisopro	10.000	9.7815	97.82	70-130
139	bis(2-ethylhexyl)P	10.000	10.353	103.53	70-130
106	4-Bromophenyl-phen	10.000	10.476	104.76	70-130
131	Butylbenzylphthala	10.000	10.428	104.28	70-130
52	4-Chloroaniline	10.000	10.003	100.03	70-130
70	2-Chloronaphthalen	10.000	10.289	102.89	70-130
95	4-Chlorophenyl-phe	10.000	10.495	104.95	70-130
137	Chrysene	10.000	10.217	102.17	70-130
150	Dibenz(a,h)anthrac	10.000	10.257	102.57	70-130
86	Dibenzofuran	10.000	10.096	100.96	70-130
120	Di-n-Butylphthalat	10.000	10.486	104.86	70-130
28	1,2-Dichlorobenzen	10.000	10.079	100.79	70-130
26	1,3-Dichlorobenzen	10.000	10.430	104.30	70-130
27	1,4-Dichlorobenzen	10.000	10.242	102.42	70-130
135	3,3'-Dichlorobenzi	10.000	10.274	102.74	70-130
93	Diethylphthalate	10.000	10.337	103.37	70-130
76	Dimethylphthalate	10.000	10.315	103.15	70-130
87	2,4-Dinitrotoluene	10.000	10.358	103.58	70-130
78	2,6-Dinitrotoluene	10.000	10.519	105.19	70-130
140	Di-n-octylphthalat	10.000	9.9779	99.78	70-130
123	Fluoranthene	10.000	10.119	101.19	70-130
94	Fluorene	10.000	10.373	103.73	70-130
107	Hexachlorobenzene	10.000	10.766	107.66	70-130
56	Hexachlorobutadien	10.000	10.376	103.76	70-130
64	Hexachlorocyclopen	10.000	8.7492	87.49	70-130
34	Hexachloroethane	10.000	10.327	103.27	70-130
149	Indeno(1,2,3-cd)py	10.000	10.239	102.39	70-130
41	Isophorone	10.000	10.175	101.75	70-130
63	1-Methylnaphthalen	10.000	10.181	101.81	70-130
62	2-Methylnaphthalen	10.000	10.086	100.86	70-130

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
51	Naphthalene	10.000	9.9504	99.50	70-130
73	2-Nitroaniline	10.000	10.375	103.75	70-130
81	3-Nitroaniline	10.000	10.045	100.45	70-130
96	4-Nitroaniline	10.000	10.318	103.18	70-130
35	Nitrobenzene	10.000	10.015	100.15	70-130
32	N-Nitroso-di-n-pro	10.000	10.286	102.86	70-130
99	N-Nitrosodiphenyla	10.000	10.523	105.23	70-130
115	Phenanthrene	10.000	10.274	102.74	70-130
125	Pyrene	10.000	10.131	101.31	70-130
50	1,2,4-Trichloroben	10.000	10.188	101.88	70-130
49	Benzoic Acid	20.000	17.384	86.92	70-130
59	4-Chloro-3-Methylp	10.000	10.328	103.28	70-130
24	2-Chlorophenol	10.000	10.325	103.25	70-130
48	2,4-Dichlorophenol	10.000	9.9649	99.65	70-130
43	2,4-Dimethylphenol	10.000	9.8584	98.58	70-130
98	4,6-Dinitro-2-meth	10.000	6.4135	64.14*	70-130
83	2,4-Dinitrophenol	20.000	8.9396	44.70*	70-130
30	2-Methylphenol	10.000	9.8192	98.19	70-130
192	4-Methylphenol	10.000	9.8990	98.99	70-130
42	2-Nitrophenol	10.000	10.103	101.03	70-130
85	4-Nitrophenol	10.000	7.2721	72.72	70-130
111	Pentachlorophenol	20.000	12.433	62.16*	70-130
22	Phenol	10.000	10.136	101.36	70-130
67	2,4,5-Trichlorophe	10.000	9.7940	97.94	70-130
66	2,4,6-Trichlorophe	10.000	9.6099	96.10	70-130
119	Carbazole	10.000	10.432	104.32	70-130
142	Benzo(k)fluoranthe	10.000	10.804	108.04	70-130
37	Acetophenone	10.000	10.387	103.87	70-130
209	Benzaldehyde	10.000	11.815	118.15	70-130
210	Caprolactam	10.000	10.229	102.29	70-130
211	1,1'-Biphenyl	10.000	10.252	102.52	70-130
212	Atrazine	10.000	10.818	108.19	70-130
21	Aniline	10.000	9.7599	97.60	70-130
10	N-Nitrosodimethyla	10.000	10.134	101.34	70-130
80	1,2-Dinitrobenzene	10.000	10.034	100.34	70-130
91	2,3,5,6-Tetrachlor	10.000	8.6315	86.31	70-130

Data File: \\cansvr11\dd\chem\MSS\a4hp10.i\10419a.b\QCMRLCL.D
Date : 19-APR-2011 16:57
Client ID:
Sample Info: qcmrlcl,10419a,b,8270C-625,qcmrl.sub
Volume Injected (uL): 0.5
Column phase: db5.625

Instrument: a4hp10.i
Operator: 001710
Column diameter: 0.32



North Canton

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270

Data file : \\cansvr11\dd\chem\MSS\a4hp10.i\10419a.b\QCMRLCL.D
Lab Smp Id: qcmrlcl
Inj Date : 19-APR-2011 16:57
Operator : 001710 Inst ID: a4hp10.i
Smp Info : qcmrlcl,10419a.b,8270C-625,qcmrl.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp10.i\10419a.b\8270C-625A.m
Meth Date : 19-Apr-2011 09:39 gruberj Quant Type: ISTD
Cal Date : 13-APR-2011 02:56 Cal File: 1NMH0412.D
Als bottle: 4 QC Sample: mrl
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: qcmrl.sub
Target Version: 4.14
Processing Host: CANPMSSV01

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	3.277	3.277	(1.000)	108695	2.00000	
* 2	Naphthalene-d8	136	4.158	4.158	(1.000)	406385	2.00000	
* 3	Acenaphthene-d10	164	5.419	5.419	(1.000)	246256	2.00000	
* 4	Phenanthrene-d10	188	6.493	6.487	(1.000)	406920	2.00000	
* 5	Chrysene-d12	240	8.437	8.443	(1.000)	421809	2.00000	
* 6	Perylene-d12	264	9.671	9.677	(1.000)	352355	2.00000	
9	Pyridine	79	1.690	1.690	(0.516)	226187	2.46396	9.8558
10	N-Nitrosodimethylamine	74	1.658	1.663	(0.506)	131454	2.53352	10.134
11	Ethyl methacrylate	69	Compound Not Detected.					
12	3-Chloropropionitrile	54	2.064	2.059	(0.630)	127352	2.50183	10.007
13	Malononitrile	66	Compound Not Detected.					
209	Benzaldehyde	77	2.988	2.988	(0.912)	135014	2.95369	11.815
21	Aniline	93	3.058	3.058	(0.933)	347599	2.43998	9.7599
22	Phenol	94	3.036	3.026	(0.927)	239337	2.53391	10.136
23	bis(2-Chloroethyl)ether	93	3.079	3.079	(0.940)	203415	2.48193	9.9277
24	2-Chlorophenol	128	3.143	3.143	(0.959)	191662	2.58129	10.325
26	1,3-Dichlorobenzene	146	3.245	3.245	(0.990)	202148	2.60754	10.430
27	1,4-Dichlorobenzene	146	3.287	3.287	(1.003)	195883	2.56041	10.242
28	1,2-Dichlorobenzene	146	3.394	3.394	(1.036)	183373	2.51978	10.079
29	Benzyl Alcohol	108	3.362	3.357	(1.026)	123481	2.54526	10.181

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)
30	2-Methylphenol	108	3.437	3.426	(1.049)	167438	2.45481	9.8192
31	bis(2-Chloroisopropyl)ether	45	3.437	3.442	(1.049)	290942	2.44538	9.7815
37	Acetophenone	105	3.538	3.538	(1.080)	266343	2.59683	10.387
32	N-Nitroso-di-n-propylamine	70	3.533	3.533	(1.078)	162502	2.57144	10.286
192	4-Methylphenol	108	3.538	3.533	(1.080)	177609	2.47475	9.8990
34	Hexachloroethane	117	3.629	3.629	(1.108)	73567	2.58174	10.327
35	Nitrobenzene	77	3.661	3.661	(0.881)	203530	2.50376	10.015
41	Isophorone	82	3.821	3.822	(0.919)	393360	2.54367	10.175
42	2-Nitrophenol	139	3.886	3.886	(0.934)	97270	2.52568	10.103
43	2,4-Dimethylphenol	107	3.907	3.902	(0.940)	179603	2.46461	9.8584
44	bis(2-Chloroethoxy)methane	93	3.955	3.955	(0.951)	227327	2.61218	10.449
46	2,4-Toluenediamene	121	4.981	4.981	(1.198)	87413	1.55457	6.2183
47	1,3,5-Trichlorobenzene	180	3.896	3.896	(0.937)	165168	2.62848	10.514
48	2,4-Dichlorophenol	162	4.062	4.057	(0.977)	134899	2.49122	9.9649
49	Benzoic Acid	122	3.987	4.003	(0.959)	218719	4.34594	17.384
50	1,2,4-Trichlorobenzene	180	4.115	4.115	(0.990)	163107	2.54711	10.188
51	Naphthalene	128	4.174	4.174	(1.004)	566198	2.48760	9.9504
52	4-Chloroaniline	127	4.206	4.201	(1.012)	259963	2.50070	10.003
56	Hexachlorobutadiene	225	4.260	4.260	(1.024)	80267	2.59392	10.376
210	Caprolactam	113	4.447	4.452	(1.069)	68970	2.55730	10.229
57	1,2,3-Trichlorobenzene	180	4.276	4.276	(1.028)	152717	2.61065	10.443
59	4-Chloro-3-Methylphenol	107	4.548	4.543	(1.094)	160187	2.58201	10.328
62	2-Methylnaphthalene	142	4.666	4.666	(1.122)	302851	2.52150	10.086
63	1-Methylnaphthalene	142	4.735	4.735	(1.139)	348211	2.54520	10.181
64	Hexachlorocyclopentadiene	237	4.778	4.778	(0.882)	77793	2.18729	8.7492
66	2,4,6-Trichlorophenol	196	4.869	4.863	(0.898)	97904	2.40248	9.6099
67	2,4,5-Trichlorophenol	196	4.901	4.895	(0.904)	105190	2.44851	9.7940
211	1,1'-Biphenyl	154	4.991	4.991	(0.921)	434714	2.56311	10.252
68	1,2,3,5-Tetrachlorobenzene	216	4.778	4.778	(0.882)	157352	2.64441	10.578
70	2-Chloronaphthalene	162	5.018	5.018	(0.926)	334255	2.57223	10.289
73	2-Nitroaniline	65	5.082	5.082	(0.938)	129868	2.59375	10.375
74	1,2,3,4-Tetrachlorobenzene	216	4.991	4.991	(0.921)	144591	2.66049	10.642
76	Dimethylphthalate	163	5.194	5.194	(0.959)	383972	2.57884	10.315
78	2,6-Dinitrotoluene	165	5.243	5.243	(0.967)	92503	2.62975	10.519
79	Acenaphthylene	152	5.317	5.317	(0.981)	547836	2.51318	10.053
80	1,2-Dinitrobenzene	168	5.291	5.291	(0.976)	45345	2.50842	10.034
81	3-Nitroaniline	138	5.376	5.376	(0.992)	111571	2.51119	10.045
82	Acenaphthene	153	5.440	5.440	(1.004)	348664	2.59723	10.389
83	2,4-Dinitrophenol	184	5.446	5.446	(1.005)	64221	2.23490	8.9396(QR)
85	4-Nitrophenol	109	5.510	5.494	(1.017)	32345	1.81804	7.2721(M)
86	Dibenzofuran	168	5.563	5.563	(1.027)	474280	2.52391	10.096
87	2,4-Dinitrotoluene	165	5.536	5.536	(1.022)	122017	2.58941	10.358
91	2,3,5,6-Tetrachlorophenol	232	5.622	5.622	(1.037)	70515	2.15787	8.6315
93	Diethylphthalate	149	5.697	5.697	(1.051)	375446	2.58433	10.337
94	Fluorene	166	5.809	5.809	(1.072)	403062	2.59329	10.373
95	4-Chlorophenyl-phenylether	204	5.798	5.798	(1.070)	187532	2.62372	10.495
96	4-Nitroaniline	138	5.819	5.820	(1.074)	119368	2.57952	10.318
98	4,6-Dinitro-2-methylphenol	198	5.836	5.836	(0.899)	47561	1.60338	6.4135(R)
99	N-Nitrosodiphenylamine	169	5.878	5.878	(0.905)	330312	2.63081	10.523
100	1,2-Diphenylhydrazine	77	5.910	5.910	(0.910)	422874	2.60177	10.407
106	4-Bromophenyl-phenylether	248	6.151	6.151	(0.947)	94227	2.61903	10.476
107	Hexachlorobenzene	284	6.215	6.215	(0.957)	90100	2.69153	10.766
212	Atrazine	200	6.252	6.252	(0.963)	109650	2.70463	10.818
111	Pentachlorophenol	266	6.359	6.354	(0.979)	67661	3.10816	12.433(R)

Good for everything except: Pentachlorophenol

TestAmerica North Canton

Semivolatile REPORT SW-846 Method 8270

Data file : \\cansvr11\dd\chem\MSS\a4hp10.i\10419a.b\MDLL3.D
Lab Smp Id: mdll3
Inj Date : 19-APR-2011 17:53
Operator : 001710 Inst ID: a4hp10.i
Smp Info : mdll3,10419a.b,8270C-625,1-827042d.sub
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\MSS\a4hp10.i\10419a.b\8270C-625A.m
Meth Date : 19-Apr-2011 09:39 gruberj Quant Type: ISTD
Cal Date : 13-APR-2011 02:56 Cal File: 1NMH0412.D
Als bottle: 29 QC Sample: mrl
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-827042d.sub
Target Version: 4.14
Processing Host: CANPMSSV01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (NG)
* 1	1,4-Dichlorobenzene-d4	152	3.277	3.277	(1.000)	109066	2.00000	(Q)
* 2	Naphthalene-d8	136	4.158	4.158	(1.000)	403615	2.00000	
* 3	Acenaphthene-d10	164	5.414	5.419	(1.000)	237445	2.00000	
* 4	Phenanthrene-d10	188	6.487	6.487	(1.000)	389700	2.00000	
* 5	Chrysene-d12	240	8.427	8.443	(1.000)	405617	2.00000	
* 6	Perylene-d12	264	9.666	9.677	(1.000)	336673	2.00000	
198	1,4-Dioxane	88	1.508	1.503	(0.460)	14217	0.48627	0.48627
9	Pyridine	79	1.701	1.690	(0.519)	43527	0.47255	0.47254 (M)
10	N-Nitrosodimethylamine	74	1.663	1.663	(0.508)	26253	0.50425	0.50425
12	3-Chloropropionitrile	54	2.064	2.059	(0.630)	24044	0.47074	0.47074 (M)
209	Benzaldehyde	77	2.988	2.988	(0.912)	27884	0.48884	0.48884
21	Aniline	93	3.058	3.058	(0.933)	67312	0.47089	0.47089
22	Phenol	94	3.031	3.026	(0.925)	45087	0.47572	0.47572
23	bis(2-Chloroethyl)ether	93	3.079	3.079	(0.940)	40066	0.48720	0.48720
24	2-Chlorophenol	128	3.143	3.143	(0.959)	36125	0.48487	0.48487
26	1,3-Dichlorobenzene	146	3.245	3.245	(0.990)	37849	0.48656	0.48656
27	1,4-Dichlorobenzene	146	3.287	3.287	(1.003)	39098	0.50932	0.50932
28	1,2-Dichlorobenzene	146	3.394	3.394	(1.036)	37798	0.51763	0.51762
29	Benzyl Alcohol	108	3.357	3.357	(1.024)	20218	0.41533	0.41533
30	2-Methylphenol	108	3.432	3.426	(1.047)	29942	0.43749	0.43748
31	bis(2-Chloroisopropyl)ether	45	3.437	3.442	(1.049)	56744	0.47531	0.47531
37	Acetophenone	105	3.539	3.538	(1.080)	52077	0.50602	0.50602
32	N-Nitroso-di-n-propylamine	70	3.528	3.533	(1.077)	31004	0.48894	0.48894
192	4-Methylphenol	108	3.533	3.533	(1.078)	32762	0.45494	0.45494
34	Hexachloroethane	117	3.629	3.629	(1.108)	15569	0.54451	0.54451
35	Nitrobenzene	77	3.661	3.661	(0.881)	38635	0.47854	0.47854
41	Isophorone	82	3.822	3.822	(0.919)	71455	0.46524	0.46524
42	2-Nitrophenol	139	3.886	3.886	(0.934)	15413	0.40296	0.40296
43	2,4-Dimethylphenol	107	3.902	3.902	(0.938)	32443	0.44826	0.44826
44	bis(2-Chloroethoxy)methane	93	3.955	3.955	(0.951)	43508	0.50338	0.50338
46	2,4-Toluenediamene	121	4.976	4.981	(1.197)	22763	0.41474	0.41474
47	1,3,5-Trichlorobenzene	180	3.896	3.896	(0.937)	31828	0.50999	0.50999
48	2,4-Dichlorophenol	162	4.062	4.057	(0.977)	22378	0.41610	0.41610

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (NG)
49 Benzoic Acid	122	3.950	4.003	(0.950)	14040	0.62031	0.62031 (Q)
50 1,2,4-Trichlorobenzene	180	4.115	4.115	(0.990)	31717	0.49870	0.49870
51 Naphthalene	128	4.174	4.174	(1.004)	110809	0.49018	0.49018
52 4-Chloroaniline	127	4.201	4.201	(1.010)	43802	0.42424	0.42424
56 Hexachlorobutadiene	225	4.260	4.260	(1.024)	16219	0.52773	0.52773
210 Caprolactam	113	4.425	4.452	(1.064)	8776	0.32763	0.32763
57 1,2,3-Trichlorobenzene	180	4.276	4.276	(1.029)	29909	0.51479	0.51479
59 4-Chloro-3-Methylphenol	107	4.548	4.543	(1.094)	27203	0.44149	0.44149
62 2-Methylnaphthalene	142	4.666	4.666	(1.122)	57629	0.48310	0.48310
63 1-Methylnaphthalene	142	4.735	4.735	(1.139)	55629	0.48300	0.48300
64 Hexachlorocyclopentadiene	237	4.778	4.778	(0.883)	11413	0.33280	0.33280
66 2,4,6-Trichlorophenol	196	4.863	4.863	(0.898)	15390	0.39167	0.39167
67 2,4,5-Trichlorophenol	196	4.901	4.895	(0.905)	14132	0.34116	0.34116
211 1,1'-Biphenyl	154	4.992	4.991	(0.922)	83180	0.50863	0.50863
68 1,2,3,5-Tetrachlorobenzene	216	4.773	4.778	(0.882)	30566	0.53274	0.53274
70 2-Chloronaphthalene	162	5.013	5.018	(0.926)	62619	0.49976	0.49976
73 2-Nitroaniline	65	5.082	5.082	(0.939)	22908	0.47450	0.47450
74 1,2,3,4-Tetrachlorobenzene	216	4.992	4.991	(0.922)	28446	0.54283	0.54283
76 Dimethylphthalate	163	5.189	5.194	(0.959)	69508	0.48415	0.48415
78 2,6-Dinitrotoluene	165	5.243	5.243	(0.968)	14379	0.42395	0.42394
79 Acenaphthylene	152	5.317	5.317	(0.982)	103324	0.49159	0.49158
80 1,2-Dinitrobenzene	168	5.285	5.291	(0.976)	7006	0.40194	0.40194
81 3-Nitroaniline	138	5.376	5.376	(0.993)	19995	0.46674	0.46674
82 Acenaphthene	153	5.440	5.440	(1.005)	66568	0.51427	0.51427
83 2,4-Dinitrophenol	184	5.456	5.446	(1.008)	1132	0.04086	0.040856 (Q)
85 4-Nitrophenol	109	5.515	5.494	(1.019)	2989	0.17424	0.17424 (QM)
86 Dibenzofuran	168	5.563	5.563	(1.028)	92051	0.50803	0.50803
87 2,4-Dinitrotoluene	165	5.531	5.536	(1.022)	20347	0.44782	0.44782
91 2,3,5,6-Tetrachlorophenol	232	5.622	5.622	(1.038)	7700	0.24438	0.24438
93 Diethylphthalate	149	5.691	5.697	(1.051)	70244	0.50146	0.50146
94 Fluorene	166	5.809	5.809	(1.073)	76398	0.50978	0.50978
95 4-Chlorophenyl-phenylether	204	5.793	5.798	(1.070)	34496	0.50054	0.50054
96 4-Nitroaniline	138	5.814	5.820	(1.074)	20813	0.46645	0.46645
98 4,6-Dinitro-2-methylphenol	198	5.836	5.836	(0.900)	4087	0.14387	0.14387
99 N-Nitrosodiphenylamine	169	5.878	5.878	(0.906)	61261	0.50948	0.50948
100 1,2-Diphenylhydrazine	77	5.905	5.910	(0.910)	75069	0.48228	0.48228
106 4-Bromophenyl-phenylether	248	6.151	6.151	(0.948)	17758	0.51539	0.51539
107 Hexachlorobenzene	284	6.215	6.215	(0.958)	18129	0.56549	0.56549
212 Atrazine	200	6.247	6.252	(0.963)	19582	0.50435	0.50435
111 Pentachlorophenol	266	Compound Not Detected.					
115 Phenanthrene	178	6.503	6.509	(1.002)	108112	0.51124	0.51124
116 Anthracene	178	6.541	6.546	(1.008)	105229	0.49446	0.49446
119 Carbazole	167	6.653	6.653	(1.026)	102231	0.51251	0.51251
120 Di-n-Butylphthalate	149	6.867	6.867	(1.058)	117338	0.49442	0.49442
123 Fluoranthene	202	7.369	7.369	(1.136)	108851	0.48994	0.48994
124 Benzidine	184	7.449	7.449	(0.884)	52210	0.34324	0.34324
125 Pyrene	202	7.534	7.540	(0.894)	115615	0.48634	0.48634
131 Butylbenzylphthalate	149	7.962	7.967	(0.945)	50088	0.47347	0.47347
133 3,3'-Dimethoxybenzidine	244	8.352	8.362	(0.991)	19156	0.33931	0.33931
135 3,3'-Dichlorobenzidine	252	8.384	8.394	(0.995)	39504	0.45644	0.45644
136 Benzo(a)Anthracene	228	8.421	8.432	(0.999)	104337	0.46243	0.46243
137 Chrysene	228	8.448	8.464	(1.003)	107438	0.51470	0.51470
138 4,4'-Methylene bis(o-chloroan	231	8.379	8.389	(0.994)	20241	0.45476	0.45476
139 bis(2-ethylhexyl)Phthalate	149	8.373	8.384	(0.994)	69467	0.46828	0.46828

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (NG)
140 Di-n-octylphthalate	149	8.854	8.870	(0.916)	108252	0.41819	0.41819
141 Benzo(b)fluoranthene	252	9.287	9.303	(0.961)	94868	0.41722	0.41722
142 Benzo(k)fluoranthene	252	9.308	9.329	(0.963)	104480	0.52046	0.52046
146 Benzo(a)pyrene	252	9.607	9.629	(0.994)	93654	0.47791	0.47791
149 Indeno(1,2,3-cd)pyrene	276	10.948	10.980	(1.133)	96347	0.47598	0.47598
150 Dibenz(a,h)anthracene	278	10.959	10.991	(1.134)	77379	0.45675	0.45675
151 Benzo(g,h,i)perylene	276	11.344	11.375	(1.174)	77577	0.45807	0.45807
$ 154 Nitrobenzene-d5	82	3.651	3.651	(0.878)	39113	0.44702	0.44702(R)
$ 155 2-Fluorobiphenyl	172	4.917	4.917	(0.908)	73520	0.50608	0.50608(R)
$ 156 Terphenyl-d14	244	7.620	7.625	(0.904)	65858	0.49985	0.49985(R)
$ 157 Phenol-d5	99	3.026	3.020	(0.923)	42494	0.46511	0.46511(R)
$ 158 2-Fluorophenol	112	2.443	2.438	(0.746)	33577	0.48618	0.48618(R)
$ 159 2,4,6-Tribromophenol	330	5.985	5.985	(1.106)	5230	0.39758	0.39758(R)
$ 186 2-Chlorophenol-d4	132	3.132	3.132	(0.956)	31716	0.48529	0.48529(R)
$ 187 1,2-Dichlorobenzene-d4	152	3.384	3.383	(1.033)	24379	0.51599	0.51599(R)
M 195 Cresols, total	100				62704	0.89243	0.89243
101 Diphenylamine	169	5.878	5.878	(0.906)	61261	0.50948	0.50948

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

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PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 9, 2011

SDG: A1D070402 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 1.8 and 3.8 °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 4/15/11 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?	✓			Instrument A2HP9 3/15/11	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%?		✓			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%?		✓		Instrument A2HP9 4/15/11 @ 0632, tox 4/15/11 @ 0352	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 9, 2011

SDG: A1D070402 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a CCV run every 12 hours?	✓				LCG Table 4
16. Was the %D for all target analytes ≤5%? 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.	LCG Appendix C >UL=J; <30%=J/R 30%-LL=J/UJ;
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%?	✓				*Was QAPP Table 3-2, Pj*
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits for FWGB12mw-012c-1713-GW at 38%, FWGBKGmw-006c-1706-GW at 45%, FWGRQLmw-008c-1734-GW at 34%, FWGRQLmw-016c-1737-GW at 41% and FWGRQLmw-DUP5-1750-GW at 42%. The surrogate, TCMX, recovered above control limits at 407% and 292% in sample FWGSCFmw-001-1742-GW. The results for FWGB12mw-012c-1713-GW, FWGBKGmw-006c-1706-GW, FWGRQLmw-008c-1734-GW, FWGRQLmw-016c-1737-GW and FWGRQLmw-DUP5-1750-GW were qualified as estimated, "UJ". The endrin result for sample FWGSCFmw-001-1742-GW was qualified as estimated, "J".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. 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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 9, 2011

SDG: A1D070402 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?			✓	There were no detected results above the RL.	LCG Table 4 >40 RPD=J
29. Were reported sample concentrations within calibration range?	✓				
30. Were laboratory-generated Quality Control Exception Reports issued?		✓			
31. 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 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
Sample FWGSCFmw-001-1742-GW was diluted and reanalyzed due to matrix.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-006C-1706-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-002 **Work Order #...:** MGM681AD **Matrix.....:** WG
Date Sampled...: 04/06/11 09:21 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1099014
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	71	(50 - 150)
Decachlorobiphenyl	45 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-015C-1709-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-004	**Work Order #...:** MGM7A1AD	**Matrix.....:** WG	
Date Sampled...: 04/06/11 10:35	**Date Received..:** 04/07/11		
Prep Date.....: 04/09/11	**Analysis Date..:** 04/16/11		
Prep Batch #...: 1099014			
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	82	(50 - 150)
Decachlorobiphenyl	76	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-021C-1711-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-006 **Work Order #...:** MGM7E1AD **Matrix.....:** WG
Date Sampled...: 04/06/11 12:45 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1099014
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	80	(50 - 150)
Decachlorobiphenyl	76	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-008C-1707-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-008 **Work Order #...:** MGM7G1AD **Matrix.....:** WG
Date Sampled...: 04/06/11 14:01 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1099014
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	81	(50 - 150)
Decachlorobiphenyl	56	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-009C-1735-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-010 **Work Order #...:** MGM7J1AD **Matrix.....:** WG
Date Sampled...: 04/06/11 15:31 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1099014
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	83	(50 - 150)
Decachlorobiphenyl	53	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-DUP5-1750-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-012 **Work Order #...:** MGM7L1AD **Matrix.....:** WG
Date Sampled...: 04/06/11 16:55 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1099014
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	69	(50 - 150)
Decachlorobiphenyl	42 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1759-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-014 **Work Order #...:** MGM7N1AD **Matrix.....:** WQ
Date Sampled...: 04/06/11 17:35 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1099014
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	90	(50 - 150)
Decachlorobiphenyl	73	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1743-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-016 **Work Order #...:** MGM7Q1AH **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1099014
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	79	(50 - 150)
Decachlorobiphenyl	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1741-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-018 **Work Order #...:** MGM7T1AD **Matrix.....:** WG
Date Sampled...: 04/06/11 12:52 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1099014
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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	**0.012 J**	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	292 *	(50 - 150)
Decachlorobiphenyl	63	(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-001-1741-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-018 **Work Order #...:** MGM7T2AD **Matrix.....:** WG
Date Sampled...: 04/06/11 12:52 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1099014
Dilution Factor: 100 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	3.0	ug/L	0.70
beta-BHC	ND	3.0	ug/L	0.84
delta-BHC	ND	3.0	ug/L	0.87
gamma-BHC (Lindane)	ND	3.0	ug/L	0.64
Heptachlor	ND	3.0	ug/L	0.80

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	407 DIL,*	(50 - 150)
Decachlorobiphenyl	87 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.

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1742-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-020 **Work Order #...:** MGM7W1AD **Matrix.....:** WG
Date Sampled...: 04/06/11 15:48 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/17/11
Prep Batch #...: 1099014
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	**0.022 J**	**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	108	(50 - 150)
Decachlorobiphenyl	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-014C-1736-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-023 **Work Order #...:** MGM721AD **Matrix.....:** WG
Date Sampled...: 04/06/11 09:16 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/17/11
Prep Batch #...: 1099014
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	52	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGB12mw-012C-1713-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-025 **Work Order #...:** MGM8T1AA **Matrix.....:** WG
Date Sampled...: 04/06/11 09:33 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/17/11
Prep Batch #...: 1099014
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	38 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-016C-1737-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-028 **Work Order #...:** MGM871AD **Matrix.....:** WG
Date Sampled...: 04/06/11 11:03 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/17/11
Prep Batch #...: 1099014
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	84	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-008C-1734-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-030 **Work Order #...:** MGM891AH **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/17/11
Prep Batch #...: 1099014
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	66	(50 - 150)
Decachlorobiphenyl	34 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-007C-1733-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-032 **Work Order #...:** MGM9E1AD **Matrix.....:** WG
Date Sampled...: 04/06/11 15:19 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/17/11
Prep Batch #...: 1099014
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	84	(50 - 150)
Decachlorobiphenyl	82	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGR9L1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D090000-014

Prep Date.....: 04/09/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/17/11 **Prep Batch #...:** 1099014
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	81	(50 - 150)
Decachlorobiphenyl	72	(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 #...: A1D070402 Work Order #...: MGR9L1AC Matrix.....: WATER
LCS Lot-Sample#: A1D090000-014
Prep Date.....: 04/09/11 Analysis Date..: 04/17/11
Prep Batch #...: 1099014
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	96	(44 - 137)	SW846 8081A
beta-BHC	92	(50 - 135)	SW846 8081A
delta-BHC	96	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	98	(58 - 127)	SW846 8081A
Heptachlor	89	(48 - 150)	SW846 8081A
Aldrin	88	(53 - 128)	SW846 8081A
Heptachlor epoxide	90	(50 - 127)	SW846 8081A
Endosulfan I	54	(50 - 160)	SW846 8081A
Dieldrin	91	(50 - 124)	SW846 8081A
4,4'-DDE	92	(50 - 130)	SW846 8081A
Endrin	91	(50 - 137)	SW846 8081A
Endosulfan II	61	(50 - 144)	SW846 8081A
4,4'-DDD	100	(50 - 137)	SW846 8081A
Endosulfan sulfate	91	(50 - 160)	SW846 8081A
4,4'-DDT	92	(50 - 145)	SW846 8081A
Methoxychlor	94	(50 - 160)	SW846 8081A
Endrin ketone	87	(50 - 150)	SW846 8081A
Endrin aldehyde	72	(30 - 160)	SW846 8081A
alpha-Chlordane	89	(50 - 122)	SW846 8081A
gamma-Chlordane	92	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	40 *	(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 #...: A1D070402 Work Order #...: MGM7Q1AT-MS Matrix.....: WG
MS Lot-Sample #: A1D070402-016 MGM7Q1AU-MSD
Date Sampled...: 04/06/11 09:22 Date Received..: 04/07/11
Prep Date.....: 04/09/11 Analysis Date..: 04/16/11
Prep Batch #...: 1099014
Dilution Factor: 1 Initial Wgt/Vol: 500 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	101	(50 - 150)			SW846 8081A
	94	(50 - 150)	6.8	(0-50)	SW846 8081A
beta-BHC	99	(50 - 150)			SW846 8081A
	91	(50 - 150)	7.6	(0-50)	SW846 8081A
delta-BHC	102	(50 - 150)			SW846 8081A
	95	(50 - 150)	7.2	(0-50)	SW846 8081A
gamma-BHC (Lindane)	101	(50 - 150)			SW846 8081A
	95	(50 - 150)	7.0	(0-50)	SW846 8081A
Heptachlor	94	(50 - 150)			SW846 8081A
	90	(50 - 150)	4.5	(0-50)	SW846 8081A
Aldrin	92	(50 - 150)			SW846 8081A
	87	(50 - 150)	6.5	(0-50)	SW846 8081A
Heptachlor epoxide	92	(50 - 150)			SW846 8081A
	86	(50 - 150)	6.2	(0-50)	SW846 8081A
Endosulfan I	61	(50 - 150)			SW846 8081A
	57	(50 - 150)	6.3	(0-50)	SW846 8081A
Dieldrin	98	(50 - 150)			SW846 8081A
	91	(50 - 150)	6.8	(0-50)	SW846 8081A
4,4'-DDE	100	(50 - 150)			SW846 8081A
	94	(50 - 150)	6.2	(0-50)	SW846 8081A
Endrin	98	(50 - 150)			SW846 8081A
	92	(50 - 150)	6.4	(0-50)	SW846 8081A
Endosulfan II	67	(50 - 150)			SW846 8081A
	65	(50 - 150)	4.3	(0-50)	SW846 8081A
4,4'-DDD	106	(50 - 150)			SW846 8081A
	101	(50 - 150)	4.4	(0-50)	SW846 8081A
Endosulfan sulfate	98	(50 - 150)			SW846 8081A
	94	(50 - 150)	4.0	(0-50)	SW846 8081A
4,4'-DDT	103	(50 - 150)			SW846 8081A
	99	(50 - 150)	3.4	(0-50)	SW846 8081A
Methoxychlor	104	(50 - 150)			SW846 8081A
	103	(50 - 150)	0.91	(0-50)	SW846 8081A
Endrin ketone	94	(50 - 150)			SW846 8081A
	91	(50 - 150)	3.2	(0-50)	SW846 8081A
Endrin aldehyde	78	(50 - 150)			SW846 8081A
	75	(50 - 150)	4.4	(0-50)	SW846 8081A
alpha-Chlordane	95	(50 - 150)			SW846 8081A
	89	(50 - 150)	6.6	(0-50)	SW846 8081A
gamma-Chlordane	98	(50 - 150)			SW846 8081A
	91	(50 - 150)	7.3	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM7Q1AT-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-016 MGM7Q1AU-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
	85	(50 - 150)
Decachlorobiphenyl	81	(50 - 150)
	86	(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 #...: A1D070402 Work Order #...: MGM891AT-MS Matrix.....: WG
MS Lot-Sample #: A1D070402-030 MGM891AU-MSD
Date Sampled...: 04/06/11 13:09 Date Received..: 04/07/11
Prep Date.....: 04/09/11 Analysis Date..: 04/17/11
Prep Batch #...: 1099014
Dilution Factor: 1 Initial Wgt/Vol: 500 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	97	(50 - 150)			SW846 8081A
	92	(50 - 150)	5.1	(0-50)	SW846 8081A
beta-BHC	96	(50 - 150)			SW846 8081A
	87	(50 - 150)	9.1	(0-50)	SW846 8081A
delta-BHC	99	(50 - 150)			SW846 8081A
	92	(50 - 150)	7.8	(0-50)	SW846 8081A
gamma-BHC (Lindane)	102	(50 - 150)			SW846 8081A
	96	(50 - 150)	6.7	(0-50)	SW846 8081A
Heptachlor	85	(50 - 150)			SW846 8081A
	81	(50 - 150)	5.2	(0-50)	SW846 8081A
Aldrin	86	(50 - 150)			SW846 8081A
	82	(50 - 150)	4.7	(0-50)	SW846 8081A
Heptachlor epoxide	95	(50 - 150)			SW846 8081A
	89	(50 - 150)	6.5	(0-50)	SW846 8081A
Endosulfan I	61	(50 - 150)			SW846 8081A
	55	(50 - 150)	9.6	(0-50)	SW846 8081A
Dieldrin	98	(50 - 150)			SW846 8081A
	89	(50 - 150)	9.4	(0-50)	SW846 8081A
4,4'-DDE	91	(50 - 150)			SW846 8081A
	84	(50 - 150)	8.1	(0-50)	SW846 8081A
Endrin	100	(50 - 150)			SW846 8081A
	90	(50 - 150)	11	(0-50)	SW846 8081A
Endosulfan II	66	(50 - 150)			SW846 8081A
	61	(50 - 150)	8.2	(0-50)	SW846 8081A
4,4'-DDD	106	(50 - 150)			SW846 8081A
	95	(50 - 150)	11	(0-50)	SW846 8081A
Endosulfan sulfate	100	(50 - 150)			SW846 8081A
	89	(50 - 150)	11	(0-50)	SW846 8081A
4,4'-DDT	98	(50 - 150)			SW846 8081A
	87	(50 - 150)	12	(0-50)	SW846 8081A
Methoxychlor	103	(50 - 150)			SW846 8081A
	92	(50 - 150)	12	(0-50)	SW846 8081A
Endrin ketone	96	(50 - 150)			SW846 8081A
	86	(50 - 150)	10	(0-50)	SW846 8081A
Endrin aldehyde	78	(50 - 150)			SW846 8081A
	71	(50 - 150)	9.6	(0-50)	SW846 8081A
alpha-Chlordane	92	(50 - 150)			SW846 8081A
	84	(50 - 150)	9.0	(0-50)	SW846 8081A
gamma-Chlordane	95	(50 - 150)			SW846 8081A
	88	(50 - 150)	7.8	(0-50)	SW846 8081A

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM891AT-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-030 MGM891AU-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	82	(50 - 150)
	80	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)
	28 *	(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.

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POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 9, 2011

SDG: A1D070402 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 1.8 and 3.8°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 4/13/11 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?	✓			3/9/11	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%?	✓			4/13/11	LCG Table 3 >115%=J; <80%=J/R 80-85%=J/UJ;
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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 9, 2011

SDG: A1D070402 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; <30%=J/R LL-30%=J/UJ;
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.	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 for FWGBKGmw-006c-1706-GW at 48%, FWGBKGmw-008c-1707-GW at 46%, FWGRQLmw-008c-1734-GW at 35%, FWGRQLmw-009c-1735-GW at 44%, FWGRQLmw-014c-1736-GW at 45%, FWGRQLmw-016c-1737-GW at 32%, FWGRQLmw-DUP5-1750-GW at 40% and FWGSCFmw-001-1741-GW at 21%. The sample results for FWGBKGmw-006c-1706-GW, FWGBKGmw-008c-1707-GW, FWGRQLmw-008c-1734-GW, FWGRQLmw-009c-1735-GW, FWGRQLmw-014c-1736-GW, FWGRQLmw-016c-1737-GW, FWGRQLmw-DUP5-1750-GW and FWGSCFmw-001-1741-GW were qualified as estimated, "UJ".	LCG Table 3 >150%=J; 10-50%=J/UJ; <10%=R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 9, 2011

SDG: A1D070402 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
26. Was a field duplicate analyzed? Were the RPDs <30%?	✓				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.		✓			

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:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-006C-1706-GW

GC Semivolatiles

Lot-Sample #...:	A1D070402-002	**Work Order #...:**	MGM681AF	**Matrix.....:**	WG
Date Sampled...:	04/06/11 09:21	**Date Received..:**	04/07/11		
Prep Date.....:	04/09/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1099015				
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	82	(50 - 150)
Decachlorobiphenyl	48 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-015C-1709-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-004 **Work Order #...:** MGM7A1AF **Matrix.....:** WG
Date Sampled...: 04/06/11 10:35 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1099015
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	85	(50 - 150)
Decachlorobiphenyl	65	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-021C-1711-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-006 **Work Order #...:** MGM7E1AF **Matrix.....:** WG
Date Sampled...: 04/06/11 12:45 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1099015
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	84	(50 - 150)
Decachlorobiphenyl	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-008C-1707-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-008	**Work Order #...:** MGM7G1AF	**Matrix.....:** WG	
Date Sampled...: 04/06/11 14:01	**Date Received..:** 04/07/11		
Prep Date.....: 04/09/11	**Analysis Date..:** 04/15/11		
Prep Batch #...: 1099015			
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	80	(50 - 150)
Decachlorobiphenyl	46 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-009C-1735-GW

GC Semivolatiles

Lot-Sample #...:	A1D070402-010	**Work Order #...:**	MGM7J1AF	**Matrix.....:**	WG
Date Sampled...:	04/06/11 15:31	**Date Received..:**	04/07/11		
Prep Date.....:	04/09/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1099015				
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	88	(50 - 150)
Decachlorobiphenyl	44 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-DUP5-1750-GW

GC Semivolatiles

Lot-Sample #...:	A1D070402-012	**Work Order #...:**	MGM7L1AF	**Matrix.....:**	WG
Date Sampled...:	04/06/11 16:55	**Date Received..:**	04/07/11		
Prep Date.....:	04/09/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1099015				
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	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1759-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-014 **Work Order #...:** MGM7N1AF **Matrix.....:** WQ
Date Sampled...: 04/06/11 17:35 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1099015
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	87	(50 - 150)
Decachlorobiphenyl	59	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1759-GW

GC Semivolatiles

Lot-Sample #...:	A1D070402-014	**Work Order #...:**	MGM7N1AF	**Matrix.....:**	WQ
Date Sampled...:	04/06/11 17:35	**Date Received..:**	04/07/11		
Prep Date.....:	04/09/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1099015				
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	87	(50 - 150)
Decachlorobiphenyl	59	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-DUP5-1750-GW

GC Semivolatiles

Lot-Sample #...:	A1D070402-012	**Work Order #...:**	MGM7L1AF	**Matrix.....:**	WG
Date Sampled...:	04/06/11 16:55	**Date Received..:**	04/07/11		
Prep Date.....:	04/09/11	**Analysis Date..:**	04/15/11		
Prep Batch #...:	1099015				
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	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1743-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-016 **Work Order #...:** MGM7Q1AP **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1099015
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	89	(50 - 150)
Decachlorobiphenyl	68	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1741-GW

GC Semivolatiles

Lot-Sample #...:	A1D070402-018	**Work Order #...:**	MGM7T1AF	**Matrix.....:**	WG
Date Sampled...:	04/06/11 12:52	**Date Received..:**	04/07/11		
Prep Date.....:	04/09/11	**Analysis Date..:**	04/19/11		
Prep Batch #...:	1099015				
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	51	(50 - 150)
Decachlorobiphenyl	21 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1742-GW

GC Semivolatiles

Lot-Sample #...:	A1D070402-020	**Work Order #...:**	MGM7W1AF	**Matrix.....:**	WG
Date Sampled...:	04/06/11 15:48	**Date Received..:**	04/07/11		
Prep Date.....:	04/09/11	**Analysis Date..:**	04/16/11		
Prep Batch #...:	1099015				
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	92	(50 - 150)
Decachlorobiphenyl	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-014C-1736-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-023	**Work Order #...:** MGM721AF	**Matrix.....:** WG	
Date Sampled...: 04/06/11 09:16	**Date Received..:** 04/07/11		
Prep Date.....: 04/09/11	**Analysis Date..:** 04/16/11		
Prep Batch #...: 1099015			
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	87	(50 - 150)
Decachlorobiphenyl	45 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-017C-1738-GW

GC Semivolatiles

Lot-Sample #...:	A1D070402-026	**Work Order #...:**	MGM811AA	**Matrix.....:**	WG
Date Sampled...:	04/06/11 10:03	**Date Received..:**	04/07/11		
Prep Date.....:	04/12/11	**Analysis Date..:**	04/18/11		
Prep Batch #...:	1102047				
Dilution Factor:	1	**Initial Wgt/Vol:**	910 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	58	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-016C-1737-GW

GC Semivolatiles

Lot-Sample #...: A1D070402-028	**Work Order #...:** MGM871AF	**Matrix.....:** WG	
Date Sampled...: 04/06/11 11:03	**Date Received..:** 04/07/11		
Prep Date.....: 04/09/11	**Analysis Date..:** 04/16/11		
Prep Batch #...: 1099015			
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	91	(50 - 150)
Decachlorobiphenyl	32 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-008C-1734-GW

GC Semivolatiles

Lot-Sample #...:	A1D070402-030	**Work Order #...:**	MGM891AP	**Matrix.....:**	WG
Date Sampled...:	04/06/11 13:09	**Date Received..:**	04/07/11		
Prep Date.....:	04/09/11	**Analysis Date..:**	04/16/11		
Prep Batch #...:	1099015				
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	75	(50 - 150)
Decachlorobiphenyl	35 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-007C-1733-GW

GC Semivolatiles

Lot-Sample #...:	A1D070402-032	**Work Order #...:**	MGM9E1AF	**Matrix.....:**	WG
Date Sampled...:	04/06/11 15:19	**Date Received..:**	04/07/11		
Prep Date.....:	04/09/11	**Analysis Date..:**	04/16/11		
Prep Batch #...:	1099015				
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	70	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGR9M1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D090000-015

Prep Date.....: 04/09/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/16/11 **Prep Batch #...:** 1099015
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	81	(50 - 150)
Decachlorobiphenyl	70	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGV001AA **Matrix.....:** WATER
MB Lot-Sample #: A1D120000-047

Prep Date.....: 04/12/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/18/11 **Prep Batch #...:** 1102047
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	84	(50 - 150)
Decachlorobiphenyl	80	(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 #...: A1D070402 **Work Order #...:** MGR9M1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D090000-015
Prep Date.....: 04/09/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1099015
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**84**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**83**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(50 - 150)
Decachlorobiphenyl	39 *	(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.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGV001AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D120000-047
Prep Date.....: 04/12/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1102047
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**96**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	95	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	93	(50 - 150)
Decachlorobiphenyl	40 *	(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 #...: A1D070402 **Work Order #...:** MGM7Q1AV-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-016 MGM7Q1AW-MSD
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1099015
Dilution Factor: 2 **Initial Wgt/Vol:** 500 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**90**	**(50 - 150)**			**SW846 8082**
	89	**(50 - 150)**	**0.78**	**(0-50)**	**SW846 8082**
Aroclor 1260	**89**	**(50 - 150)**			**SW846 8082**
	91	**(50 - 150)**	**2.2**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
	87	(50 - 150)
Decachlorobiphenyl	72	(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

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1D070402 **Work Order #...:** MGM891AV-MS **Matrix.....:** WG
MS Lot-Sample #: A1D070402-030 MGM891AW-MSD
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11
Prep Date.....: 04/09/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1099015
Dilution Factor: 2 **Initial Wgt/Vol:** 500 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**91**	**(50 - 150)**			**SW846 8082**
	91	**(50 - 150)**	**0.0**	**(0-50)**	**SW846 8082**
Aroclor 1260	**81**	**(50 - 150)**			**SW846 8082**
	81	**(50 - 150)**	**0.0**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(50 - 150)
	88	(50 - 150)
Decachlorobiphenyl	45 *	(50 - 150)
	45 *	(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.

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METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 10, 2011

SDG: A1D070402 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 1.8 and 3.8°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?	✓			1/1/11	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
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		ICPMS The ICB analyzed 4/11/11 had sodium detected at 34.5ug/L and thallium detected at 0.2ug/L. There were no sodium concentrations reported <5x contamination, so no qualifications were made for sodium. The thallium results for samples FWGSCFmw-001-1741-GF, FWGRQLmw-014c-1736-GF, FWGRQLmw-017c-1738-GF and FWGRQLmw-007c-1733-GF were qualified "U" as the detected concentrations were	LCG Table 7 < 5x = U

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 10, 2011

SDG: A1D070402 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
				<5x the thallium 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.	
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, <85%=J/R 90-85%=J/UJ;
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 4/14/11 @1650 had detected arsenic at 5.2ug/L, chromium at 2.2ug/L, cobalt at 2.3ug/L, nickel at 3.1ug/L, silver at 2.9ug/L and vanadium at 2.6ug/L. The nickel result for samples FWGRQLmw-009c-1735-GF and FWGRQLmw-DUP5-1750-GF were qualified "B". The arsenic result for samples FWGRQLmw-009c-1735-GF, FWGBKGmw-008c-1707-GF and FWGSCFmw-001-1741-GF were qualified "B". No additional qualifications were made for the other contaminates, as there were no detected concentrations reported for the associated field samples. 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. ICPMS The CCBs analyzed 4/11/11 had detected thallium from 0.16ug/L to 0.26ug/L and sodium at 57.5ug/L to 93ug/L. There were no sodium concentrations reported for the associated field samples <5x contamination, so no sodium qualifications were made. No additional qualifications were made for thallium other than those made for the ICB 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.	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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 10, 2011

SDG: A1D070402 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
22. Were target analytes <1/2 the MRL in the method blank?		✓		ADR checked section; The method blank had zinc detected at 5.9ug/L. All zinc sample results were qualified, "B", due to sample results <5x blank contamination with the exception of FWGSCFmw-002-1742-GF.	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; FWGEQUIPRinse3-1759-GW had zinc detected at 5.4ug/L. All zinc sample results were qualified, "B", due to sample results <5x blank contamination with the exception of FWGSCFmw-002-1742-GF.	<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%=J/R 60%-LL= J/UJ;
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%?	✓				LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤20%?	✓			Checked by ADR. Only results above the reporting limit evaluated.	LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	Matrix spike recoveries were within control limits.	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%?	✓				QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 10, 2011

SDG: A1D070402 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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 **SDG:** A1D070402 R0
Sample Event: April 2011 **Analysis:** SW846 7470A
Data Reviewer/Date: Angye Dragotta/ May 10, 2011

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 1.8 and 3.8°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?	✓			1/1/11	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:** A1D070402 R0
Sample Event: April 2011 **Analysis:** SW846 7470A
Data Reviewer/Date: Angye Dragotta/ May 10, 2011

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%?	✓			Checked by ADR.	LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓				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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 10, 2011

SDG: A1D070402 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: FWGBKGmw-006C-1706-GF

TOTAL Metals

Lot-Sample #...: A1D070402-003 **Matrix.....:** WG
Date Sampled...: 04/06/11 09:21 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM691AN
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM691AA
		Dilution Factor: 1		Analysis Time..: 18:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM691AK
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**8.5 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM691AP**
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM691AC
		Dilution Factor: 1		Analysis Time..: 18:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**65100**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM691AQ**
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM691AD
		Dilution Factor: 1		Analysis Time..: 18:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM691AR
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM691AT
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM691AU
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-006C-1706-GF

TOTAL Metals

Lot-Sample #...: A1D070402-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**518**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM691AE**
		Dilution Factor: 1		Analysis Time..: 18:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM691A2
		Dilution Factor: 1		Analysis Time..: 13:53	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1120**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	MGM691AV
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**20000**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM691AW**
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**191**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM691AX**
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**40500**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM691AJ**
		Dilution Factor: 1		Analysis Time..: 18:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM691A0
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM691AL
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM691AF
		Dilution Factor: 1		Analysis Time..: 18:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM691AM
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-006C-1706-GF

TOTAL Metals

Lot-Sample #...: A1D070402-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.21 B**	**1.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM691AH**
		Dilution Factor: 1		Analysis Time..: 18:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM691A1
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**2.4 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM691AG**
		Dilution Factor: 1		Analysis Time..: 18:21	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: FWGBKGmw-015C-1709-GF

TOTAL Metals

Lot-Sample #...: A1D070402-005 **Matrix.....:** WG
Date Sampled...: 04/06/11 10:35 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7C1AR
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM7C1AE
		Dilution Factor: 1		Analysis Time..: 18:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7C1AN
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**249**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7C1AT**
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7C1AF
		Dilution Factor: 1		Analysis Time..: 18:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**30700**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7C1AU**
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM7C1AG
		Dilution Factor: 1		Analysis Time..: 18:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7C1AV
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7C1AW
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7C1AX
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-015C-1709-GF

TOTAL Metals

Lot-Sample #...: A1D070402-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM7C1AH
		Dilution Factor: 1		Analysis Time..: 18:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM7C1AD
		Dilution Factor: 1		Analysis Time..: 13:58	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**4120**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7C1A0**
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**13000**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7C1A1**
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7C1A2
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**13600**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7C1AM**
		Dilution Factor: 1		Analysis Time..: 18:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7C1AA
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7C1AP
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM7C1AJ
		Dilution Factor: 1		Analysis Time..: 18:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7C1AQ
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-015C-1709-GF

TOTAL Metals

Lot-Sample #...: A1D070402-005 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7C1AL
		Dilution Factor: 1		Analysis Time..: 18:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7C1AC
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**5.2 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7C1AK**
		Dilution Factor: 1		Analysis Time..: 18:26	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: FWGBKGmw-021C-1711-GF

TOTAL Metals

Lot-Sample #...: A1D070402-007 **Matrix.....:** WG
Date Sampled...: 04/06/11 12:45 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7F1AR
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM7F1AE
		Dilution Factor: 1		Analysis Time..: 18:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7F1AN
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**26.0**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7F1AT**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7F1AF
		Dilution Factor: 1		Analysis Time..: 18:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**74800**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7F1AU**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM7F1AG
		Dilution Factor: 1		Analysis Time..: 18:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7F1AV
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7F1AW
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7F1AX
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-021C-1711-GF

TOTAL Metals

Lot-Sample #...: A1D070402-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM7F1AH
		Dilution Factor: 1		Analysis Time..: 18:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM7F1AD
		Dilution Factor: 1		Analysis Time..: 13:50	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**541 B**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7F1A0**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**39100**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7F1A1**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7F1A2
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**8530**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7F1AM**
		Dilution Factor: 1		Analysis Time..: 18:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7F1AA
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7F1AP
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM7F1AJ
		Dilution Factor: 1		Analysis Time..: 18:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7F1AQ
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-021C-1711-GF

TOTAL Metals

Lot-Sample #...: A1D070402-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7F1AL
		Dilution Factor: 1		Analysis Time..: 18:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7F1AC
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**3.0 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7F1AK**
		Dilution Factor: 1		Analysis Time..: 18:30	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: FWGBKGmw-008C-1707-GF

TOTAL Metals

Lot-Sample #...: A1D070402-009 **Matrix.....:** WG
Date Sampled...: 04/06/11 14:01 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7H1AR
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM7H1AE
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**3.3 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7H1AN**
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**3.7 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7H1AT**
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7H1AF
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**23200**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7H1AU**
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM7H1AG
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7H1AV
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7H1AW
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7H1AX
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-008C-1707-GF

TOTAL Metals

Lot-Sample #...: A1D070402-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM7H1AH
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM7H1AD
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**444 B**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7H1A0**
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**9570**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7H1A1**
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**9.7 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7H1A2**
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**8860**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7H1AM**
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7H1AA
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7H1AP
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM7H1AJ
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7H1AQ
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-008C-1707-GF

TOTAL Metals

Lot-Sample #...: A1D070402-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7H1AL
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7H1AC
		Dilution Factor: 1		Analysis Time..: 16:56	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**4.3 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7H1AK**
		Dilution Factor: 1		Analysis Time..: 18:47	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: FWGRQLmw-009C-1735-GF

TOTAL Metals

Lot-Sample #...: A1D070402-011 **Matrix.....:** WG
Date Sampled...: 04/06/11 15:31 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7K1AR
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**402**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7K1AE**
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**4.3 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7K1AN**
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**21.1**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7K1AT**
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7K1AF
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**14600**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7K1AU**
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM7K1AG
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7K1AV
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7K1AW
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	**4.9 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7K1AX**
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-009C-1735-GF

TOTAL Metals

Lot-Sample #...: A1D070402-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**886**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7K1AH**
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM7K1AD
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**3070**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7K1A0**
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**10700**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7K1A1**
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**113**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7K1A2**
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1880**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7K1AM**
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**2.9 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7K1AA**
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	**2.4 B**	**3.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7K1AP**
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM7K1AJ
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7K1AQ
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-009C-1735-GF

TOTAL Metals

Lot-Sample #...: A1D070402-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7K1AL
		Dilution Factor: 1		Analysis Time..: 18:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7K1AC
		Dilution Factor: 1		Analysis Time..: 17:02	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**8.2 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7K1AK**
		Dilution Factor: 1		Analysis Time..: 18:52	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: FWGRQLmw-DUP5-1750-GF

TOTAL Metals

Lot-Sample #...: A1D070402-013 **Matrix.....:** WG
Date Sampled...: 04/06/11 16:55 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7M1AR
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**76.8**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7M1AE**
		Dilution Factor: 1		Analysis Time..: 18:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7M1AN
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**19.6**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7M1AT**
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7M1AF
		Dilution Factor: 1		Analysis Time..: 18:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**14800**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7M1AU**
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM7M1AG
		Dilution Factor: 1		Analysis Time..: 18:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7M1AV
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7M1AW
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7M1AX
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-DUP5-1750-GF

TOTAL Metals

Lot-Sample #...: A1D070402-013 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**300**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7M1AH**
		Dilution Factor: 1		Analysis Time..: 18:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM7M1AD
		Dilution Factor: 1		Analysis Time..: 14:07	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**3070**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7M1A0**
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**10800**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7M1A1**
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**109**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7M1A2**
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1930**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7M1AM**
		Dilution Factor: 1		Analysis Time..: 18:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**3.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7M1AA**
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7M1AP
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM7M1AJ
		Dilution Factor: 1		Analysis Time..: 18:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7M1AQ
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-DUP5-1750-GF

TOTAL Metals

Lot-Sample #...: A1D070402-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7M1AL
		Dilution Factor: 1		Analysis Time..: 18:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7M1AC
		Dilution Factor: 1		Analysis Time..: 17:08	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**5.5 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7M1AK**
		Dilution Factor: 1		Analysis Time..: 18:56	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: FWGEQUIPRINSE3-1759-GW

TOTAL Metals

Lot-Sample #...: A1D070402-014 **Matrix.....:** WQ
Date Sampled...: 04/06/11 17:35 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1AU
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM7N1AG
		Dilution Factor: 1		Analysis Time..: 19:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1AQ
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1AV
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7N1AH
		Dilution Factor: 1		Analysis Time..: 19:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1AW
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM7N1AJ
		Dilution Factor: 1		Analysis Time..: 19:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1AX
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1A0
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1A1
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1759-GW

TOTAL Metals

Lot-Sample #...: A1D070402-014 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM7N1AK
		Dilution Factor: 1		Analysis Time..: 19:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM7N1A7
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1A2
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1A3
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1A4
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6020	04/08-04/11/11	MGM7N1AP
		Dilution Factor: 1		Analysis Time..: 19:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1A5
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1AR
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM7N1AL
		Dilution Factor: 1		Analysis Time..: 19:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1AT
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1759-GW

TOTAL Metals

Lot-Sample #...: A1D070402-014 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7N1AN
		Dilution Factor: 1		Analysis Time..: 19:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7N1A6
		Dilution Factor: 1		Analysis Time..: 17:14	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**5.4 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7N1AM**
		Dilution Factor: 1		Analysis Time..: 19:01	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: FWGSCFmw-003-1743-GF

TOTAL Metals

Lot-Sample #...: A1D070402-017 **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7R1CP
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM7R1AL
		Dilution Factor: 1		Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7R1CE
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**76.4**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7R1CT**
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7R1AP
		Dilution Factor: 1		Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**73600**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7R1CW**
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM7R1AT
		Dilution Factor: 1		Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7R1C1
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7R1C4
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7R1C7
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1743-GF

TOTAL Metals

Lot-Sample #...: A1D070402-017 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**599**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7R1AW**
		Dilution Factor: 1		Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM7R1AH
		Dilution Factor: 1		Analysis Time..: 14:00	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1370**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7R1DA**
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**30000**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7R1DE**
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**258**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7R1DH**
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**7180**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7R1CA**
		Dilution Factor: 1		Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7R1AA
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7R1CH
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM7R1A1
		Dilution Factor: 1		Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7R1CL
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1743-GF

TOTAL Metals

Lot-Sample #...: A1D070402-017 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7R1A7
		Dilution Factor: 1		Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7R1AE
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**8.0 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7R1A4**
		Dilution Factor: 1		Analysis Time..: 19:06	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: FWGSCFmw-001-1741-GF

TOTAL Metals

Lot-Sample #...: A1D070402-019 **Matrix.....:** WG
Date Sampled...: 04/06/11 12:52 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7V1AR
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM7V1AE
		Dilution Factor: 1		Analysis Time..: 19:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**3.4 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7V1AN**
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**3.3 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7V1AT**
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7V1AF
		Dilution Factor: 1		Analysis Time..: 19:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**60900**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7V1AU**
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM7V1AG
		Dilution Factor: 1		Analysis Time..: 19:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7V1AV
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7V1AW
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7V1AX
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1741-GF

TOTAL Metals

Lot-Sample #...: A1D070402-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**99.6**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7V1AH**
		Dilution Factor: 1		Analysis Time..: 19:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM7V1AD
		Dilution Factor: 1		Analysis Time..: 13:59	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**10200**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7V1A0**
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**18100**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7V1A1**
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**528**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7V1A2**
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**15900**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7V1AM**
		Dilution Factor: 1		Analysis Time..: 19:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7V1AA
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7V1AP
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.95 B**	**2.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7V1AJ**
		Dilution Factor: 1		Analysis Time..: 19:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7V1AQ
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1741-GF

TOTAL Metals

Lot-Sample #...: A1D070402-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.18 B**	**1.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7V1AL**
		Dilution Factor: 1		Analysis Time..: 19:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7V1AC
		Dilution Factor: 1		Analysis Time..: 17:44	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**3.4 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7V1AK**
		Dilution Factor: 1		Analysis Time..: 19:27	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: FWGSCFmw-002-1742-GF

TOTAL Metals

Lot-Sample #...: A1D070402-021 **Matrix.....:** WG
Date Sampled...: 04/06/11 15:48 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7X1AR
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM7X1AE
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**14.2**	**5.0**	**ug/L**	**SW846 6010B**	**04/08-04/15/11**	**MGM7X1AN**
		Dilution Factor: 1		Analysis Time..: 07:31	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**41.3**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7X1AT**
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7X1AF
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**85600**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7X1AU**
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM7X1AG
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7X1AV
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7X1AW
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7X1AX
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1742-GF

TOTAL Metals

Lot-Sample #...: A1D070402-021 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**397**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7X1AH**
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM7X1AD
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2010**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7X1A0**
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**27700**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7X1A1**
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**77.8**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM7X1A2**
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**22200**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM7X1AM**
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7X1AA
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7X1AP
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM7X1AJ
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7X1AQ
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1742-GF

TOTAL Metals

Lot-Sample #...: A1D070402-021 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM7X1AL
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM7X1AC
		Dilution Factor: 1		Analysis Time..: 17:50	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/08-04/11/11	MGM7X1AK
		Dilution Factor: 1		Analysis Time..: 19:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-014C-1736-GF

TOTAL Metals

Lot-Sample #...: A1D070402-024 **Matrix.....:** WG
Date Sampled...: 04/06/11 09:16 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM741AR
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM741AE
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM741AN
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**22.4**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM741AT**
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM741AF
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**10500**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM741AU**
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM741AG
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**11.8**	**5.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM741AV**
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM741AW
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM741AX
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-014C-1736-GF

TOTAL Metals

Lot-Sample #...: A1D070402-024 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**15100**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM741AH**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM741AD
		Dilution Factor: 1		Analysis Time..: 13:45	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1740**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM741A0**
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**7300**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM741A1**
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**2800**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM741A2**
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**3850**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM741AM**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**21.6**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM741AA**
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM741AP
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM741AJ
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM741AQ
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-014C-1736-GF

TOTAL Metals

Lot-Sample #...: A1D070402-024 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.18 B**	**1.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM741AL**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM741AC
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**20.4 J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM741AK**
		Dilution Factor: 1		Analysis Time..: 19:48	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: FWGRQLmw-017C-1738-GF

TOTAL Metals

Lot-Sample #...: A1D070402-027 **Matrix.....:** WG
Date Sampled...: 04/06/11 10:03 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM821AR
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**36.6 B**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM821AE**
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM821AN
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM821AT
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM821AF
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**75400**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM821AU**
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM821AG
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**4.9 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM821AV**
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM821AW
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM821AX
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-017C-1738-GF

TOTAL Metals

Lot-Sample #...: A1D070402-027 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**160**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM821AH**
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM821AD
		Dilution Factor: 1		Analysis Time..: 13:54	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1690**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM821A0**
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**30100**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM821A1**
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**4820**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM821A2**
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**5120**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM821AM**
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**17.4**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM821AA**
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM821AP
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM821AJ
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM821AQ
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-017C-1738-GF

TOTAL Metals

Lot-Sample #...: A1D070402-027 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.19 B**	**1.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM821AL**
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM821AC
		Dilution Factor: 1		Analysis Time..: 18:13	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**20.4 J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM821AK**
		Dilution Factor: 1		Analysis Time..: 19:53	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: FWGRQLmw-016C-1737-GF

TOTAL Metals

Lot-Sample #...: A1D070402-029 **Matrix.....:** WG
Date Sampled...: 04/06/11 11:03 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM881AR
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM881AE
		Dilution Factor: 1		Analysis Time..: 19:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM881AN
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**9.9 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM881AT**
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM881AF
		Dilution Factor: 1		Analysis Time..: 19:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**376000**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM881AU**
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM881AG
		Dilution Factor: 1		Analysis Time..: 19:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM881AV
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM881AW
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM881AX
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-016C-1737-GF

TOTAL Metals

Lot-Sample #...: A1D070402-029 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	11600	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM881AH
		Dilution Factor: 1		Analysis Time..: 19:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM881AD
		Dilution Factor: 1		Analysis Time..: 14:08	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	2910	1000	ug/L	SW846 6010B	04/08-04/14/11	MGM881A0
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	57700	1000	ug/L	SW846 6010B	04/08-04/14/11	MGM881A1
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	6830	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM881A2
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	7820	1000	ug/L	SW846 6020	04/08-04/11/11	MGM881AM
		Dilution Factor: 1		Analysis Time..: 19:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	4.8 B	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM881AA
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM881AP
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM881AJ
		Dilution Factor: 1		Analysis Time..: 19:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM881AQ
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-016C-1737-GF

TOTAL Metals

Lot-Sample #...: A1D070402-029 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM881AL
		Dilution Factor: 1		Analysis Time..: 19:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM881AC
		Dilution Factor: 1		Analysis Time..: 18:19	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**6.5 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM881AK**
		Dilution Factor: 1		Analysis Time..: 19:57	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: FWGRQLmw-008C-1734-GF

TOTAL Metals

Lot-Sample #...: A1D070402-031 **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9D1CP
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGM9D1AL
		Dilution Factor: 1		Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**11.3**	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9D1CE
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**35.7**	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9D1CT
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM9D1AP
		Dilution Factor: 1		Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**33300**	1000	ug/L	SW846 6010B	04/08-04/14/11	MGM9D1CW
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM9D1AT
		Dilution Factor: 1		Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.5 B**	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9D1C1
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9D1C4
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9D1C7
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-008C-1734-GF

TOTAL Metals

Lot-Sample #...: A1D070402-031 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**18200**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM9D1AW**
		Dilution Factor: 1		Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM9D1AH
		Dilution Factor: 1		Analysis Time..: 13:39	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2130**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM9D1DA**
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**92000**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM9D1DE**
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**296**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM9D1DH**
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2180**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM9D1CA**
		Dilution Factor: 1		Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**2.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM9D1AA**
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9D1CH
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGM9D1A1
		Dilution Factor: 1		Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9D1CL
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-008C-1734-GF

TOTAL Metals

Lot-Sample #...: A1D070402-031 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM9D1A7
		Dilution Factor: 1		Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9D1AE
		Dilution Factor: 1		Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**5.5 B,J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM9D1A4**
		Dilution Factor: 1		Analysis Time..: 20:02	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: FWGRQLmw-007C-1733-GF

TOTAL Metals

Lot-Sample #...: A1D070402-033 **Matrix.....:** WG
Date Sampled...: 04/06/11 15:19 **Date Received..:** 04/07/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1098019						
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9G1AR
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**154**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM9G1AE**
		Dilution Factor: 1		Analysis Time..: 20:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9G1AN
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**23.7**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM9G1AT**
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGM9G1AF
		Dilution Factor: 1		Analysis Time..: 20:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**64400**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM9G1AU**
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGM9G1AG
		Dilution Factor: 1		Analysis Time..: 20:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9G1AV
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9G1AW
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9G1AX
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-007C-1733-GF

TOTAL Metals

Lot-Sample #...: A1D070402-033 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**594**	**50.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM9G1AH**
		Dilution Factor: 1		Analysis Time..: 20:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGM9G1AD
		Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2510**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM9G1A0**
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**33500**	**1000**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM9G1A1**
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**19.1**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM9G1A2**
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**2440**	**1000**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM9G1AM**
		Dilution Factor: 1		Analysis Time..: 20:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**12.2**	**10.0**	**ug/L**	**SW846 6010B**	**04/08-04/14/11**	**MGM9G1AA**
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9G1AP
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.27 B**	**2.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM9G1AJ**
		Dilution Factor: 1		Analysis Time..: 20:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9G1AQ
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-007C-1733-GF

TOTAL Metals

Lot-Sample #...: A1D070402-033 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.22 B**	**1.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM9G1AL**
		Dilution Factor: 1		Analysis Time..: 20:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGM9G1AC
		Dilution Factor: 1		Analysis Time..: 18:49	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**21.0 J**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGM9G1AK**
		Dilution Factor: 1		Analysis Time..: 20:19	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 #...: A1D070402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1D080000-019 **Prep Batch #...:** 1098019						
Aluminum	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGPWP1AE
		Dilution Factor: 1				
		Analysis Time..: 18:09		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	04/08-04/11/11	MGPWP1AJ
		Dilution Factor: 1				
		Analysis Time..: 18:09		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	04/08-04/15/11	MGPWP1AN
		Dilution Factor: 1				
		Analysis Time..: 07:19		Analyst ID.....: 002260	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1AT
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGPWP1AF
		Dilution Factor: 1				
		Analysis Time..: 18:09		Analyst ID.....: 000079	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	04/08-04/11/11	MGPWP1AG
		Dilution Factor: 1				
		Analysis Time..: 18:09		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1AU
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1AW
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1AV
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1AX
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	04/08-04/11/11	MGPWP1AH
		Dilution Factor: 1				
		Analysis Time..: 18:09		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1D070402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1AP
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1A1
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1A2
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	04/08-04/11/11	MGPWP1AD
		Dilution Factor: 1				
		Analysis Time..: 13:36		Analyst ID.....: 002260	Instrument ID..: H1	
Nickel	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1AA
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1A0
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1AQ
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1AR
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6020	04/08-04/11/11	MGPWP1AM
		Dilution Factor: 1				
		Analysis Time..: 18:09		Analyst ID.....: 000079	Instrument ID..: I8	
Thallium	ND	1.0	ug/L	SW846 6020	04/08-04/11/11	MGPWP1AL
		Dilution Factor: 1				
		Analysis Time..: 18:09		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	04/08-04/14/11	MGPWP1AC
		Dilution Factor: 1				
		Analysis Time..: 16:15		Analyst ID.....: 002260	Instrument ID..: I5	
Zinc	**5.9 B**	**10.0**	**ug/L**	**SW846 6020**	**04/08-04/11/11**	**MGPWP1AK**
		Dilution Factor: 1				
		Analysis Time..: 18:09		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1D070402 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 #...: A1D070402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A1D080000-019 **Prep Batch #...:** 1098019					
Nickel	99	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1A3
		Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260	
		Instrument ID..: I5			
Vanadium	99	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1A4
		Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260	
		Instrument ID..: I5			
Mercury	96	(80 - 120)	SW846 7470A	04/08-04/11/11	MGPWP1A5
		Dilution Factor: 1	Analysis Time..: 13:37	Analyst ID.....: 002260	
		Instrument ID..: H1			
Aluminum	99	(80 - 120)	SW846 6020	04/08-04/11/11	MGPWP1A6
		Dilution Factor: 1	Analysis Time..: 18:14	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	101	(80 - 120)	SW846 6020	04/08-04/11/11	MGPWP1A7
		Dilution Factor: 1	Analysis Time..: 18:14	Analyst ID.....: 000079	
		Instrument ID..: I8			
Cadmium	106	(80 - 120)	SW846 6020	04/08-04/11/11	MGPWP1A8
		Dilution Factor: 1	Analysis Time..: 18:14	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	101	(80 - 120)	SW846 6020	04/08-04/11/11	MGPWP1A9
		Dilution Factor: 1	Analysis Time..: 18:14	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	104	(80 - 120)	SW846 6020	04/08-04/11/11	MGPWP1CA
		Dilution Factor: 1	Analysis Time..: 18:14	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	113	(80 - 120)	SW846 6020	04/08-04/11/11	MGPWP1CC
		Dilution Factor: 1	Analysis Time..: 18:14	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	100	(80 - 120)	SW846 6020	04/08-04/11/11	MGPWP1CD
		Dilution Factor: 1	Analysis Time..: 18:14	Analyst ID.....: 000079	
		Instrument ID..: I8			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D070402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Sodium	114	(80 - 120)	SW846 6020	04/08-04/11/11	MGPWP1CE
	Dilution Factor: 1	Analysis Time..: 18:14	Analyst ID.....: 000079		
	Instrument ID..: I8				
Arsenic	97	(80 - 120)	SW846 6010B	04/08-04/15/11	MGPWP1CF
	Dilution Factor: 1	Analysis Time..: 07:25	Analyst ID.....: 002260		
	Instrument ID..: I5				
Lead	104	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1CG
	Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260		
	Instrument ID..: I5				
Selenium	106	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1CH
	Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260		
	Instrument ID..: I5				
Silver	90	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1CJ
	Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260		
	Instrument ID..: I5				
Barium	100	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1CK
	Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260		
	Instrument ID..: I5				
Calcium	97	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1CL
	Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260		
	Instrument ID..: I5				
Cobalt	98	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1CM
	Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260		
	Instrument ID..: I5				
Chromium	96	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1CN
	Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260		
	Instrument ID..: I5				
Copper	98	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1CP
	Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260		
	Instrument ID..: I5				
Potassium	93	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1CQ
	Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260		
	Instrument ID..: I5				

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D070402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	99	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1CR
		Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260	
		Instrument ID..: I5			
Manganese	105	(80 - 120)	SW846 6010B	04/08-04/14/11	MGPWP1CT
		Dilution Factor: 1	Analysis Time..: 16:21	Analyst ID.....: 002260	
		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 #...: A1D070402 **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1D070402-017 **Prep Batch #...:** 1098019					
Aluminum	97	(75 - 125)	SW846 6020	04/08-04/11/11	MGM7R1AM
		Dilution Factor: 1	Analysis Time..: 19:06	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	102	(75 - 125)	SW846 6020	04/08-04/11/11	MGM7R1A2
		Dilution Factor: 1	Analysis Time..: 19:06	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	101	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1CF
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Barium	107	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1CU
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Beryllium	99	(75 - 125)	SW846 6020	04/08-04/11/11	MGM7R1AQ
		Dilution Factor: 1	Analysis Time..: 19:06	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	102	(75 - 125)	SW846 6020	04/08-04/11/11	MGM7R1AU
		Dilution Factor: 1	Analysis Time..: 19:06	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	107	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1CX
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Chromium	103	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1C5
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Cobalt	105	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1C2
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Copper	105	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1C8
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D070402 **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	98	(75 - 125)	SW846 6020	04/08-04/11/11	MGM7R1AX
		Dilution Factor: 1	Analysis Time..: 19:06	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	110	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1CJ
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Magnesium	111	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1DF
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Manganese	114	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1DJ
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Mercury	97	(80 - 120)	SW846 7470A	04/08-04/11/11	MGM7R1AJ
		Dilution Factor: 1	Analysis Time..: 14:00	Instrument ID..: H1	
		Analyst ID.....: 002260			
Nickel	108	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1AC
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Potassium	103	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1DC
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Selenium	112	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1CM
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Silver	98	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1CQ
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Sodium	103	(75 - 125)	SW846 6020	04/08-04/11/11	MGM7R1CC
		Dilution Factor: 1	Analysis Time..: 19:06	Instrument ID..: I8	
		Analyst ID.....: 000079			
Thallium	102	(75 - 125)	SW846 6020	04/08-04/11/11	MGM7R1A8
		Dilution Factor: 1	Analysis Time..: 19:06	Instrument ID..: I8	
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D070402 **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	106	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM7R1AF
		Dilution Factor: 1	Analysis Time..: 17:20	Instrument ID..: I5	
		Analyst ID.....: 002260			
Zinc	96	(75 - 125)	SW846 6020	04/08-04/11/11	MGM7R1A5
		Dilution Factor: 1	Analysis Time..: 19:06	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 #...: A1D070402 **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1D070402-031 **Prep Batch #...:** 1098019					
Aluminum	96	(75 - 125)	SW846 6020	04/08-04/11/11	MGM9D1AM
		Dilution Factor: 1	Analysis Time..: 20:02	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	101	(75 - 125)	SW846 6020	04/08-04/11/11	MGM9D1A2
		Dilution Factor: 1	Analysis Time..: 20:02	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	97	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1CF
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Barium	109	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1CU
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Beryllium	95	(75 - 125)	SW846 6020	04/08-04/11/11	MGM9D1AQ
		Dilution Factor: 1	Analysis Time..: 20:02	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	101	(75 - 125)	SW846 6020	04/08-04/11/11	MGM9D1AU
		Dilution Factor: 1	Analysis Time..: 20:02	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	98	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1CX
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Chromium	100	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1C5
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Cobalt	101	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1C2
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Copper	106	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1C8
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D070402 **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	96	(75 - 125)	SW846 6020	04/08-04/11/11	MGM9D1AX
		Dilution Factor: 1	Analysis Time..: 20:02	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	105	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1CJ
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Magnesium	98	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1DF
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Manganese	109	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1DJ
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Mercury	102	(80 - 120)	SW846 7470A	04/08-04/11/11	MGM9D1AJ
		Dilution Factor: 1	Analysis Time..: 13:39	Instrument ID..: H1	
		Analyst ID.....: 002260			
Nickel	104	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1AC
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Potassium	107	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1DC
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Selenium	107	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1CM
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Silver	98	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1CQ
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Sodium	111	(75 - 125)	SW846 6020	04/08-04/11/11	MGM9D1CC
		Dilution Factor: 1	Analysis Time..: 20:02	Instrument ID..: I8	
		Analyst ID.....: 000079			
Thallium	102	(75 - 125)	SW846 6020	04/08-04/11/11	MGM9D1A8
		Dilution Factor: 1	Analysis Time..: 20:02	Instrument ID..: I8	
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D070402 **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	104	(75 - 125)	SW846 6010B	04/08-04/14/11	MGM9D1AF
		Dilution Factor: 1	Analysis Time..: 18:25	Instrument ID..: I5	
		Analyst ID.....: 002260			
Zinc	100	(75 - 125)	SW846 6020	04/08-04/11/11	MGM9D1A5
		Dilution Factor: 1	Analysis Time..: 20:02	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 #...: A1D070402 **Work Order #...:** MGM7R-SMP MGM7R-DUP **Matrix.....:** WG

Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						
Barium						SD Lot-Sample #: A1D070402-017		
	76.4	78.2	ug/L	2.4	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #: A1D070402-017		
	73600	74900	ug/L	1.8	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1D070402-000 **Work Order #...:** MGM7R-SMP MGM7R-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A1D070402-017		
	599	612	ug/L	2.2	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 14:00	Analyst ID.....: 002260	
		Instrument ID..: H1						
Potassium						SD Lot-Sample #: A1D070402-017		
	1370	1380	ug/L	0.74	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A1D070402-017		
	30000	30500	ug/L	1.7	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A1D070402-017		
	258	262	ug/L	1.8	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A1D070402-017		
	7180	7440	ug/L	3.5	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8						
Nickel						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 17:20	Analyst ID.....: 002260	
		Instrument ID..: I5						

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SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1D070402-000 **Work Order #...:** MGM7R-SMP MGM7R-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/08-04/11/11	1098019
			Dilution Factor: 1			Analysis Time..: 19:06	Analyst ID.....: 000079	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
			Dilution Factor: 1			Analysis Time..: 17:20	Analyst ID.....: 002260	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/08-04/11/11	1098019
			Dilution Factor: 1			Analysis Time..: 19:06	Analyst ID.....: 000079	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #: A1D070402-017		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
			Dilution Factor: 1			Analysis Time..: 17:20	Analyst ID.....: 002260	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #: A1D070402-017		
	8.0 B,J	4.1 B	ug/L	65	(0-20)	SW846 6020	04/08-04/11/11	1098019
			Dilution Factor: 1			Analysis Time..: 19:06	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.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A1D070402 **Work Order #...:** MGM9D-SMP MGM9D-DUP **Matrix.....:** WG

Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #: A1D070402-031		
	11.3	13.8	ug/L	20	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Barium						SD Lot-Sample #: A1D070402-031		
	35.7	33.6	ug/L	6.1	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #: A1D070402-031		
	33300	31000	ug/L	7.3	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #: A1D070402-031		
	1.5 B	2.1 B	ug/L	33	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1D070402-000 **Work Order #...:** MGM9D-SMP MGM9D-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A1D070402-031		
	18200	16800	ug/L	8.0	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 13:39	Analyst ID.....: 002260	
		Instrument ID..: H1						
Potassium						SD Lot-Sample #: A1D070402-031		
	2130	2050	ug/L	3.8	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A1D070402-031		
	92000	85500	ug/L	7.3	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A1D070402-031		
	296	274	ug/L	7.5	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A1D070402-031		
	2180	2000	ug/L	8.4	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8						
Nickel						SD Lot-Sample #: A1D070402-031		
	2.8 B	2.5 B	ug/L	10	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1D070402-000 **Work Order #...:** MGM9D-SMP MGM9D-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8						
Selenium						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Thallium						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 20:02	Analyst ID.....: 000079	
		Instrument ID..: I8						
Vanadium						SD Lot-Sample #: A1D070402-031		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/08-04/14/11	1098019
		Dilution Factor: 1				Analysis Time..: 18:25	Analyst ID.....: 002260	
		Instrument ID..: I5						
Zinc						SD Lot-Sample #: A1D070402-031		
	5.5 B,J	7.4 B	ug/L	29	(0-20)	SW846 6020	04/08-04/11/11	1098019
		Dilution Factor: 1				Analysis Time..: 20:02	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

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50414A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/14/2011 11:57 AM Found	Q	CCB 4/14/2011 3:40 PM Found	Q	CCB 4/14/2011 4:50 PM Found	Q	CCB 4/14/2011 6:01 PM Found	Q	CCB 4/14/2011 7:12 PM Found	Q
Arsenic	189.042	5	3.3	U	3.3	U	5.2		3.3	U	3.3	U
Barium	493.409	10	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
Calcium	317.933	1000	634.0	U	634.0	U	634.0	U	634.0	U	634.0	U
Chromium	267.716	5	1.4	U	1.4	U	2.2	B	1.4	U	1.4	U
Cobalt	228.616	5	1.5	U	1.5	U	2.3	B	1.5	U	1.5	U
Copper	324.753	5	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
Lead	220.353	3	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
Magnesium	279.078	1000	122.0	U	122.0	U	122.0	U	122.0	U	122.0	U
Manganese	257.61	10	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Nickel	231.604	10	2.2	U	2.2	U	3.1	B	2.2	U	2.2	U
Potassium	766.491	1000	300.0	U	300.0	U	300.0	U	300.0	U	300.0	U
Selenium	196.026	5	4.0	U	-4.4	B	4.0	U	4.0	U	4.0	U
Silver	328.068	5	1.7	U	1.7	U	2.9	B	1.7	U	1.7	U
Vanadium	292.402	10	1.3	U	1.3	U	2.6	B	1.3	U	1.3	U

As
FWGBKG-008C-1707-GF.
FWGRQLMS009C-1735-GF
FWGSCFMW-001-1741-GF

Ni
FWGRQL-009C-1735-GF
FWGRQL-Dup5-1750-GF

5.21.0

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80411A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/11/2011 2:08 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	19	U								
Antimony	121	2	0.13	U								
Beryllium	9	1	0.2	U								
Cadmium	111	0.5	0.13	U								
Iron	56	50	26	U								
Sodium	23	1000	**34.5**	**B**								
Thallium	205	1	**0.2**	**B**								
Zinc	66	10	2.3	U								

Na < 345 Tl < 1.0

NQ

FLAG SCF mw-001-1741

RQL - 014c - 1736

RQL - 017c - 1738

RQL - 007c - 1733

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: I50414A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/14/2011 8:23 PM Found	Q	CCB 4/14/2011 9:34 PM Found	Q	CCB 4/14/2011 10:45 PM Found	Q	CCB 4/14/2011 11:56 PM Found	Q	CCB 4/15/2011 1:07 AM Found	Q
Arsenic	189.042	5	3.3	U	3.3	U	3.7	B	3.3	U	3.3	U
Barium	493.409	10	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
Calcium	317.933	1000	634.0	U	634.0	U	634.0	U	634.0	U	634.0	U
Chromium	267.716	5	1.4	U	1.4	U	1.8	B	1.4	U	1.4	U
Cobalt	228.616	5	1.5	U	1.5	U	1.6	B	1.5	U	1.5	U
Copper	324.753	5	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
Lead	220.353	3	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
Magnesium	279.078	1000	122.0	U	122.0	U	122.0	U	122.0	U	122.0	U
Manganese	257.61	10	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Nickel	231.604	10	2.2	U	2.2	U	2.2	U	2.2	U	2.2	U
Potassium	766.491	1000	300.0	U	300.0	U	300.0	U	300.0	U	300.0	U
Selenium	196.026	5	4.0	U	4.0	U	-4.4	B	4.0	U	4.0	U
Silver	328.068	5	1.7	U	1.7	U	2.0	B	1.7	U	1.7	U
Vanadium	292.402	10	1.3	U	1.3	U	2.0	B	1.3	U	1.3	U

Not Bracketing

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80411A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/11/2011 2:36 PM Found	Q	CCB 3 4/11/2011 5:39 PM Found	Q	CCB 4 4/11/2011 6:42 PM Found	Q	CCB 5 4/11/2011 7:43 PM Found	Q	CCB 6 4/11/2011 8:35 PM Found	Q
Aluminum	27	50	19	U	19	U	19	U	19	U	19	U
Antimony	121	2	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Beryllium	9	1	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Cadmium	111	0.5	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Iron	56	50	26	U	26	U	26	U	26	U	26	U
Sodium	23	1000	**93**	**B**	**57.5**	**B**	**58**	**B**	**62.6**	**B**	**63.4**	**B**
Thallium	205	1	**0.25**	**B**	**0.16**	**B**	**0.22**	**B**	**0.24**	**B**	**0.26**	**B**
Zinc	66	10	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

Metals Run Log
Additional Information

A1D070402	017	MGM7R	TOTAL	H1	04/11/11	14:00
	HG					
A1D070402	017	MGM7R	TOTAL	H1	04/11/11	14:00
	HG					
A1D070402 DUP	017	MGM7R	TOTAL	H1	04/11/11	14:02
	HG					
A1D070402 DUP	017	MGM7R	TOTAL	H1	04/11/11	14:02
	HG					
A1D070402 MS	017	MGM7R	TOTAL	H1	04/11/11	14:05
	HG					
A1D070402 MS	017	MGM7R	TOTAL	H1	04/11/11	14:05
	HG					
A1D070402	013	MGM7M	TOTAL	H1	04/11/11	14:07
	HG					
A1D070402	013	MGM7M	TOTAL	H1	04/11/11	14:07
	HG					
A1D070402	029	MGM88	TOTAL	H1	04/11/11	14:08
	HG					
A1D070402	029	MGM88	TOTAL	H1	04/11/11	14:08
	HG					
A1D080000 MB	019	MGPWP	TOTAL	H1	04/14/11	16:15
	AG BA CA CO CR CU KX MG MN NI PB SE VX					
A1D080000 LCS	019	MGPWP	TOTAL	H1	04/14/11	16:21
	AG BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	003	MGM69	TOTAL	H1	04/14/11	16:27
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	005	MGM7C	TOTAL	H1	04/14/11	16:33
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	007	MGM7F	TOTAL	H1	04/14/11	16:39
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	009	MGM7H	TOTAL	H1	04/14/11	16:56
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					

↓ As, Cr, Co N
Silver, V.

Metals Run Log
Additional Information

A1D070402	011	MGM7K	TOTAL	H1	04/14/11	17:02
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	013	MGM7M	TOTAL	H1	04/14/11	17:08
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	014	MGM7N	TOTAL	H1	04/14/11	17:14
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	017	MGM7R	TOTAL	H1	04/14/11	17:20
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402 DUP	017	MGM7R	TOTAL	H1	04/14/11	17:32
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402 MS	017	MGM7R	TOTAL	H1	04/14/11	17:38
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	019	MGM7V	TOTAL	H1	04/14/11	17:44
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	021	MGM7X	TOTAL	H1	04/14/11	17:50
	AG BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	024	MGM74	TOTAL	H1	04/14/11	18:07
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	027	MGM82	TOTAL	H1	04/14/11	18:13
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	029	MGM88	TOTAL	H1	04/14/11	18:19
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	031	MGM9D	TOTAL	H1	04/14/11	18:25
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402 DUP	031	MGM9D	TOTAL	H1	04/14/11	18:37
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402 MS	031	MGM9D	TOTAL	H1	04/14/11	18:43
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	033	MGM9G	TOTAL	H1	04/14/11	18:49
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D080000 MB	019	MGPWP	TOTAL	H1	04/15/11	07:19
	AS					

↑ As, Cr, Co, Ni, Ag + V

A1D080000 LCS	019	MGPWP	TOTAL	H1	04/15/11	07:25
	AS					
A1D070402	021	MGM7X	TOTAL	H1	04/15/11	07:31
	AS					
A1D080000 MB	019	MGPWP	TOTAL	I5	04/14/11	16:15
	AG BA CA CO CR CU KX MG MN NI PB SE VX					
A1D080000 LCS	019	MGPWP	TOTAL	I5	04/14/11	16:21
	AG BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	003	MGM69	TOTAL	I5	04/14/11	16:27
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	005	MGM7C	TOTAL	I5	04/14/11	16:33
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	007	MGM7F	TOTAL	I5	04/14/11	16:39
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	009	MGM7H	TOTAL	I5	04/14/11	16:56
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	011	MGM7K	TOTAL	I5	04/14/11	17:02
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	013	MGM7M	TOTAL	I5	04/14/11	17:08
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	014	MGM7N	TOTAL	I5	04/14/11	17:14
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	017	MGM7R	TOTAL	I5	04/14/11	17:20
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402 DUP	017	MGM7R	TOTAL	I5	04/14/11	17:32
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402 MS	017	MGM7R	TOTAL	I5	04/14/11	17:38
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	019	MGM7V	TOTAL	I5	04/14/11	17:44
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	021	MGM7X	TOTAL	I5	04/14/11	17:50
	AG BA CA CO CR CU KX MG MN NI PB SE VX					

A1D070402	024	MGM74	TOTAL	I5	04/14/11	18:07
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	027	MGM82	TOTAL	I5	04/14/11	18:13
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	029	MGM88	TOTAL	I5	04/14/11	18:19
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	031	MGM9D	TOTAL	I5	04/14/11	18:25
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402 DUP	031	MGM9D	TOTAL	I5	04/14/11	18:37
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402 MS	031	MGM9D	TOTAL	I5	04/14/11	18:43
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D070402	033	MGM9G	TOTAL	I5	04/14/11	18:49
	AG AS BA CA CO CR CU KX MG MN NI PB SE VX					
A1D080000 MB	019	MGPWP	TOTAL	I5	04/15/11	07:19
	AS					
A1D080000 LCS	019	MGPWP	TOTAL	I5	04/15/11	07:25
	AS					
A1D070402	021	MGM7X	TOTAL	I5	04/15/11	07:31
	AS					
A1D080000 MB	019	MGPWP	TOTAL	I8	04/11/11	18:09
	AL BE CD FE NA SB TL ZN					
A1D080000 MB	019	MGPWP	TOTAL	I8	04/11/11	18:09
	AL BE CD FE NA SB TL ZN					
A1D080000 LCS	019	MGPWP	TOTAL	I8	04/11/11	18:14
	AL BE CD FE NA SB TL ZN					
A1D080000 LCS	019	MGPWP	TOTAL	I8	04/11/11	18:14
	AL BE CD FE NA SB TL ZN					
A1D070402	003	MGM69	TOTAL	I8	04/11/11	18:21
	AL BE CD FE NA SB TL ZN					
A1D070402	003	MGM69	TOTAL	I8	04/11/11	18:21
	AL BE CD FE NA SB TL ZN					

A1D070402	005	MGM7C	TOTAL	I8	04/11/11	18:26
	AL BE CD FE NA SB TL ZN					
A1D070402	005	MGM7C	TOTAL	I8	04/11/11	18:26
	AL BE CD FE NA SB TL ZN					
A1D070402	007	MGM7F	TOTAL	I8	04/11/11	18:30
	AL BE CD FE NA SB TL ZN					
A1D070402	007	MGM7F	TOTAL	I8	04/11/11	18:30
	AL BE CD FE NA SB TL ZN					
A1D070402	009	MGM7H	TOTAL	I8	04/11/11	18:47
	AL BE CD FE NA SB TL ZN					
A1D070402	009	MGM7H	TOTAL	I8	04/11/11	18:47
	AL BE CD FE NA SB TL ZN					
A1D070402	011	MGM7K	TOTAL	I8	04/11/11	18:52
	AL BE CD FE NA SB TL ZN					
A1D070402	011	MGM7K	TOTAL	I8	04/11/11	18:52
	AL BE CD FE NA SB TL ZN					
A1D070402	013	MGM7M	TOTAL	I8	04/11/11	18:56
	AL BE CD FE NA SB TL ZN					
A1D070402	013	MGM7M	TOTAL	I8	04/11/11	18:56
	AL BE CD FE NA SB TL ZN					
A1D070402	014	MGM7N	TOTAL	I8	04/11/11	19:01
	AL BE CD FE NA SB TL ZN					
A1D070402	014	MGM7N	TOTAL	I8	04/11/11	19:01
	AL BE CD FE NA SB TL ZN					
A1D070402	017	MGM7R	TOTAL	I8	04/11/11	19:06
	AL BE CD FE NA SB TL ZN					
A1D070402	017	MGM7R	TOTAL	I8	04/11/11	19:06
	AL BE CD FE NA SB TL ZN					
A1D070402 DUP	017	MGM7R	TOTAL	I8	04/11/11	19:15
	AL BE CD FE NA SB TL ZN					
A1D070402 DUP	017	MGM7R	TOTAL	I8	04/11/11	19:15
	AL BE CD FE NA SB TL ZN					

A1D070402 MS	017	MGM7R TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:20
A1D070402 MS	017	MGM7R TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:20
A1D070402	019	MGM7V TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:27
A1D070402	019	MGM7V TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:27
A1D070402	021	MGM7X TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:31
A1D070402	021	MGM7X TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:31
A1D070402	024	MGM74 TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:48
A1D070402	024	MGM74 TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:48
A1D070402	027	MGM82 TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:53
A1D070402	027	MGM82 TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:53
A1D070402	029	MGM88 TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:57
A1D070402	029	MGM88 TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	19:57
A1D070402	031	MGM9D TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	20:02
A1D070402	031	MGM9D TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	20:02
A1D070402 DUP	031	MGM9D TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	20:07
A1D070402 DUP	031	MGM9D TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	20:07

Metals Run Log
Additional Information

A1D070402 MS	031	MGM9D TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	20:12
A1D070402 MS	031	MGM9D TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	20:12
A1D070402	033	MGM9G TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	20:19
A1D070402	033	MGM9G TOTAL *AL BE CD FE NA SB TL ZN*	I8	04/11/11	20:19

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GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 10, 2011

SDG: A1D070402 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 1.8 and 3.8°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 ≥ .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?	✓			1/19/11	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 10, 2011

SDG: A1D070402 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%=J/R 75-80%=J/UJ;
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%=R 50-79%=J/UJ;
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%=J/R 30-75%=J/UJ;
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued?		✓			
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 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

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-006C-1706-GW

General Chemistry

Lot-Sample #...: A1D070402-002 **Work Order #...:** MGM68 **Matrix.....:** WG
Date Sampled...: 04/06/11 09:21 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-015C-1709-GW

General Chemistry

Lot-Sample #...: A1D070402-004 **Work Order #...:** MGM7A **Matrix.....:** WG
Date Sampled...: 04/06/11 10:35 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-021C-1711-GW

General Chemistry

Lot-Sample #...: A1D070402-006 **Work Order #...:** MGM7E **Matrix.....:** WG
Date Sampled...: 04/06/11 12:45 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-008C-1707-GW

General Chemistry

Lot-Sample #...: A1D070402-008 **Work Order #...:** MGM7G **Matrix.....:** WG
Date Sampled...: 04/06/11 14:01 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-009C-1735-GW

General Chemistry

Lot-Sample #...: A1D070402-010 **Work Order #...:** MGM7J **Matrix.....:** WG
Date Sampled...: 04/06/11 15:31 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-DUP5-1750-GW

General Chemistry

Lot-Sample #...: A1D070402-012 **Work Order #...:** MGM7L **Matrix.....:** WG
Date Sampled...: 04/06/11 16:55 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1759-GW

General Chemistry

Lot-Sample #...: A1D070402-014 **Work Order #...:** MGM7N **Matrix.....:** WQ
Date Sampled...: 04/06/11 17:35 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1743-GW

General Chemistry

Lot-Sample #...: A1D070402-016 **Work Order #...:** MGM7Q **Matrix.....:** WG
Date Sampled...: 04/06/11 09:22 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1741-GW

General Chemistry

Lot-Sample #...: A1D070402-018 **Work Order #...:** MGM7T **Matrix.....:** WG
Date Sampled...: 04/06/11 12:52 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1742-GW

General Chemistry

Lot-Sample #...: A1D070402-020 **Work Order #...:** MGM7W **Matrix.....:** WG
Date Sampled...: 04/06/11 15:48 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-014C-1736-GW

General Chemistry

Lot-Sample #...: A1D070402-023 **Work Order #...:** MGM72 **Matrix.....:** WG
Date Sampled...: 04/06/11 09:16 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-016C-1737-GW

General Chemistry

Lot-Sample #...: A1D070402-028 **Work Order #...:** MGM87 **Matrix.....:** WG
Date Sampled...: 04/06/11 11:03 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-008C-1734-GW

General Chemistry

Lot-Sample #...: A1D070402-030 **Work Order #...:** MGM89 **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGRQLmw-007C-1733-GW

General Chemistry

Lot-Sample #...: A1D070402-032 **Work Order #...:** MGM9E **Matrix.....:** WG
Date Sampled...: 04/06/11 15:19 **Date Received..:** 04/07/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1D070402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MGQ7K1AA		MB Lot-Sample #:	A1D080000-270	
	ND	0.010	mg/L	SW846 9012A	04/08/11	1098270
		Dilution Factor: 1				
Cyanide, Total		Work Order #: MG0MK1AA		MB Lot-Sample #:	A1D130000-349	
	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349
		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 #...: A1D070402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MGQ7K1AC	LCS Lot-Sample#: A1D080000-270		
	94	(80 - 120)	SW846 9012A	04/08/11	1098270
		Dilution Factor: 1			
Cyanide, Total		Work Order #: MG0MK1AC	LCS Lot-Sample#: A1D130000-349		
	101	(80 - 120)	SW846 9012A	04/13/11	1103349
		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 #...: A1D070402 **Matrix.....:** WATER
Date Sampled...: 04/07/11 08:59 **Date Received..:** 04/08/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: MGK3H1AM-MS/MGK3H1AN-MSD				MS Lot-Sample #: A1D060402-029	
	96	(80 - 120)			SW846 9012A	04/08/11	1098270
	90	(80 - 120)	6.8	(0-20)	SW846 9012A	04/08/11	1098270
		Dilution Factor: 1					
Cyanide, Total		WO#: MGP1D1AM-MS/MGP1D1AN-MSD				MS Lot-Sample #: A1D080405-002	
	92	(80 - 120)			SW846 9012A	04/13/11	1103349
	97	(80 - 120)	5.8	(0-20)	SW846 9012A	04/13/11	1103349
		Dilution Factor: 1					
Cyanide, Total		WO#: MGP131AM-MS/MGP131AN-MSD				MS Lot-Sample #: A1D080405-018	
	103	(80 - 120)			SW846 9012A	04/13/11	1103349
	98	(80 - 120)	4.5	(0-20)	SW846 9012A	04/13/11	1103349
		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 #...: A1D070402 **Matrix.....:** WATER
Date Sampled...: 04/05/11 11:23 **Date Received..:** 04/06/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #...: MGK3H1AM		MS Lot-Sample #: A1D060402-029	
	96	(80 - 120)	SW846 9012A	04/08/11	1098270
		Dilution Factor: 1			
Cyanide, Total		Work Order #...: MGP1D1AM		MS Lot-Sample #: A1D080405-002	
	92	(80 - 120)	SW846 9012A	04/13/11	1103349
		Dilution Factor: 1			
Cyanide, Total		Work Order #...: MGP131AM		MS Lot-Sample #: A1D080405-018	
	103	(80 - 120)	SW846 9012A	04/13/11	1103349
		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 #...: A1D070402 **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: MGM891AM-MS/MGM891AN-MSD				MS Lot-Sample #: A1D070402-030	
	99	(80 - 120)			SW846 9012A	04/13/11	1103349
	90	(80 - 120)	8.7	(0-20)	SW846 9012A	04/13/11	1103349
		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 #...: A1D070402 **Matrix.....:** WG
Date Sampled...: 04/06/11 13:09 **Date Received..:** 04/07/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #...: MGM891AM		MS Lot-Sample #: A1D070402-030	
	99	(80 - 120)	SW846 9012A	04/13/11	1103349
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix 1

Appendix 1

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: A1D070402										
6010B	FWGBKGmw-006C-1706-GF	AQ	N							
				Barium	10.0	8.5B		J	ug/L	L
6010B	FWGBKGmw-008C-1707-GF	AQ	N							
				Arsenic	5.0	3.3B		UJ	ug/L	L,Cb
				Barium	10.0	3.7B		J	ug/L	L
				Manganese	10.0	9.7B		J	ug/L	L
				Potassium	1000	444B		J	ug/L	L
6010B	FWGBKGmw-021C-1711-GF	AQ	N							
				Potassium	1000	541B		J	ug/L	L
6010B	FWGRQLmw-008C-1734-GF	AQ	N							
				Cobalt	5.0	1.5B		J	ug/L	L
				Nickel	10.0	2.8B		J	ug/L	L
6010B	FWGRQLmw-009C-1735-GF	AQ	N							
				Arsenic	5.0	4.3B		UJ	ug/L	L,Cb
				Copper	5.0	4.9B		J	ug/L	L
				Lead	3.0	2.4B		J	ug/L	L
				Nickel	10.0	2.9B		UJ	ug/L	L,Cb
6010B	FWGRQLmw-016C-1737-GF	AQ	N							
				Barium	10.0	9.9B		J	ug/L	L
				Nickel	10.0	4.8B		J	ug/L	L
6010B	FWGRQLmw-017C-1738-GF	AQ	N							
				Cobalt	5.0	4.9B		J	ug/L	L
6010B	FWGRQLmw-DUP5-1750-GF	AQ	N							
				Nickel	10.0	3.8B		UJ	ug/L	L,Cb

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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: A1D070402										
6010B	FWGSCFmw-001-1741-GF	AQ	N							
				Arsenic	5.0	3.4B		UJ	ug/L	L,Cb
				Barium	10.0	3.3B		J	ug/L	L
6020	FWGBKGmw-006C-1706-GF	AQ	N							
				Thallium	1.0	0.21B		J	ug/L	L
				Zinc	10.0	2.4B J		JB	ug/L	L,F
6020	FWGBKGmw-008C-1707-GF	AQ	N							
				Zinc	10.0	4.3B J		JB	ug/L	L,F
6020	FWGBKGmw-015C-1709-GF	AQ	N							
				Zinc	10.0	5.2B J		JB	ug/L	L,F
6020	FWGBKGmw-021C-1711-GF	AQ	N							
				Zinc	10.0	3.0B J		JB	ug/L	L,F
6020	FWGEQUIPRINSE3-1759-GW	AQ	EB							
				Zinc	10.0	5.4B J		JB	ug/L	L,F
6020	FWGRQLmw-007C-1733-GF	AQ	N							
				Antimony	2.0	0.27B		J	ug/L	L
				Thallium	1.0	0.22B		UJ	ug/L	L,Cb
				Zinc	10.0	21.0J		B	ug/L	F
6020	FWGRQLmw-008C-1734-GF	AQ	N							
				Zinc	10.0	5.5B J		JB	ug/L	L,F
6020	FWGRQLmw-009C-1735-GF	AQ	N							
				Zinc	10.0	8.2B J		JB	ug/L	L,F

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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: A1D070402										
6020	FWGRQLmw-014C-1736-GF	AQ	N							
				Thallium	1.0	0.18B		UJ	ug/L	L,Cb
				Zinc	10.0	20.4J		B	ug/L	F
6020	FWGRQLmw-016C-1737-GF	AQ	N							
				Zinc	10.0	6.5B J		JB	ug/L	L,F
6020	FWGRQLmw-017C-1738-GF	AQ	N							
				Aluminum	50.0	36.6B		J	ug/L	L
				Thallium	1.0	0.19B		UJ	ug/L	L,Cb
				Zinc	10.0	20.4J		B	ug/L	F
6020	FWGRQLmw-DUP5-1750-GF	AQ	N							
				Zinc	10.0	5.5B J		JB	ug/L	L,F
6020	FWGSCFmw-001-1741-GF	AQ	N							
				Antimony	2.0	0.95B		J	ug/L	L
				Thallium	1.0	0.18B		UJ	ug/L	L,Cb
				Zinc	10.0	3.4B J		JB	ug/L	L,F
6020	FWGSCFmw-003-1743-GF	AQ	N							
				Zinc	10.0	8.0B J		JB	ug/L	L,F

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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: A1D070402										
8081A	FWGB12mw-012C-1713-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: A1D070402										
8081A	FWGBKGmw-006C-1706-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: A1D070402										
8081A	FWGRQLmw-008C-1734-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: A1D070402										
8081A	FWGRQLmw-016C-1737-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: A1D070402										
8081A	FWGRQLmw-DUP5-1750-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	FWGSCFmw-001-1741-GW	AQ	N							
				Endrin	0.030	0.012J		J	ug/L	G,L
8081A	FWGSCFmw-002-1742-GW	AQ	N							
				alpha-BHC	0.030	0.022J		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: A1D070402										
8082	FWGBKGmw-006C-1706-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	FWGBKGmw-008C-1707-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	FWGRQLmw-008C-1734-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: A1D070402										
8082	FWGRQLmw-009C-1735-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	FWGRQLmw-014C-1736-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	FWGRQLmw-016C-1737-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: A1D070402										
8082	FWGRQLmw-DUP5-1750-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
8082	FWGSCFmw-001-1741-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	FWGEQUIPRINSE3-1759-GW	AQ	EB							
				Acetone	10	11		J	ug/L	Pj
				Carbon disulfide	1.0	0.45J		J	ug/L	L,J
				Chloroform	1.0	0.83J		J	ug/L	L
				Methylene chloride	2.0	2.2B		JB	ug/L	F,Pj,J
				Toluene	1.0	0.45J		J	ug/L	L
8260B	FWGSCFmw-001-1741-GW	AQ	N							
				Carbon disulfide	1.0	0.44J		J	ug/L	L,J
8260B	FWGSCFmw-002-1742-GW	AQ	N							
				Carbon disulfide	1.0	0.28J		J	ug/L	L,J

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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: A1D070402										
8260B	FWGTEAM1-TRIP	AQ	N							
				Chloroform	1.0	0.23J		J	ug/L	L
				Methylene chloride	2.0	0.33J B		JB	ug/L	L,Pj,J,F
8260B	FWGTEAM2-TRIP	AQ	N							
				Chloroform	1.0	0.22J		J	ug/L	L
8260B	FWGTEAM3-TRIP	AQ	N							
				Chloroform	1.0	0.22J		J	ug/L	L
8270C	FWGBKGmw-006C-1706-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGBKGmw-008C-1707-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.1J B		JB	ug/L	L,F
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGBKGmw-015C-1709-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.2J B		JB	ug/L	L,F
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGBKGmw-021C-1711-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.1J B		JB	ug/L	L,F
				Butylbenzyl Phthalate	1.0	0.82J		J	ug/L	L
				Pentachlorophenol	5.0	5.0U		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: A1D070402										
8270C	FWGEQUIPRINSE3-1759-GW	AQ	EB							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGRQLmw-007C-1733-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.4J B		JB	ug/L	L,F
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGRQLmw-008C-1734-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.2J B		JB	ug/L	L,F
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGRQLmw-009C-1735-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.3J B		JB	ug/L	L,F
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGRQLmw-014C-1736-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.9J B		JB	ug/L	L,F
				Pentachlorophenol	5.0	5.0U		UJ	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: A1D070402										
8270C	FWGRQLmw-016C-1737-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.1J B		JB	ug/L	L,F
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGRQLmw-DUP5-1750-GW	AQ	FD							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	0.97J B		JB	ug/L	L,F
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGSCFmw-001-1741-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.4J B		JB	ug/L	L,F
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGSCFmw-002-1742-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.2J B		JB	ug/L	L,F
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj
8270C	FWGSCFmw-003-1743-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	H,Pj
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Pj
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Pj

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 : FWGB12mw-012C-1713-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402025

Reviewed By / Date : Angye Dragotta 6/6/2011 **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

* 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 : FWGBKGmw-006C-1706-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402003

Reviewed By / Date : Angye Dragotta 6/6/2011 **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
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.21		ug/L	B	YES	J								J							L
Zinc	2.4		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 : FWGBKGmw-006C-1706-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402002

Reviewed By / Date : Angye Dragotta 6/6/2011 **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 : FWGBKGmw-006C-1706-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402002

Reviewed By / Date : Angye Dragotta 6/6/2011 **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**															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	**UJ**															Pj
Pentachlorophenol	5.0		ug/L	U	YES	**UJ**															Pj

* Overall result qualifier reflects summation of qualifiers added during eutometed 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 : FWGBKGmw-008C-1707-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402009

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	3.3		ug/L	B	YES	UJ								J							L,Cb
Barium	3.7		ug/L	B	YES	J								J							L
Manganese	9.7		ug/L	B	YES	J								J							L
Potassium	444		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	4.3		ug/L	B J	YES	UJ								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 : FWGBKGmw-008C-1707-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402008

Reviewed By / Date : Angye Dragotta 6/6/2011 **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 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**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.1		ug/L	J B	YES	~~UJ~~ JB			JB					J							L,F
Pentachlorophenol	5.0		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 : FWGBKGmw-015C-1709-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402005

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	5.2		ug/L	B J	YES	~~UJ~~ J			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 : FWGBKGmw-015C-1709-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402004

Reviewed By / Date : Angye Dragotta 6/6/2011 **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															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.2		ug/L	J B	YES	~~UJ~~ J B			J B					J							L,F
Pentachlorophenol	5.0		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 : FWGBKGmw-021C-1711-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402007

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	541		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	3.0		ug/L	B J	YES	UJ B			UB					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 : FWGBKGmw-021C-1711-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402006

Reviewed By / Date : Angye Dragotta 6/6/2011 **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**															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	**UJ**															Pj
bis(2-Ethylhexyl) phthalate	1.1		ug/L	J B	YES	~~UJ~~ SB			B					J							L,F
Butylbenzyl Phthalate	0.82		ug/L	J	YES	**J**								J							L
Pentachlorophenol	5.0		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 : FWGEQUIPRINSE3-1759-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402014

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	11		ug/L		YES	J															Pj
Carbon disulfide	0.45		ug/L	J	YES	J				J				J							L,J
Chloroform	0.83		ug/L	J	YES	J								J							L
Methylene chloride	2.2		ug/L	B	YES	~~UJ~~ J6			YB	J											F,Pj,J
Toluene	0.45		ug/L	J	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ															Pj
Pentachlorophenol	5.0		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 : FWGEQUIPRINSE3-1759-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402014

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	5.4		ug/L	B J	YES	UJ 5B			UB					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 : FWGRQLmw-007C-1733-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402033

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	0.27		ug/L	B	YES	J								J							L
Thallium	0.22		ug/L	B	YES	UJ								J							L,Cb
Zinc	21.0		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 : FWGRQLmw-007C-1733-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402032

Reviewed By / Date : Angye Dragotta 6/6/2011 **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															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.4		ug/L	J B	YES	~~UJ~~ J B			J B					J							L,F
Pentachlorophenol	5.0		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 : FWGRQLmw-008C-1734-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402031

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	2.8		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	5.5		ug/L	B J	YES	~~U~~ J B			~~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 : FWGRQLmw-008C-1734-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402030

Reviewed By / Date : Angye Dragotta 6/6/2011 **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 : FWGRQLmw-008C-1734-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402030

Reviewed By / Date : Angye Dragotta 6/6/2011 **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															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.2		ug/L	J B	YES	~~UJ~~ JB			J B					J							L,F
Pentachlorophenol	5.0		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 : FWGRQLmw-009C-1735-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402011

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	4.3		ug/L	B	YES	**UJ**								J							L,Cb
Copper	4.9		ug/L	B	YES	**J**								J							L
Lead	2.4		ug/L	B	YES	**J**								J							L
Nickel	2.9		ug/L	B	YES	**UJ**								J							L,Cb
Analysis Method : 6020						**Dilution: 1**															
Zinc	8.2		ug/L	B J	YES	UJ SB			V 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 : FWGRQLmw-009C-1735-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402010

Reviewed By / Date : Angye Dragotta 6/6/2011 **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 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**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	**UJ**															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	**UJ**															Pj
bis(2-Ethylhexyl) phthalate	1.3		ug/L	J B	YES	**UJ**								J							L,F
Pentachlorophenol	5.0		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 : FWGRQLmw-014C-1736-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402024

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	0.18		ug/L	B	YES	UJ								J							L,Cb
Zinc	20.4		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 : FWGRQLmw-014C-1736-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402023

Reviewed By / Date : Angye Dragotta 6/6/2011 **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 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**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.9		ug/L	J B	YES	UJ 3B			MB					J							L,F
Pentachlorophenol	5.0		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 : FWGRQLmw-016C-1737-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402029

Reviewed By / Date : Angye Dragotta 6/6/2011 **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
Nickel	4.8		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	6.5		ug/L	B J	YES	UJ SB			UB					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 : FWGRQLmw-016C-1737-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402028

Reviewed By / Date : Angye Dragotta 6/6/2011 **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 : FWGRQLmw-016C-1737-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402028

Reviewed By / Date : Angye Dragotta 6/6/2011 **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															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.1		ug/L	J B	YES	~~UJ~~ JB			JB					J							L,F
Pentachlorophenol	5.0		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 : FWGRQLmw-017C-1738-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402027

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	4.9		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Aluminum	36.6		ug/L	B	YES	J								J							L
Thallium	0.19		ug/L	B	YES	UJ								J							L,Cb
Zinc	20.4		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 : FWGRQLmw-DUP5-1750-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402013

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	3.8		ug/L	B	YES	UJ								J							L,Cb
Analysis Method : 6020						**Dilution: 1**															
Zinc	5.5		ug/L	B J	YES	UJ ~~J~~ B			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 : FWGRQLmw-DUP5-1750-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402012

Reviewed By / Date : Angye Dragotta 6/6/2011 **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 : FWGRQLmw-DUP5-1750-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402012

Reviewed By / Date : Angye Dragotta 6/6/2011 **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															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	0.97		ug/L	J B	YES	~~UJ~~ 58			~~B~~					J							L,F
Pentachlorophenol	5.0		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 : FWGSCFmw-001-1741-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402019

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	3.4		ug/L	B	YES	**UJ**								J							L,Cb
Barium	3.3		ug/L	B	YES	**J**								J							L
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.95		ug/L	B	YES	**J**								J							L
Thallium	0.18		ug/L	B	YES	**UJ**								J							L,Cb
Zinc	3.4		ug/L	B J	YES	**UJ** 5B			UB					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 : FWGSCFmw-001-1741-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402018

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	0.012		ug/L	J	YES	**J**							J	J							G,L
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**															
Carbon disulfide	0.44		ug/L	J	YES	**J**				J				J							L,J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	**UJ**															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	**UJ**															Pj
bis(2-Ethylhexyl) phthalate	1.4		ug/L	J B	YES	~~UJ~~ J			~~U~~ J					J							L,F
Pentachlorophenol	5.0		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 : FWGSCFmw-002-1742-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402020

Reviewed By / Date : Angye Dragotta 6/6/2011 **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**															
alpha-BHC	0.022		ug/L	J	YES	J								J							L
Analysis Method : 8260B						**Dilution: 1**															
Carbon disulfide	0.28		ug/L	J	YES	J				J				J							L,J
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.2		ug/L	J B	YES	UJ								J							L,F
Pentachlorophenol	5.0		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 : FWGSCFmw-003-1743-GF **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1D070402017

Reviewed By / Date : Angye Dragotta 6/6/2011 **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	8.0		ug/L	B J	YES	UJ J5			J B					J							L,F

Project Number and Name: 030240.0006 - RVAAP (OH) **Library Used:** Ravenna 111810

ADR 8.1 Report Date: 6/6/2011 13:49

* 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-003-1743-GW **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402016

Reviewed By / Date : Angye Dragotta 6/6/2011 **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										H,Pj
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ															Pj
Pentachlorophenol	5.0		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 :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402001

Reviewed By / Date : Angye Dragotta 6/6/2011 **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**															
Chloroform	0.23		ug/L	J	YES	J								J							L
Methylene chloride	0.33		ug/L	J B	YES	~~UJ~~ JB			~~U~~ B	J				J							L,Pj,J,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 : FWGTEAM2-TRIP
Lab Report Batch : A1D070402
Lab ID : TALCAN
Sample Date : 04/06/2011
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A1D070402015

Reviewed By / Date : Angye Dragotta 6/6/2011
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**															
Chloroform	0.22		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 : FWGTEAM3-TRIP **Lab Report Batch :** A1D070402 **Lab ID :** TALCAN

Sample Date : 04/06/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1D070402022

Reviewed By / Date : Angye Dragotta 6/6/2011 **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**															
Chloroform	0.22		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

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 1098032 **Analysis Method :** 8270C **Analysis Date :** 04/19/2011

Preparation Batch : 1098032 **Preparation Type :** 3520C **Preparation Date :** 04/08/2011

Lab Reporting Batch : A1D070402 **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
FWGRQLmw-008C-1734	A1D070402030S	AQ	3,3'-Dichlorobenzidine	20		0.00	45.00	135.00	40.00
			Hexachlorocyclopentadiene	44		0.00	45.00	135.00	40.00
FWGRQLmw-008C-1734	A1D070402030D		3,3'-Dichlorobenzidine	21		0.00	45.00	135.00	40.00
FWGSCFmw-003-1743-	A1D070402016S		2,4-Dinitrophenol	35		0.00	45.00	135.00	40.00
			3,3'-Dichlorobenzidine	29		0.00	45.00	135.00	40.00
			Hexachlorocyclopentadiene	38		0.00	45.00	135.00	40.00
FWGSCFmw-003-1743-	A1D070402016D		2,4-Dinitrophenol	35		0.00	45.00	135.00	40.00
			3,3'-Dichlorobenzidine	27		0.00	45.00	135.00	40.00
			Hexachlorocyclopentadiene	41		0.00	45.00	135.00	40.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGRQLmw-008C-1734-GW	A1D070402030
FWGSCFmw-003-1743-GW	A1D070402016

* 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 : 1105156 **Analysis Method :** 8260B **Analysis Date :** 04/15/2011

Preparation Batch : 1105156 **Preparation Type :** 5030B **Preparation Date :** 04/15/2011

Lab Reporting Batch : A1D070402 **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
FWGRQLmw-008C-1734	A1D070402030S	AQ	Carbon disulfide	135		0.00	70.00	130.00	30.00
FWGRQLmw-008C-1734	A1D070402030D		Carbon disulfide	136		0.00	70.00	130.00	30.00
FWGSCFmw-003-1743-	A1D070402016S		Carbon disulfide	151		0.00	70.00	130.00	30.00
FWGSCFmw-003-1743-	A1D070402016D		Bromomethane	69		0.00	70.00	130.00	30.00
			Carbon disulfide	142		0.00	70.00	130.00	30.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGRQLmw-008C-1734-GW	A1D070402030
FWGSCFmw-003-1743-GW	A1D070402016

* 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)

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 1104189 **Analysis Method :** 8260B **Analysis Date :** 04/14/2011

Preparation Batch : 1104189 **Preparation Type :** 5030B **Preparation Date :** 04/14/2011

Lab Reporting Batch : A1D070402 **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
A1D140000189C	AQ	Carbon disulfide	130		30.00	74.00	123.00	30.00
		Methylene chloride	126		30.00	69.00	118.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGBKGmw-006C-1706-GW	A1D070402002
FWGBKGmw-008C-1707-GW	A1D070402008
FWGBKGmw-015C-1709-GW	A1D070402004
FWGBKGmw-021C-1711-GW	A1D070402006
FWGEQUIPRINSE3-1759-GW	A1D070402014
FWGRQLmw-009C-1735-GW	A1D070402010
FWGRQLmw-DUP5-1750-GW	A1D070402012
FWGTEAM1-TRIP	A1D070402001

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)

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 1105156 **Analysis Method :** 8260B **Analysis Date :** 04/15/2011

Preparation Batch : 1105156 **Preparation Type :** 5030B **Preparation Date :** 04/15/2011

Lab Reporting Batch : A1D070402 **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
A1D150000156C	AQ	Carbon disulfide	130		30.00	74.00	123.00	30.00
		Methylene chloride	130		30.00	69.00	118.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGRQLmw-007C-1733-GW	A1D070402032
FWGRQLmw-008C-1734-GW	A1D070402030
FWGRQLmw-014C-1736-GW	A1D070402023
FWGRQLmw-016C-1737-GW	A1D070402028
FWGSCFmw-001-1741-GW	A1D070402018
FWGSCFmw-002-1742-GW	A1D070402020
FWGSCFmw-003-1743-GW	A1D070402016
FWGTEAM2-TRIP	A1D070402015
FWGTEAM3-TRIP	A1D070402022

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)

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: A1D070402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE3-1759	A1D070402014	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Potassium	U	1000	200.00	ug/L
		6020		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)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A1D070402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGBKGmw-006C-1706-	A1D070402003	6010B	AQ	Barium	B	8.5	10.0	ug/L
		6020		Thallium	B	0.21	1.0	ug/L
				Zinc	B J	2.4	10.0	ug/L
FWGBKGmw-008C-1707-	A1D070402009	6010B		Arsenic	B	3.3	5.0	ug/L
				Barium	B	3.7	10.0	ug/L
				Manganese	B	9.7	10.0	ug/L
				Potassium	B	444	1000	ug/L
		6020		Zinc	B J	4.3	10.0	ug/L
FWGBKGmw-008C-1707-	A1D070402008	8270C		bis(2-Ethylhexyl) phthalate	J B	1.1	10	ug/L
FWGBKGmw-015C-1709-	A1D070402005	6020		Zinc	B J	5.2	10.0	ug/L
FWGBKGmw-015C-1709-	A1D070402004	8270C		bis(2-Ethylhexyl) phthalate	J B	1.2	10	ug/L
FWGBKGmw-021C-1711-	A1D070402007	6010B		Potassium	B	541	1000	ug/L
		6020		Zinc	B J	3.0	10.0	ug/L
FWGBKGmw-021C-1711-	A1D070402006	8270C		bis(2-Ethylhexyl) phthalate	J B	1.1	10	ug/L
				Butylbenzyl Phthalate	J	0.82	1.0	ug/L
FWGEQUIPRINSE3-1759	A1D070402014	6020		Zinc	B J	5.4	10.0	ug/L
		8260B		Carbon disulfide	J	0.45	1.0	ug/L
				Chloroform	J	0.83	1.0	ug/L
				Toluene	J	0.45	1.0	ug/L
FWGRQLmw-007C-1733-	A1D070402033	6020		Antimony	B	0.27	2.0	ug/L
				Thallium	B	0.22	1.0	ug/L
FWGRQLmw-007C-1733-	A1D070402032	8270C		bis(2-Ethylhexyl) phthalate	J B	1.4	10	ug/L
FWGRQLmw-008C-1734-	A1D070402031	6010B		Cobalt	B	1.5	5.0	ug/L
				Nickel	B	2.8	10.0	ug/L
		6020		Zinc	B J	5.5	10.0	ug/L
FWGRQLmw-008C-1734-	A1D070402030	8270C		bis(2-Ethylhexyl) phthalate	J B	1.2	10	ug/L
FWGRQLmw-009C-1735-	A1D070402011	6010B		Arsenic	B	4.3	5.0	ug/L
				Copper	B	4.9	5.0	ug/L
				Lead	B	2.4	3.0	ug/L
				Nickel	B	2.9	10.0	ug/L
		6020		Zinc	B J	8.2	10.0	ug/L
FWGRQLmw-009C-1735-	A1D070402010	8270C		bis(2-Ethylhexyl) phthalate	J B	1.3	10	ug/L
FWGRQLmw-014C-1736-	A1D070402024	6020		Thallium	B	0.18	1.0	ug/L
FWGRQLmw-014C-1736-	A1D070402023	8270C		bis(2-Ethylhexyl) phthalate	J B	1.9	10	ug/L
FWGRQLmw-016C-1737-	A1D070402029	6010B		Barium	B	9.9	10.0	ug/L
				Nickel	B	4.8	10.0	ug/L

Project Number and Name: 030240.0006 - RVAAP (OH)

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A1D070402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGRQLmw-016C-1737-	A1D070402029	6020	AQ	Zinc	B J	6.5	10.0	ug/L
FWGRQLmw-016C-1737-	A1D070402028	8270C		bis(2-Ethylhexyl) phthalate	J B	1.1	10	ug/L
FWGRQLmw-017C-1738-	A1D070402027	6010B		Cobalt	B	4.9	5.0	ug/L
		6020		Aluminum	B	36.6	50.0	ug/L
				Thallium	B	0.19	1.0	ug/L
FWGRQLmw-DUP5-1750-	A1D070402013	6010B		Nickel	B	3.8	10.0	ug/L
		6020		Zinc	B J	5.5	10.0	ug/L
FWGRQLmw-DUP5-1750-	A1D070402012	8270C		bis(2-Ethylhexyl) phthalate	J B	0.97	10	ug/L
FWGSCFmw-001-1741-G	A1D070402019	6010B		Arsenic	B	3.4	5.0	ug/L
				Barium	B	3.3	10.0	ug/L
		6020		Antimony	B	0.95	2.0	ug/L
				Thallium	B	0.18	1.0	ug/L
				Zinc	B J	3.4	10.0	ug/L
FWGSCFmw-001-1741-G	A1D070402018	8081A		Endrin	J	0.012	0.030	ug/L
		8260B		Carbon disulfide	J	0.44	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.4	10	ug/L
FWGSCFmw-002-1742-G	A1D070402020	8081A		alpha-BHC	J	0.022	0.030	ug/L
		8260B		Carbon disulfide	J	0.28	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.2	10	ug/L
FWGSCFmw-003-1743-G	A1D070402017	6020		Zinc	B J	8.0	10.0	ug/L
FWGTEAM1-TRIP	A1D070402001	8260B		Chloroform	J	0.23	1.0	ug/L
				Methylene chloride	J B	0.33	2.0	ug/L
FWGTEAM2-TRIP	A1D070402015			Chloroform	J	0.22	1.0	ug/L
FWGTEAM3-TRIP	A1D070402022			Chloroform	J	0.22	1.0	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A1D070402 **Lab ID:** TALCAN

Analysis Method : 6020 **Analysis Date :** 04/11/2011

Preparation Type : 3005A **Preparation Date :** 04/08/2011

Method Blank Lab Sample ID : A1D080000019B **Preparation Batch :** 1098019

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	5.9	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
FWGBKGmw-006C-1706-GF	A1D070402003	1	2.4	B J	ug/L
FWGBKGmw-008C-1707-GF	A1D070402009	1	4.3	B J	ug/L
FWGBKGmw-015C-1709-GF	A1D070402005	1	5.2	B J	ug/L
FWGBKGmw-021C-1711-GF	A1D070402007	1	3.0	B J	ug/L
FWGEQUIPRINSE3-1759-G	A1D070402014	1	5.4	B J	ug/L
FWGRQLmw-007C-1733-GF	A1D070402033	1	21.0	J	ug/L
FWGRQLmw-008C-1734-GF	A1D070402031	1	5.5	B J	ug/L
FWGRQLmw-009C-1735-GF	A1D070402011	1	8.2	B J	ug/L
FWGRQLmw-014C-1736-GF	A1D070402024	1	20.4	J	ug/L
FWGRQLmw-016C-1737-GF	A1D070402029	1	6.5	B J	ug/L
FWGRQLmw-017C-1738-GF	A1D070402027	1	20.4	J	ug/L
FWGRQLmw-DUP5-1750-GF	A1D070402013	1	5.5	B J	ug/L
FWGSCFmw-001-1741-GF	A1D070402019	1	3.4	B J	ug/L
FWGSCFmw-003-1743-GF	A1D070402017	1	8.0	B J	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A1D070402 **Lab ID:** TALCAN

Analysis Method : 8270C **Analysis Date :** 04/19/2011

Preparation Type : 3520C **Preparation Date :** 04/08/2011

Method Blank Lab Sample ID : A1D080000032B **Preparation Batch :** 1098032

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	4.0	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
FWGBKGmw-008C-1707-G	A1D070402008	1	1.1	J B	ug/L
FWGBKGmw-015C-1709-G	A1D070402004	1	1.2	J B	ug/L
FWGBKGmw-021C-1711-G	A1D070402006	1	1.1	J B	ug/L
FWGRQLmw-007C-1733-G	A1D070402032	1	1.4	J B	ug/L
FWGRQLmw-008C-1734-G	A1D070402030	1	1.2	J B	ug/L
FWGRQLmw-009C-1735-G	A1D070402010	1	1.3	J B	ug/L
FWGRQLmw-014C-1736-G	A1D070402023	1	1.9	J B	ug/L
FWGRQLmw-016C-1737-G	A1D070402028	1	1.1	J B	ug/L
FWGRQLmw-DUP5-1750-G	A1D070402012	1	0.97	J B	ug/L
FWGSCFmw-001-1741-GW	A1D070402018	1	1.4	J B	ug/L
FWGSCFmw-002-1742-GW	A1D070402020	1	1.2	J B	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A1D070402
Lab ID: TALCAN
Analysis Method : 8260B
Analysis Date : 04/14/2011
Preparation Type : 5030B
Preparation Date : 04/14/2011
Method Blank Lab Sample ID : A1D140000189B
Preparation Batch : 1104189

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.3	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
FWGEQUIPRINSE3-1759-G	A1D070402014	1	2.2	B	ug/L
FWGTEAM1-TRIP	A1D070402001	1	0.33	J B	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A1D070402 **Lab ID:** TALCAN

Analysis Method : 8260B **Analysis Date :** 04/15/2011

Preparation Type : 5030B **Preparation Date :** 04/15/2011

Method Blank Lab Sample ID : A1D150000156B **Preparation Batch :** 1105156

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	1.0	2.0	ug/L	J	Common Contaminant

Methylene chloride contamination found in the method blank did not qualify any samples.

Surrogate Recovery Outlier Report

Lab Report Batch: A1D070402 **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
FWGB12mw-012C-1713-GW	A1D070402025	8081A	1	AQ	Decachlorobiphenyl	38	50.0	150.0	10.0	All Target
FWGBKGmw-006C-1706-GW	A1D070402002	8081A	1	AQ	Decachlorobiphenyl	45	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	48	50.0	150.0	10.0	All Target
FWGBKGmw-008C-1707-GW	A1D070402008	8082	1	AQ	Decachlorobiphenyl	46	50.0	150.0	10.0	All Target
FWGRQLmw-008C-1734-GW	A1D070402030	8081A	1	AQ	Decachlorobiphenyl	34	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	35	50.0	150.0	10.0	All Target
FWGRQLmw-008C-1734-GWMS	A1D070402030S	8081A	1	AQ	Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
		8082	2		Decachlorobiphenyl	48	50.0	150.0	10.0	All Target
FWGRQLmw-008C-1734-GWMSD	A1D070402030D	8081A	1	AQ	Decachlorobiphenyl	28	50.0	150.0	10.0	All Target
		8082	2		Decachlorobiphenyl	45	50.0	150.0	10.0	All Target
FWGRQLmw-009C-1735-GW	A1D070402010	8082	1	AQ	Decachlorobiphenyl	44	50.0	150.0	10.0	All Target
FWGRQLmw-014C-1736-GW	A1D070402023	8082	1	AQ	Decachlorobiphenyl	45	50.0	150.0	10.0	All Target
FWGRQLmw-016C-1737-GW	A1D070402028	8081A	1	AQ	Decachlorobiphenyl	41	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	32	50.0	150.0	10.0	All Target
FWGRQLmw-DUP5-1750-GW	A1D070402012	8081A	1	AQ	Decachlorobiphenyl	42	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	40	50.0	150.0	10.0	All Target

Project Number and Name: ***030240.0006 - RVAAP (OH)***

Surrogate Recovery Outlier Report

Lab Report Batch: A1D070402 **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
FWGSCFmw-001-1741-GW	A1D070402018	8081A	1	AQ	Tetrachloro-m-xylene	292	50.0	150.0	10.0	All Target
			100		Tetrachloro-m-xylene	407	50.0	150.0	10.0	All Target
		8082	1		Decachlorobiphenyl	21	50.0	150.0	10.0	All Target

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 12, 2011
Sample Delivery Group: A1D080405 **Revision:** 0

Data Validator: Angye Dragotta /Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On April 7, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1D080405.

Field Sample ID	Analytes	Method
FWGBKGmw-018c-1710-GW	VOCs SVOCs Pesticides PCBs Cyanide	SW846 8260B SW846 8270C SW846 8081A SW846 8082 SW846 9012A
FWGBKGmw-005c-1705-GW		
FWGCBLmw-004c-1714-GW		
FWGLL2mw-267c-1722-GW		
FWGLL2mw-DUP3-1748-GW		
FWGLL2mw-266c-1721-GW		
FWGLL3mw-239c-1725-GW		
FWGLL2mw-269c-1723-GW		
FWGLL3mw-236c-1724-GW		
FWGASYmw-003c-1704-GW		
FWGEQUIPRinse4-1760-GW		
FWGEQUIPRinse4-1760-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGBKGmw-018c-1710-GF	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGBKGmw-005c-1705-GF		
FWGCBLmw-004c-1714-GF		
FWGLL2mw-267c-1722-GF		
FWGLL2mw-DUP3-1748-GF		
FWGLL2mw-266c-1721-GF		
FWGLL3mw-239c-1725-GF		
FWGLL2mw-269c-1723-GF		
FWGLL3mw-236c-1724-GF		
FWGASYmw-003c-1704-GF		
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 1.1°C – 2.9°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.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 12, 2011
Sample Delivery Group: A1D080405 **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/ MRL verification criteria
- Method/Field/Trip blank Criteria
- Surrogate recoveries
- Field duplicate RPD criteria
- Laboratory Control Sample criteria
- Matrix Spike Recovery Criteria and RPD

MRL Recovery

4/15/2011- See A1D070402 for documentation

- The opening MRL check recovered above control limits of 70-130% for chloromethane at 131%, chloroethane at 139% and methylene chloride at 201%.
- The closing MRL check recovered above control limits of 70-130% for methylene chloride at 234%.

The methylene chloride results for FWGLL2mw-DUP2-1748-GW and FWGTEAM3-Trip were qualified as estimated, "J". No additional qualifications were made as the bracketed samples were nondetect for the other MRL outliers.

4/19/2011

- The opening MRL check recovered above control limits of 70-130% for carbon disulfide at 137%, chloromethane at 153%, vinyl chloride at 131%, chloroethane at 134% and methylene chloride at 213%.
- The closing MRL check recovered above control limits of 70-130% for methylene chloride at 213%.

The methylene chloride result for FWGEQUIPRinse4-1760-GW, FWGLL2mw-269c-1723-GW and FWGTEAM1-Trip were qualified as estimated, "J". No additional qualifications were made as the bracketed samples were nondetect for the other MRL outliers.

Blanks

Methylene chloride was detected in the method blanks analyzed on April 15^{h} and 19th at 1.0ug/L and 0.86ug/L, respectively. The methylene chloride results for samples FWGEQUIPRinse4-1760-GW, FWGLL2mw-269c-1723-GW, FWGLL2mw-DUP3-1748-GW, FWGTEAM1-Trip and FWGTEAM3-Trip were qualified "B".

- FWGTEAM1-Trip had chloroform detected at 0.23ug/L and methylene chloride detected at 0.36ug/L.
- FWGTEAM3-Trip had chloroform detected at 0.25ug/L and methylene chloride detected at 0.39ug/L.
- FWGTEAM2-Trip had chloroform detected at 0.22ug/L.
- 2-butanone was detected in FWGEQUIPRinse4-1760-GW at 1.9ug/L, acetone at 4.2ug/L, chloroform at 0.79ug/L, methylene chloride at 2ug/L and toluene at 0.23ug/L.

The methylene chloride result for samples FWGLL2mw-269c-1723-GW and FWGLL2mw-DUP3-1748-GW were qualified, "B". The chloroform result for sample FWGLL3mw-239c-1725-GW and FWGEQUIPRinse4-1760-GW were qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.

LCS Recovery

- The LCS analyzed on 4/15/11 recovered above limits at 130% for carbon disulfide and methylene chloride. The methylene chloride results for FWGLL2mw-DUP2-1748-GW and FWGTEAM3-Trip were qualified as estimated, "J".
- The LCS analyzed on 4/19/11 recovered above limits at 130% for carbon disulfide and at 121% for methylene chloride. The methylene chloride result for FWGEQUIPRinse4-1760-GW, FWGLL2mw-269c-1723-GW and FWGTEAM1-Trip were qualified as estimated, "J".

Matrix Spike Recovery Criteria

- The matrix spike and duplicate analyzed on sample FWGLL2mw-269c-1723-GW recovered above control limits for carbon disulfide at 132% and 135%, respectively.
- The matrix spike and duplicate analyzed on sample FWGBKGmw-018c-1710-GW recovered above control limits for carbon disulfide at 138% and 134%, respectively.

No qualification was made for the carbon disulfide outliers as there were no detected carbon disulfide results reported for the parent samples.

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 12, 2011
Sample Delivery Group: A1D080405 **Revision:** 0

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

Sample FWGLL2mw-269c-1723-GW was initially extracted within hold. Upon analysis it was determined the sample was not spiked with surrogate. The sample was re extracted and reanalyzed outside of hold but within two times hold. The results for sample FWGLL2mw-269c-1723-GW were qualified as estimated, "UJ".

MRL Recovery

The closing MRL analyzed 4/20/11 @ 1603 recovered below control limits for 4,6-dinitro-2-methylphenol at 61%, pentachlorophenol at 55%, 2,4-dinitrophenol at 43% and 4-nitrophenol at 51%. An MDL check was analyzed following the closing MRL with detected results for all targets except 2,4-dinitrophenol. The 4,6-dinitro-2-methylphenol, pentachlorophenol and 4-nitrophenol results for all samples with the exception of FWGLL2mw-269c-1723-GW were qualified as estimated, "UJ". The bracketed 2,4-dinitrophenol samples were reanalyzed with acceptable MRL recoveries on 4/28/11.

Blanks

bis(2-ethylhexyl) phthalate was detected in the equipment rinse at 3.0ug/L. The bis(2-ethylhexyl) phthalate results for samples FWGASYmw-003c-1704-GW, FWGLL2mw-267c-1722-GW, FWGLL2mw-DUP3-1748-GW and FWGLL3mw-236c-1724-GW were qualified, "B" as the detected concentrations were less than 5x contamination

LCS Recovery

The LCS analyzed 4/27/11 associated with the reextracted sample FWGLL2mw-269c-1723-GW recovered below control limits for 4-chlorophenylphenyl ether at 39%. The 4-chlorophenylphenyl ether result for sample FWGLL2mw-269c-1723-GW was qualified as estimated, "UJ".

Matrix Spike Analysis

- For the matrix spike analysis performed on sample FWGBKGmw-018c-1710-GW, the matrix spike and spike duplicate were below control limits for 3,3'-dichlorobenzidine at 27% and 28% and below limits for hexachlorocyclopentadiene at 41% in both the MS and MSD. No qualifications were made for the matrix spike outliers since there were no additional QC outliers associated with the sample FWGBKGmw-018c-1710-GW.
- For the matrix spike analysis performed on sample FWGLL2mw-269c-1723-GW, the matrix spike and spike duplicate were below control limits for 4-chloroanailine at 11% and 10%,4-chlorophenylphenyl ether at 33% and 36%, and phenol at 38%. The 4-chloroanailine,4-chlorophenylphenyl ether and phenol results were qualified as estimated, "UJ"

Surrogate Recovery

- For sample FWGASYmw-003c-1704-GW, all surrogates recovered below control limits of 50% but above 10%. The results for FWGASYmw-003c-1704-GW were qualified as estimated, "J/UJ".
- Terphenyl-d14 recovered below control limits at 46% for sample FWGLL3mw-239c-1725. For sample FWGLL2mw-266c-1721-GW, 2,4,6-tribromophenol recovered below control limits at 49% and terphenyl-d14 recovered below control limits at 47%. No qualifiers were applied, as LCG allows for one surrogate per fraction to be outside control limits without qualification.
- All acid surrogates recovered below control limits of 50% for samples FWGLL2mw-269c-1723-GW and FWGLL3mw-236c-1724-GW but above 10%. The associated acid targets were qualified as estimated, "UJ."

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 12, 2011
Sample Delivery Group: A1D080405 **Revision:** 0

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
- Method/Field blank Criteria
- LCS Recoveries
- Field Duplicate Criteria
- MDL/MRL verification criteria
- Matrix Spike Recovery Criteria and RPD
- Surrogate Recoveries
- Second Column confirmation criteria

Surrogate Recovery
With the exception of sample FWGEQUIPRinse4-1760-GW, the surrogate, DCB, recovered below control limits of 50%, but above 10% in the field samples from this SDG. All sample results, with the exception of sample FWGEQUIPRinse4-1760-GW, were qualified as estimated, "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
- Method/Field blank Criteria
- 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 Recovery
With the exception of sample FWGEQUIPRinse4-1760-GW, DCB, recovered below control limits of 50%, but above 10% in the field samples from this SDG. All sample results, with the exception of sample FWGEQUIPRinse4-1760-GW, were qualified as estimated, "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 criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

Matrix spike Recovery
Manganese recovered below control limits at 74%. All manganese results were qualified as estimated, "UJ/J".

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 12, 2011
Sample Delivery Group: A1D080405 **Revision:** 0

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 criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

Blanks

- The ICB analyzed 4/11/11 had sodium detected at 34.5ug/L and thallium detected at 0.2ug/L. There were The ICB analyzed 4/13/11 had thallium detected at 0.16ug/L. The thallium result for sample FWGBKGmw-018c-1710-GFwas qualified "U" as the detected concentration was <5x the thallium contamination.
- The CCBs analyzed 4/13/11 had detected thallium from 0.17ug/L to 0.23ug/L. No additional qualifications were made for thallium other than those made for the ICB 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
Zinc recovered above control limits at 135% in the LCS. The zinc results for samples FWGBKGmw-018c-1710-GF, FWGCBLmw-004c-1714-GF, FWGLL2mw-DUP3-1748-GF, FWGLL2mw-266c-1721-GF, FWGLL2mw-269c-1723-GF and FWGLL3mw-236c-1724-GF were qualified as estimated, "J".

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 criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS percent recovery criteria
- MS percent recovery
- Matrix Duplicate RPD criteria
- Field duplicate RPD criteria

No QC outliers 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
- ICB /CCBs criteria
- Method/Field blank Criteria
- MRL and MDL verification criteria
- LCS/LCSD percent recoveries and RPD value criteria
- Field Duplicate RPD criteria
- Matrix spike recovery criteria and RPD

Sample FWGASYmw-003c-1704-GW was analyzed on 4/18/11 with a ND result. The curve used in the analysis on 4/18/11 had a negative response for the low standard. Sample was reanalyzed with a new curve with the same result. Both results were provided by the lab. The reanalysis had elevated reporting limits due to limited sample volume on the reanalysis.

SAMPLE SUMMARY

A1D080405

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MGP1C	001	FWGTEAM1-TRIP	04/07/11	08:00
MGP1D	002	FWGBKGmw-018C-1710-GW	04/07/11	09:01
MGP1F	003	FWGBKGmw-018C-1710-GF	04/07/11	09:01
MGP1H	004	FWGBKGmw-005C-1705-GW	04/07/11	11:31
MGP1K	005	FWGBKGmw-005C-1705-GF	04/07/11	11:31
MGP1L	006	FWGCBLmw-004C-1714-GW	04/07/11	13:21
MGP1M	007	FWGCBLmw-004C-1714-GF	04/07/11	13:21
MGP1N	008	FWGTEAM2-TRIP	04/07/11	08:00
MGP1P	009	FWGLL2mw-267C-1722-GW	04/07/11	08:52
MGP1Q	010	FWGLL2mw-267C-1722-GF	04/07/11	08:52
MGP1R	011	FWGLL2mw-DUP3-1748-GW	04/07/11	10:10
MGP1T	012	FWGLL2mw-DUP3-1748-GF	04/07/11	10:10
MGP1V	013	FWGLL2mw-266C-1721-GW	04/07/11	11:04
MGP1W	014	FWGLL2mw-266C-1721-GF	04/07/11	11:04
MGP1X	015	FWGLL3mw-239C-1725-GW	04/07/11	12:32
MGP10	016	FWGLL3mw-239C-1725-GF	04/07/11	12:32
MGP11	017	FWGTEAM3-TRIP	04/07/11	08:00
MGP13	018	FWGLL2mw-269C-1723-GW	04/07/11	08:59
MGP15	019	FWGLL2mw-269C-1723-GF	04/07/11	08:59
MGP16	020	FWGLL3mw-236C-1724-GW	04/07/11	11:59
MGP17	021	FWGLL3mw-236C-1724-GF	04/07/11	11:59
MGP18	022	FWGASYmw-003C-1704-GW	04/07/11	13:33
MGP19	023	FWGASYmw-003C-1704-GF	04/07/11	13:33
MGP2A	024	FWGEQUIPRINSE4-1760-GW	04/07/11	14:33

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

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/7/11	Chain of Custody Number: 000495
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513-825-7500	Lab Number:	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 (OH)	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 030240.0006 16726			

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 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellant	Cyanide 9012	Metals 6010/6020/7470	Special Instructions/ Conditions of Receipt
FWGTeam1-Trip	4/7/11	08:00		X						2			X								Cooler ID
FWGBKGmw-018C-1710-GW	4/7/11	09:01		X			2			9	3		X	X	X	X	X	X	X		AS01
FWGBKGmw-018C-1710-GF	4/7/11	09:01		X					3											X	MS/MSD AS01, 123, E-21
FWGBKGmw-005C-1705-GW	4/7/11	11:31		X			9			3	1		X	X	X	X	X	X	X		MS/MSD AS01, 123, E-21
FWGBKGmw-005C-1705-GF	4/7/11	11:31		X					1											X	114
FWGCBLmw-004C-1714-GW	4/7/11	13:21		X			9			3	1		X	X	X	X	X	X	X		114
FWGCBLmw-004C-1714-GF	4/7/11	13:21		X					1											X	BRUFF4
																					BRUFF4

EC 4/7/11

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 [ ] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metals are field filtered

1. Relinquished By: J. Steiger	Date: 4-7-11	Time: 1700	1. Received By: TC Tobin	Date: 4/7/11	Time: 1700
2. Relinquished By: TC Tobin	Date: 4/7/11	Time: 1822	2. Received By: JL Kegle	Date: 4/8/11	Time: 0700
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

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

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4-7-11	Chain of Custody Number: 000476
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 825 7500 (513) FAX 7495	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 Ravenna, Oh	Carrier/Waybill Number: LAB Pickup	
Contract/Purchase Order/Quote No.: PM302240.0006 PO# 16726		

Analysis (Attach list if more space is needed)

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 8260	SVOC 8270	Pest	PCB	EPA 8330	Perchlorate	Cyanide	Metals	Special Instructions/ Conditions of Receipt: Cooler ID #
FWGTeam2 -Trip	4-7-11	0800		/						2			X								54
FWGLL2mw-266C-1722-GW		0852		/			9			3	1		X	X	X	X	X	X	X		E-120
FWGLL2mw-266C-1722-GF				/																X	E-120
FWGLL2mw-DUP3-1748-GW		1018		/			9			3	1		X	X	X	X	X	X	X		12
FWGLL2mw-DUP3-1748-GF				/																X	12
FWGLL2mw-266C-1721-GW		1104		/			9			3	1		X	X	X	X	X	X	X		M23
FWGLL2mw-266C-1721-GF		1104		/																X	M23
FWGLL3mw-239C-1725-GW		1232		/			9			3	1		X	X	X	X	X	X	X		54
FWGLL3mw-239C-1725-GF				/																X	54

ADD 4/7/11

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 _____

QC Requirements (Specify): all metals field filtered (GF). ALL VOAs in 54

	Date	Time
1. Relinquished By	4/7/11	1700
2. Relinquished By	4/7/11	1822
3. Relinquished By		

	Date	Time
1. Received By	4/7/11	1709
2. Received By	4/8/11	0700
3. Received By		

Comments: temps may not meet requirements if sample collection is close to lab pickup time.

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

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/7/11	Chain of Custody Number: 000468
Address: 1800 Carillon	Telephone Number (Area Code)/Fax Number: 513 825 7500	Lab Number: 330 4979396	Page 1 of
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E. Corbin; Lab Contact: M. Loeb		
Project Name and Location (State): RVAAP (OH)	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 30240.0006			

Analysis (Attach list if more space is needed)

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 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9010	Metals 6010 6020 7470	Special Instructions/ Conditions of Receipt: Cooler ID
FWG Team 3 - Trip	4-7-11	0800		X									X								173
FWGLL2mw-269C-1723-GW	↓	0859		X			27			9	3		X	X	X	X	X	X	X		173, EC1, ID27
FWGLL2mw-269C-1723-GF	↓	↓		X					3											X	173, EC1, ID27
FWGLL3mw-236C-1724-GW	↓	1159		X			9			3	1		X	X	X	X	X	X	X		PH12
FWGLL3mw-236C-1724-GF	↓	↓		X					1											X	PH12
FWGASYmw-003C-1704-GW	↓	1333		X			9			3	1		X	X	X	X	X	X	X		613
FWGASYmw-003C-1704-GF	↓	↓		X					1											X	613
FWGEQUIPRinse4-~~GW~~ 1760-GW HD 4/7/11	4/7/11			X			9		1	3	1		X	X	X	X	X	X	X	X	881

4/7/11 4/7/11

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 [X] Other SOW

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	4/7/11	1700	1. Received By: [signature]	4/7/11	1700
2. Relinquished By: [signature]	4/7/11	1822	2. Received By: [signature]	4/8/11	0700
3. Relinquished By:			3. Received By:		

Comments: Metals (GF) were field filtered
Temps may not meet requirements if sample collection time is close to lab pick up time.

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Lot Number: ALD080405

Client EQM Project RVAAP By: (Signature)
Cooler Received on 4/8/11 Opened on 4/8/11
FedEx [X] UPS [ ] DHL [ ] FAS [ ] Stetson [ ] Client Drop Off [ ] TestAmerica Courier [ ] Other
TestAmerica Cooler # Multiple Coolers [X] Foam Box [ ] Client Cooler [ ] Other

1. Were custody seals on the outside of the cooler(s)? Yes [X] No [ ] Intact? Yes [X] No [ ] NA [ ]
   If YES, Quantity 15 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes [X] No [ ] NA [ ]
   Were custody seals on the bottle(s)? Yes [ ] No [X]
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes [ ] No [X]
3. Did custody papers accompany the sample(s)? Yes [X] No [ ] Relinquished by client? Yes [X] No [ ]
4. Were the custody papers signed in the appropriate place? Yes [X] No [ ]
5. Packing material used: Bubble Wrap [X] Foam [ ] None [ ] Other
6. Cooler temperature upon receipt °C See back of form for multiple coolers/temps [X]
   METHOD: IR [X] Other [ ]
   COOLANT: Wet Ice [X] Blue Ice [ ] Dry Ice [ ] Water [ ] None [ ]
7. Did all bottles arrive in good condition (Unbroken)? Yes [X] No [ ]
8. Could all bottle labels be reconciled with the COC? Yes [X] No [ ]
9. Were sample(s) at the correct pH upon receipt? Yes [X] No [ ] NA [ ]
10. Were correct bottle(s) used for the test(s) indicated? Yes [X] No [ ]
11. Were air bubbles >6 mm in any VOA vials? Yes [ ] No [X] NA [ ]
12. Sufficient quantity received to perform indicated analyses? Yes [X] No [ ]
13. Was a trip blank present in the cooler(s)? Yes [X] No [ ] Were VOAs on the COC? Yes [X] No [ ]

Contacted PM Date by via Verbal [ ] Voice Mail [ ] Other [ ]
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:
No collection times on COC for FWGEquipRinse4-1760-GW. Will log 1433 per time on bottle labels.

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# 100110-HNO_3; Sulfuric Acid Lot# 110410-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
1710	<2 <2 <2 <2 >12 >12 >12 >12	4/8/11	[illegible]
1705	<2 >12		
1714	<2 >12		
1722	<2 >12		
1748	<2 >12		
1721	<2 >12		
1725	<2 >12		
1723	<2 <2 <2 <2 >12 >12 >12 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1724	<2 >12	4/8/11	[illegible]
1704	<2 >12	"	"
1760	<2 >12	"	"

Cooler #	Temp. °C	Cooler	Temp	Method	Coolant
ASD1	1.7	PH12	1.3	IR	Ice
123	1.8	613	1.1		
E-21	2.6	B81	1.8		
114	2.9				
BRVFF4	1.1				
54	2.1				
E-120	2.1				
12	1.2				
M23	1.7				
173	1.2				
EC1	2.0				
ID27	2.2			"	"

Discrepancies Cont'd:

ANALYTICAL METHODS SUMMARY

A1D080405

PARAMETER	ANALYTICAL METHOD
Cyanide, Total	SW846 9012A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
ICP-MS (6020)	SW846 6020
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Organochlorine Pesticides	SW846 8081A
PCBs by SW-846 8082	SW846 8082
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B
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.

CASE NARRATIVE

A1D080405

The following report contains the analytical results for twenty-one 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 April 08, 2011, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods and Louisville Corps Guidelines version 5, where applicable, in all analytical reports. 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 May 02, 2011. 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. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

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 1.1 to 2.9° 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.

The matrix spike/matrix spike duplicate(s) for FWGBKGmw-018C-1710-GW and FWGLL2mw-269C-1723-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 matrix spike/matrix spike duplicate(s) for batch(es) 1105156 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 1109091 was recovered high and outside of criteria for Methylene Chloride and Carbon Disulfide. Since the analyte was not detected in any of the samples above reporting limits, the results were accepted. Slight positive bias is not believed to have impacted data quality.

GC/MS SEMIVOLATILES

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.

CASE NARRATIVE (continued)

GC/MS SEMIVOLATILES (cont)

The matrix spike/matrix spike duplicate(s) for FWGBKGmw-018C-1710-GW and FWGLL2mw-269C-1723-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.

3-Methylphenol (m-Cresol) and 4-Methylphenol (p-Cresol) co-elute and cannot be reported as separate analytes. When these analytes are requested, the reported result represents a probable combination of the two analytes.

For sample(s) FWGLL2mw-266C-1721-GW (2AC), FWGLL3mw-239C-1725-GW(2AC), FWGLL2mw-269C-1723-GW, FWGLL2mw-269C-1723-GWMS, FWGLL2mw-269C-1723-GWMSD, FWGLL3mw-236C-1724-GW (2AC), FWGASYmw-003C-1704-GW (2AC),FWGEQUIPRINSE4-1760-GW (2AC) and the Blank associated with batch 1111325 the recovery for surrogate compound(s) are outside acceptance criteria. Since LCG criterion is that all surrogates be above 10%, no corrective action is required.

The LCS for batch 1111325 had a Benzoic Acid recovery of 27.83%.

Sample FWGLL2mw-269C-1723-GW was not surrogated. Upon re-extraction and re-analysis all QC met acceptance criteria, however sample holding times had been exceeded. Per client request only the re-extract run will be reported.

PESTICIDES-8081

For sample(s) FWGBKGmw-018C-1710-GW, FWGBKGmw-005C-1705-GW, FWGCBLmw-004C-1714-GW, FWGLL2mw-267C-1722-GW, FWGLL2mw-DUP3-1748-GW, FWGLL2mw-266C-1721-GW, FWGLL3mw-239C-1725-GW, FWGLL2mw-269C-1723-GW, FWGLL3mw-236C-1724-GW, and FWGASYmw-003C-1704-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%)

Endosulfan I for LCS associated with batch 1101049 was reported from the confirmation column.

CASE NARRATIVE (continued)

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGBKGmw-018C-1710-GW, FWGBKGmw-005C-1705-GW, FWGCBLmw-004C-1714-GW, FWGLL2mw-267C-1722-GW, FWGLL2mw-DUP3-1748-GW, FWGLL2mw-266C-1721-GW, FWGLL3mw-239C-1725-GW, FWGLL2mw-269C-1723-GW, FWGLL3mw-236C-1724-GW, and FWGASYmw-003C-1704-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%)

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-269C-1723-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 1101020 was recovered high and outside of criteria for Zinc. Since the analyte was not detected in any of the samples the result(s) was/were accepted. Slight positive bias is not believed to have impacted data quality.

GENERAL CHEMISTRY

The reporting limit is elevated due to limited sample volume. Refer to the sample report pages for the affected analytes flagged with "V".

The calibration curve for the Cyanide sample FWGASYmw-003C-1704-GW met laboratory QC criteria. However; during the second level review process it was noted that the response for the 0.005 calibration point yielded a negative concentration. Although the initial curve meets linearity criteria, the laboratory reanalyzed all samples for verification. Sample FWGASYmw-003C-1704-GW was used for Batch MS and MSD in the initial run. Since this was not a client specified MS/MSD, there was limited volume remaining and the verification analysis was performed at a dilution. Both sets of data are reported.

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.

The method blank associated with Cyanide sample FWGASYmw-003C-1704-GW was greater than 1/2 the MRL. Since there is no more sample and all the samples are ND, data is reported.

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, a Matrix Spike/Matrix Spike Duplicate (MS/MSD) pair or a Matrix Spike/Sample Duplicate (MS/DU) pair.
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. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch, with the exception of poor performing analytes. A list of these analytes is listed below. No corrective action is taken if these analytes do not meet criteria.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.

Poor performers

Method 8270 Water and Solid:	
4-Nitrophenol	3,3' – Dichlorobenzidine
Benzoic Acid	2,4,6 - Tribromophenol
Phenol	2,4-Dinitrophenol
Phenol-d5	Pentachlorophenol
4,6-Dinitro-2-methylphenol	Hexachlorocyclopentadiene (LCG only)
Benzyl Alcohol	4-Chloroaniline
Method 8151 Solid	
Dinoseb	
Method 8260 Water and Solid	
Dichlorodifluoromethane	Hexachlorobutadiene
Trichlorofluoromethane	Naphthalene
Chloroethane	1,2,3-Trichlorobenzene
Acetone	1,2,4-Trichlorobenzene
Bromomethane	2,2-Dichloropropane
Bromoform	Chloromethane

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 ten 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 do 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 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 or Matrix Spike/Sample Duplicate.

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, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, 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), DoD ELAP (ADE-1437) USDA Soil Permit (P33-08-00123)

MANUAL INTEGRATION SUMMARY

Lot A1D080405

Client ID: FWGLL2mw-269C-1723-
Compound Name: Decachlorobiphenyl
Instrument ID: a2hp9.i
File Name: P9418043.D
Inj. Date and Time: 18-APR-2011 17:49
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: Benzoic Acid
Instrument ID: a4hp10.i
File Name: MHCRM1AC.D
Inj. Date and Time: 27-APR-2011 10:21

Client ID: FWGLL2mw-269C-1723-
Compound Name: 4-Nitrophenol
Instrument ID: a4hp10.i
File Name: MGP131AT.D
Inj. Date and Time: 27-APR-2011 10:59
Manual Integration Reason: Peak not found

Client ID: FWGLL2mw-269C-1723-
Compound Name: Benzoic Acid
Instrument ID: a4hp10.i
File Name: MGP131AU.D
Inj. Date and Time: 27-APR-2011 11:18
Manual Integration Reason: Peak not found

Client ID: FWGLL2mw-269C-1723-
Compound Name: 4-Nitrophenol
Instrument ID: a4hp10.i
File Name: MGP131AU.D
Inj. Date and Time: 27-APR-2011 11:18
Manual Integration Reason: Peak not found

Client ID: FWGBKGmw-018C-1710-
Compound Name: Acetophenone
Instrument ID: a4hp10.i
File Name: MGP1D1AF.D
Inj. Date and Time: 20-APR-2011 12:19
Manual Integration Reason: Peak not found

Client ID: FWGBKGmw-018C-1710-
Compound Name: Acetophenone
Instrument ID: a4hp10.i
File Name: MGP1D1AG.D
Inj. Date and Time: 20-APR-2011 12:38
Manual Integration Reason: Peak not found

MANUAL INTEGRATION SUMMARY

Client ID: FWGLL2mw-266C-1721- Lot A1D080405 (Continued)
Compound Name: 2,4,6-Tribromophenol
Instrument ID: a4hp10.i
File Name: MGP1V2AC.D
Inj. Date and Time: 18-APR-2011 16:49
Manual Integration Reason: Poor Chromatography

Client ID: FWGEQUIPRINSE4-1760
Compound Name: 2,4,6-Tribromophenol
Instrument ID: a4hp10.i
File Name: MGP2A2AC.D
Inj. Date and Time: 18-APR-2011 16:12
Manual Integration Reason: Poor Chromatography

Client ID: FWGBKGmw-005C-1705-
Compound Name: Diallate
Instrument ID: a2hp9.i
File Name: P9418036.D
Inj. Date and Time: 18-APR-2011 15:06
Manual Integration Reason: Baseline Event

Client ID: FWGBKGmw-005C-1705-
Compound Name: alpha-BHC
Instrument ID: a2hp9.i
File Name: P9418036.D
Inj. Date and Time: 18-APR-2011 15:06
Manual Integration Reason: Baseline Event

Client ID: FWGBKGmw-005C-1705-
Compound Name: delta-BHC
Instrument ID: a2hp9.i
File Name: P9418036.D
Inj. Date and Time: 18-APR-2011 15:06
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: Acetophenone
Instrument ID: a4hp10.i
File Name: MGTVT1AC.D
Inj. Date and Time: 20-APR-2011 10:27
Manual Integration Reason: Peak not found

Client ID: INTRA-LAB CHECK
Compound Name: Benzoic Acid
Instrument ID: a4hp10.i
File Name: MGTVT1AC.D
Inj. Date and Time: 20-APR-2011 10:27
Manual Integration Reason: Poor Chromatography

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 11, 2011

SDG: A1D080405 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 1.1 and 2.9 °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–March 8, 2011 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 and bromoform used a weighted linear curve.	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?	✓			4/14/11 @ 2017	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

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 11, 2011

SDG: A1D080405 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Were the QC/MRL recoveries 70-130%?		✓		4/15/2011- See A1D070402 for documentation • The opening MRL check recovered above control limits of 70-130% for chloromethane at 131%, chloroethane at 139% and methylene chloride at 201%. • The closing MRL check recovered above control limits of 70-130% for methylene chloride at 234%. The methylene chloride results for FWGLL2mw-DUP2-1748-GW and FWGTEAM3-Trip were qualified as estimated, "J". No additional qualifications were made as the bracketed samples were nondetect for the other MRL outliers. 4/19/2011 • The opening MRL check recovered above control limits of 70-130% for carbon disulfide at 137%, chloromethane at 153%, vinyl chloride at 131%, chloroethane at 134% and methylene chloride at 213%. • The closing MRL check recovered above control limits of 70-130% for methylene chloride at 213%. The methylene chloride result for FWGEQUIPRinse4-1760-GW, FWGLL2mw-269c-1723-GW and FWGTEAM1-Trip were qualified as estimated, "J". No additional qualifications were made as the bracketed samples were nondetect for the other MRL outliers.	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed? Were results 80-120%?	✓			3/8/2011 @1059	LCG Table 1, <60%=J/R >120%=J; 60-80%=J/UJ
18. Was a CCV run every 12 hours?	✓			4/15/11 @1038, 4/19/11 @ 0948	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%?	✓			4/15/11-Carbon disulfide had a %D above control limits at 26%, 4-methyl-2-pentanone at 24% and 2-hexanone at 23%. No qualifications were made as the avg %D was <20%. See A1D070402 for documentation 4/19/11-2-hexanone had a %D above control limits at 21.9%. No qualifications were made as the avg %D was <20%.	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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 11, 2011

SDG: A1D080405 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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 blanks analyzed on April 15^{h} and 19th at 1.0ug/L and 0.86ug/L, respectively. The methylene chloride results for samples FWGEQUIPRinse4-1760-GW, FWGLL2mw-269c-1723-GW, FWGLL2mw-DUP3-1748-GW, FWGTEAM1-Trip and FWGTEAM3-Trip were qualified "B".	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse4-1760-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGTEAM1-Trip had chloroform detected at 0.23ug/L and methylene chloride detected at 0.36ug/L. • FWGTEAM3-Trip had chloroform detected at 0.25ug/L and methylene chloride detected at 0.39ug/L. • FWGTEAM2-Trip had chloroform detected at 0.22ug/L. • 2-butanone was detected in FWGEQUIPRinse4-1760-GW at 1.9ug/L, acetone at 4.2ug/L, chloroform at 0.79ug/L, methylene chloride at 2ug/L and toluene at 0.23ug/L. The methylene chloride result for samples FWGLL2mw-269c-1723-GW and FWGLL2mw-DUP3-1748-GW were qualified, "B". The chloroform result for sample FWGLL3mw-239c-1725-GW and FWGEQUIPRinse4-1760-GW were qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.	<5/10X =B
29. Was a field duplicate analyzed?	✓				
30. Were the field duplicates RPDs within ±30%?	✓				QAPP Table 3-2 RPD >30=J
31. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 11, 2011

SDG: A1D080405 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?		✓		ADR checked section; The LCS analyzed on 4/15/11 recovered above limits at 130% for carbon disulfide and methylene chloride. The methylene chloride results for FWGLL2mw-DUP2-1748-GW and FWGTEAM3-Trip were qualified as estimated, "J". The LCS analyzed on 4/19/11 recovered above limits at 130% for carbon disulfide and at 121% for methylene chloride. The methylene chloride result for FWGEQUIPRinse4-1760-GW, FWGLL2mw-269c-1723-GW and FWGTEAM1-Trip were 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?	✓				
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?		✓		The matrix spike and duplicate analyzed on sample FWGLL2mw-269c-1723-GW recovered above control limits for carbon disulfide at 132% and 135%, respectively. The matrix spike and duplicate analyzed on sample FWGBKGmw-018c-1710-GW recovered above control limits for carbon disulfide at 138% and 134%, respectively. No qualification was made for the carbon disulfide outliers as there were no detected carbon disulfide results reported for the parent samples.	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

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 11, 2011

SDG: A1D080405 R0
Analysis: SW846 8260B

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 #...: A1D080405-001 **Work Order #...:** MGP1C1AA **Matrix.....:** WQ
Date Sampled...: 04/07/11 08:00 **Date Received..:** 04/08/11
Prep Date.....: 04/19/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1109091
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	**0.36 J,B**	**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	**0.23 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	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 #...: A1D080405-001 **Work Order #...:** MGP1C1AA **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	80	(50 - 150)
1,2-Dichloroethane-d4	78	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	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: FWGBKGmw-018C-1710-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-002 **Work Order #...:** MGP1D1AA **Matrix.....:** WG
Date Sampled...: 04/07/11 09:01 **Date Received..:** 04/08/11
Prep Date.....: 04/19/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1109091
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: FWGBKGmw-018C-1710-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-002 Work Order #...: MGP1D1AA 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	80	(50 - 150)
1,2-Dichloroethane-d4	78	(50 - 150)
Toluene-d8	76	(50 - 150)
4-Bromofluorobenzene	75	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-005C-1705-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-004 **Work Order #...:** MGP1H1AA **Matrix.....:** WG
Date Sampled...: 04/07/11 11:31 **Date Received..:** 04/08/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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: FWGBKGmw-005C-1705-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-004 **Work Order #...:** MGP1H1AA **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	78	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBLmw-004C-1714-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-006 **Work Order #...:** MGP1L1AA **Matrix.....:** WG
Date Sampled...: 04/07/11 13:21 **Date Received..:** 04/08/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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: FWGCBLmw-004C-1714-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-006 **Work Order #...:** MGP1L1AA **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	89	(50 - 150)
1,2-Dichloroethane-d4	88	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	78	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1D080405-008 **Work Order #...:** MGP1N1AA **Matrix.....:** WQ
Date Sampled...: 04/07/11 08:00 **Date Received..:** 04/08/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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	**0.22 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	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 #...: A1D080405-008 **Work Order #...:** MGP1N1AA **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	86	(50 - 150)
1,2-Dichloroethane-d4	85	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	75	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-009 **Work Order #...:** MGP1P1AA **Matrix.....:** WG
Date Sampled...: 04/07/11 08:52 **Date Received..:** 04/08/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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-1722-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-009 **Work Order #...:** MGP1P1AA **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	90	(50 - 150)
1,2-Dichloroethane-d4	87	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	80	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1748-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-011 **Work Order #...:** MGP1R1AA **Matrix.....:** WG
Date Sampled...: 04/07/11 10:10 **Date Received..:** 04/08/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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	**0.42 J,B**	**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-DUP3-1748-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-011 **Work Order #...:** MGP1R1AA **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	88	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	81	(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-266C-1721-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-013 **Work Order #...:** MGP1V1AA **Matrix.....:** WG
Date Sampled...: 04/07/11 11:04 **Date Received..:** 04/08/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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-266C-1721-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-013 **Work Order #...:** MGP1V1AA **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	88	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1725-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-015	**Work Order #...:** MGP1X1AA	**Matrix.....:** WG	
Date Sampled...: 04/07/11 12:32	**Date Received..:** 04/08/11		
Prep Date.....: 04/15/11	**Analysis Date..:** 04/15/11		
Prep Batch #...: 1105156			
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	**0.43 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	**0.33 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-1725-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-015 **Work Order #...:** MGP1X1AA **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	90	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	76	(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 #...: A1D080405-017 **Work Order #...:** MGP111AA **Matrix.....:** WQ
Date Sampled...: 04/07/11 08:00 **Date Received..:** 04/08/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1105156
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	**0.39 J,B**	**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	**0.25 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	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-1723-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-018 **Work Order #...:** MGP131AA **Matrix.....:** WG
Date Sampled...: 04/07/11 08:59 **Date Received..:** 04/08/11
Prep Date.....: 04/19/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1109091
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	**0.41 J,B**	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-1723-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-018 Work Order #...: MGP131AA 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	77	(50 - 150)
1,2-Dichloroethane-d4	74	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	81	(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: FWGLL3mw-236C-1724-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-020 **Work Order #...:** MGP161AA **Matrix.....:** WG
Date Sampled...: 04/07/11 11:59 **Date Received..:** 04/08/11
Prep Date.....: 04/19/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1109091
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-1724-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-020 **Work Order #...:** MGP161AA **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	76	(50 - 150)
1,2-Dichloroethane-d4	76	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1704-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-022 **Work Order #...:** MGP181AA **Matrix.....:** WG
Date Sampled...: 04/07/11 13:33 **Date Received..:** 04/08/11
Prep Date.....: 04/19/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1109091
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: FWGASYmw-003C-1704-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-022 **Work Order #...:** MGP181AA **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	78	(50 - 150)
1,2-Dichloroethane-d4	78	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-024	**Work Order #...:** MGP2A1AA	**Matrix.....:** WQ	
Date Sampled...: 04/07/11 14:33	**Date Received..:** 04/08/11		
Prep Date.....: 04/19/11	**Analysis Date..:** 04/19/11		
Prep Batch #...: 1109091			
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	**4.2 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	**0.79 J**	**1.0**	**ug/L**	**0.16**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**1.9 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	**0.23 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: FWGEQUIPRINSE4-1760-GW

GC/MS Volatiles

Lot-Sample #...: A1D080405-024 **Work Order #...:** MGP2A1AA **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	79	(50 - 150)
1,2-Dichloroethane-d4	77	(50 - 150)
Toluene-d8	77	(50 - 150)
4-Bromofluorobenzene	81	(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.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 **Work Order #...:** MG3AC1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D150000-156

Prep Date.....: 04/15/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/15/11 **Prep Batch #...:** 1105156
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	**1.0 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 #...: A1D080405 **Work Order #...:** MG3AC1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	86	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	79	(50 - 150)
4-Bromofluorobenzene	81	(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 #...: A1D080405 **Work Order #...:** MG6XC1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D190000-091

Prep Date.....: 04/19/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/19/11 **Prep Batch #...:** 1109091
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	**0.86 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 #...: A1D080405 **Work Order #...:** MG6XC1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	77	(50 - 150)
1,2-Dichloroethane-d4	76	(50 - 150)
Toluene-d8	78	(50 - 150)
4-Bromofluorobenzene	78	(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 #...: A1D080405 Work Order #...: MG3AC1AC Matrix.....: WATER
LCS Lot-Sample#: A1D150000-156
Prep Date.....: 04/15/11 Analysis Date..: 04/15/11
Prep Batch #...: 1105156
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
m-Xylene & p-Xylene	103	(75 - 122)	SW846 8260B
o-Xylene	105	(75 - 118)	SW846 8260B
cis-1,2-Dichloroethene	102	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	107	(75 - 134)	SW846 8260B
1,2-Dibromoethane	105	(75 - 127)	SW846 8260B
Bromochloromethane	103	(75 - 127)	SW846 8260B
Chloromethane	99	(58 - 135)	SW846 8260B
Bromomethane	102	(35 - 153)	SW846 8260B
Vinyl chloride	95	(73 - 134)	SW846 8260B
Chloroethane	107	(72 - 129)	SW846 8260B
Methylene chloride	130 a	(69 - 118)	SW846 8260B
Acetone	99	(51 - 157)	SW846 8260B
Carbon disulfide	130 a	(74 - 123)	SW846 8260B
1,1-Dichloroethene	116	(75 - 125)	SW846 8260B
1,1-Dichloroethane	105	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	105	(85 - 111)	SW846 8260B
Chloroform	104	(74 - 127)	SW846 8260B
1,2-Dichloroethane	106	(67 - 132)	SW846 8260B
2-Butanone	108	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	104	(70 - 127)	SW846 8260B
Carbon tetrachloride	106	(71 - 132)	SW846 8260B
Bromodichloromethane	108	(70 - 130)	SW846 8260B
1,2-Dichloropropane	106	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	105	(73 - 132)	SW846 8260B
Trichloroethene	100	(67 - 128)	SW846 8260B
Dibromochloromethane	106	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	106	(75 - 136)	SW846 8260B
Benzene	104	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	116	(74 - 131)	SW846 8260B
Bromoform	108	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	116	(59 - 150)	SW846 8260B
2-Hexanone	115	(53 - 139)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 **Work Order #...:** MG3AC1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D150000-156

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	**94**	**(75 - 129)**	**SW846 8260B**
1,1,2,2-Tetrachloroethane	**100**	**(68 - 129)**	**SW846 8260B**
Toluene	**102**	**(75 - 125)**	**SW846 8260B**
Chlorobenzene	**99**	**(75 - 127)**	**SW846 8260B**
Ethylbenzene	**102**	**(75 - 120)**	**SW846 8260B**
Styrene	**111**	**(75 - 130)**	**SW846 8260B**
Xylenes (total)	**104**	**(90 - 114)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	81	(50 - 150)
1,2-Dichloroethane-d4	81	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	98	(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 #...: A1D080405 Work Order #...: MG6XC1AC Matrix.....: WATER
LCS Lot-Sample#: A1D190000-091
Prep Date.....: 04/19/11 Analysis Date..: 04/19/11
Prep Batch #...: 1109091
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
cis-1,2-Dichloroethene	101	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	103	(75 - 134)	SW846 8260B
1,2-Dibromoethane	105	(75 - 127)	SW846 8260B
Bromochloromethane	104	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	102	(75 - 122)	SW846 8260B
o-Xylene	104	(75 - 118)	SW846 8260B
Chloromethane	108	(58 - 135)	SW846 8260B
Bromomethane	89	(35 - 153)	SW846 8260B
Vinyl chloride	97	(73 - 134)	SW846 8260B
Chloroethane	96	(72 - 129)	SW846 8260B
Methylene chloride	121 a	(69 - 118)	SW846 8260B
Acetone	93	(51 - 157)	SW846 8260B
Carbon disulfide	130 a	(74 - 123)	SW846 8260B
1,1-Dichloroethene	111	(75 - 125)	SW846 8260B
1,1-Dichloroethane	102	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	102	(85 - 111)	SW846 8260B
Chloroform	102	(74 - 127)	SW846 8260B
1,2-Dichloroethane	102	(67 - 132)	SW846 8260B
2-Butanone	105	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	100	(70 - 127)	SW846 8260B
Carbon tetrachloride	103	(71 - 132)	SW846 8260B
Bromodichloromethane	105	(70 - 130)	SW846 8260B
1,2-Dichloropropane	104	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	105	(73 - 132)	SW846 8260B
Trichloroethene	100	(67 - 128)	SW846 8260B
Dibromochloromethane	103	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	104	(75 - 136)	SW846 8260B
Benzene	102	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	115	(74 - 131)	SW846 8260B
Bromoform	101	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	109	(59 - 150)	SW846 8260B
2-Hexanone	113	(53 - 139)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 **Work Order #...:** MG6XC1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D190000-091

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	**93**	**(75 - 129)**	**SW846 8260B**
1,1,2,2-Tetrachloroethane	**98**	**(68 - 129)**	**SW846 8260B**
Toluene	**100**	**(75 - 125)**	**SW846 8260B**
Chlorobenzene	**99**	**(75 - 127)**	**SW846 8260B**
Ethylbenzene	**104**	**(75 - 120)**	**SW846 8260B**
Styrene	**107**	**(75 - 130)**	**SW846 8260B**
Xylenes (total)	**103**	**(90 - 114)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	79	(50 - 150)
1,2-Dichloroethane-d4	79	(50 - 150)
Toluene-d8	80	(50 - 150)
4-Bromofluorobenzene	94	(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 #...: A1D080405 Work Order #...: MGM7Q1AC-MS Matrix.....: WATER
MS Lot-Sample #: A1D070402-016 MGM7Q1AD-MSD
Date Sampled...: 04/06/11 09:22 Date Received..: 04/07/11
Prep Date.....: 04/15/11 Analysis Date..: 04/15/11
Prep Batch #...: 1105156
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	101	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.04	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.99	(0-30)	SW846 8260B
1,2-Dibromoethane	103	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.5	(0-30)	SW846 8260B
Bromochloromethane	103	(70 - 130)			SW846 8260B
	108	(70 - 130)	3.8	(0-30)	SW846 8260B
m-Xylene & p-Xylene	99	(70 - 130)			SW846 8260B
	91	(70 - 130)	7.9	(0-30)	SW846 8260B
o-Xylene	101	(70 - 130)			SW846 8260B
	95	(70 - 130)	6.3	(0-30)	SW846 8260B
Chloromethane	82	(70 - 130)			SW846 8260B
	91	(70 - 130)	11	(0-30)	SW846 8260B
Bromomethane	76	(70 - 130)			SW846 8260B
	69 a	(70 - 130)	9.2	(0-30)	SW846 8260B
Vinyl chloride	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.4	(0-30)	SW846 8260B
Chloroethane	109	(70 - 130)			SW846 8260B
	104	(70 - 130)	4.4	(0-30)	SW846 8260B
Methylene chloride	121	(70 - 130)			SW846 8260B
	119	(70 - 130)	1.5	(0-30)	SW846 8260B
Acetone	103	(70 - 130)			SW846 8260B
	107	(70 - 130)	3.5	(0-30)	SW846 8260B
Carbon disulfide	151 a	(70 - 130)			SW846 8260B
	142 a	(70 - 130)	5.8	(0-30)	SW846 8260B
1,1-Dichloroethene	123	(70 - 130)			SW846 8260B
	119	(70 - 130)	3.0	(0-30)	SW846 8260B
1,1-Dichloroethane	103	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.08	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	103	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.48	(0-30)	SW846 8260B
Chloroform	102	(70 - 130)			SW846 8260B
	100	(70 - 130)	2.1	(0-30)	SW846 8260B
1,2-Dichloroethane	106	(70 - 130)			SW846 8260B
	104	(70 - 130)	1.8	(0-30)	SW846 8260B
2-Butanone	111	(70 - 130)			SW846 8260B
	115	(70 - 130)	3.1	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 Work Order #...: MGM7Q1AC-MS Matrix.....: WATER
MS Lot-Sample #: A1D070402-016 MGM7Q1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	104	(70 - 130)			SW846 8260B
	101	(70 - 130)	2.3	(0-30)	SW846 8260B
Carbon tetrachloride	105	(70 - 130)			SW846 8260B
	100	(70 - 130)	5.0	(0-30)	SW846 8260B
Bromodichloromethane	108	(70 - 130)			SW846 8260B
	105	(70 - 130)	3.2	(0-30)	SW846 8260B
1,2-Dichloropropane	102	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.81	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	96	(70 - 130)			SW846 8260B
	98	(70 - 130)	2.8	(0-30)	SW846 8260B
Trichloroethene	99	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.5	(0-30)	SW846 8260B
Dibromochloromethane	104	(70 - 130)			SW846 8260B
	101	(70 - 130)	3.0	(0-30)	SW846 8260B
1,1,2-Trichloroethane	102	(70 - 130)			SW846 8260B
	98	(70 - 130)	4.0	(0-30)	SW846 8260B
Benzene	104	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.0	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	106	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.4	(0-30)	SW846 8260B
Bromoform	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	115	(70 - 130)			SW846 8260B
	116	(70 - 130)	1.1	(0-30)	SW846 8260B
2-Hexanone	113	(70 - 130)			SW846 8260B
	114	(70 - 130)	0.93	(0-30)	SW846 8260B
Tetrachloroethene	91	(70 - 130)			SW846 8260B
	82	(70 - 130)	10	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	96	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.2	(0-30)	SW846 8260B
Toluene	98	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.3	(0-30)	SW846 8260B
Chlorobenzene	94	(70 - 130)			SW846 8260B
	91	(70 - 130)	3.6	(0-30)	SW846 8260B
Ethylbenzene	98	(70 - 130)			SW846 8260B
	91	(70 - 130)	7.0	(0-30)	SW846 8260B
Styrene	105	(70 - 130)			SW846 8260B
	100	(70 - 130)	4.6	(0-30)	SW846 8260B
Xylenes (total)	99	(70 - 130)			SW846 8260B
	92	(70 - 130)	7.4	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 **Work Order #...:** MGM7Q1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D070402-016 MGM7Q1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	86	(50 - 150)
	84	(50 - 150)
1,2-Dichloroethane-d4	86	(50 - 150)
	81	(50 - 150)
Toluene-d8	80	(50 - 150)
	81	(50 - 150)
4-Bromofluorobenzene	98	(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

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 Work Order #...: MGM891AC-MS Matrix.....: WATER
MS Lot-Sample #: A1D070402-030 MGM891AD-MSD
Date Sampled...: 04/06/11 13:09 Date Received..: 04/07/11
Prep Date.....: 04/15/11 Analysis Date..: 04/15/11
Prep Batch #...: 1105156
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	96	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.4	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	103	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.33	(0-30)	SW846 8260B
1,2-Dibromoethane	102	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.89	(0-30)	SW846 8260B
Bromochloromethane	101	(70 - 130)			SW846 8260B
	107	(70 - 130)	6.2	(0-30)	SW846 8260B
m-Xylene & p-Xylene	92	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.66	(0-30)	SW846 8260B
o-Xylene	97	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.63	(0-30)	SW846 8260B
Chloromethane	88	(70 - 130)			SW846 8260B
	90	(70 - 130)	2.2	(0-30)	SW846 8260B
Bromomethane	88	(70 - 130)			SW846 8260B
	89	(70 - 130)	1.9	(0-30)	SW846 8260B
Vinyl chloride	95	(70 - 130)			SW846 8260B
	99	(70 - 130)	4.0	(0-30)	SW846 8260B
Chloroethane	104	(70 - 130)			SW846 8260B
	107	(70 - 130)	2.4	(0-30)	SW846 8260B
Methylene chloride	119	(70 - 130)			SW846 8260B
	120	(70 - 130)	1.4	(0-30)	SW846 8260B
Acetone	102	(70 - 130)			SW846 8260B
	108	(70 - 130)	5.9	(0-30)	SW846 8260B
Carbon disulfide	135 a	(70 - 130)			SW846 8260B
	136 a	(70 - 130)	0.97	(0-30)	SW846 8260B
1,1-Dichloroethene	115	(70 - 130)			SW846 8260B
	116	(70 - 130)	1.7	(0-30)	SW846 8260B
1,1-Dichloroethane	99	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.6	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.0	(0-30)	SW846 8260B
Chloroform	101	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.75	(0-30)	SW846 8260B
1,2-Dichloroethane	103	(70 - 130)			SW846 8260B
	104	(70 - 130)	1.0	(0-30)	SW846 8260B
2-Butanone	109	(70 - 130)			SW846 8260B
	113	(70 - 130)	3.8	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 Work Order #...: MGM891AC-MS Matrix.....: WATER
MS Lot-Sample #: A1D070402-030 MGM891AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.2	(0-30)	SW846 8260B
Carbon tetrachloride	103	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.9	(0-30)	SW846 8260B
Bromodichloromethane	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.48	(0-30)	SW846 8260B
1,2-Dichloropropane	104	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.35	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	95	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.2	(0-30)	SW846 8260B
Trichloroethene	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.60	(0-30)	SW846 8260B
Dibromochloromethane	101	(70 - 130)			SW846 8260B
	103	(70 - 130)	1.8	(0-30)	SW846 8260B
1,1,2-Trichloroethane	99	(70 - 130)			SW846 8260B
	103	(70 - 130)	4.1	(0-30)	SW846 8260B
Benzene	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.75	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	107	(70 - 130)			SW846 8260B
	108	(70 - 130)	1.4	(0-30)	SW846 8260B
Bromoform	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.8	(0-30)	SW846 8260B
4-Methyl-2-pentanone	120	(70 - 130)			SW846 8260B
	123	(70 - 130)	3.1	(0-30)	SW846 8260B
2-Hexanone	119	(70 - 130)			SW846 8260B
	119	(70 - 130)	0.59	(0-30)	SW846 8260B
Tetrachloroethene	85	(70 - 130)			SW846 8260B
	84	(70 - 130)	0.46	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	91	(70 - 130)			SW846 8260B
	98	(70 - 130)	7.0	(0-30)	SW846 8260B
Toluene	94	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.0	(0-30)	SW846 8260B
Chlorobenzene	92	(70 - 130)			SW846 8260B
	92	(70 - 130)	0.42	(0-30)	SW846 8260B
Ethylbenzene	94	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.2	(0-30)	SW846 8260B
Styrene	98	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.5	(0-30)	SW846 8260B
Xylenes (total)	94	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.22	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 **Work Order #...:** MGM891AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D070402-030 MGM891AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	84	(50 - 150)
	84	(50 - 150)
1,2-Dichloroethane-d4	80	(50 - 150)
	79	(50 - 150)
Toluene-d8	82	(50 - 150)
	79	(50 - 150)
4-Bromofluorobenzene	98	(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

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP131AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-018 MGP131AD-MSD
Date Sampled...: 04/07/11 08:59 **Date Received..:** 04/08/11
Prep Date.....: 04/19/11 **Analysis Date..:** 04/19/11
Prep Batch #...: 1109091
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	99	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.19	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.09	(0-30)	SW846 8260B
1,2-Dibromoethane	98	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.2	(0-30)	SW846 8260B
Bromochloromethane	99	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.8	(0-30)	SW846 8260B
m-Xylene & p-Xylene	98	(70 - 130)			SW846 8260B
	100	(70 - 130)	2.5	(0-30)	SW846 8260B
o-Xylene	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.76	(0-30)	SW846 8260B
Chloromethane	102	(70 - 130)			SW846 8260B
	94	(70 - 130)	8.2	(0-30)	SW846 8260B
Bromomethane	95	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.4	(0-30)	SW846 8260B
Vinyl chloride	101	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.73	(0-30)	SW846 8260B
Chloroethane	103	(70 - 130)			SW846 8260B
	100	(70 - 130)	2.6	(0-30)	SW846 8260B
Methylene chloride	106	(70 - 130)			SW846 8260B
	111	(70 - 130)	4.3	(0-30)	SW846 8260B
Acetone	97	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.5	(0-30)	SW846 8260B
Carbon disulfide	132 a	(70 - 130)			SW846 8260B
	133 a	(70 - 130)	1.2	(0-30)	SW846 8260B
1,1-Dichloroethene	111	(70 - 130)			SW846 8260B
	115	(70 - 130)	2.9	(0-30)	SW846 8260B
1,1-Dichloroethane	97	(70 - 130)			SW846 8260B
	100	(70 - 130)	2.2	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.05	(0-30)	SW846 8260B
Chloroform	99	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.25	(0-30)	SW846 8260B
1,2-Dichloroethane	97	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.6	(0-30)	SW846 8260B
2-Butanone	106	(70 - 130)			SW846 8260B
	105	(70 - 130)	0.69	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP131AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-018 MGP131AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	101	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.31	(0-30)	SW846 8260B
Carbon tetrachloride	101	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.02	(0-30)	SW846 8260B
Bromodichloromethane	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.52	(0-30)	SW846 8260B
1,2-Dichloropropane	102	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.83	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	99	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.6	(0-30)	SW846 8260B
Trichloroethene	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.75	(0-30)	SW846 8260B
Dibromochloromethane	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.1	(0-30)	SW846 8260B
1,1,2-Trichloroethane	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.12	(0-30)	SW846 8260B
Benzene	99	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.6	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	109	(70 - 130)			SW846 8260B
	112	(70 - 130)	2.5	(0-30)	SW846 8260B
Bromoform	97	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.62	(0-30)	SW846 8260B
4-Methyl-2-pentanone	111	(70 - 130)			SW846 8260B
	113	(70 - 130)	2.0	(0-30)	SW846 8260B
2-Hexanone	115	(70 - 130)			SW846 8260B
	112	(70 - 130)	3.0	(0-30)	SW846 8260B
Tetrachloroethene	93	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.37	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	93	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.8	(0-30)	SW846 8260B
Toluene	96	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.1	(0-30)	SW846 8260B
Chlorobenzene	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.31	(0-30)	SW846 8260B
Ethylbenzene	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.7	(0-30)	SW846 8260B
Styrene	103	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.6	(0-30)	SW846 8260B
Xylenes (total)	98	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.9	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP131AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-018 MGP131AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	79	(50 - 150)
	77	(50 - 150)
1,2-Dichloroethane-d4	72	(50 - 150)
	73	(50 - 150)
Toluene-d8	80	(50 - 150)
	78	(50 - 150)
4-Bromofluorobenzene	94	(50 - 150)
	94	(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 #...: A1D080405 Work Order #...: MGP1D1AC-MS Matrix.....: WG
MS Lot-Sample #: A1D080405-002 MGP1D1AD-MSD
Date Sampled...: 04/07/11 09:01 Date Received..: 04/08/11
Prep Date.....: 04/19/11 Analysis Date..: 04/19/11
Prep Batch #...: 1109091
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	99	(70 - 130)			SW846 8260B
	94	(70 - 130)	5.3	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	102	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.8	(0-30)	SW846 8260B
1,2-Dibromoethane	100	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.4	(0-30)	SW846 8260B
Bromochloromethane	100	(70 - 130)			SW846 8260B
	94	(70 - 130)	5.7	(0-30)	SW846 8260B
m-Xylene & p-Xylene	102	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.7	(0-30)	SW846 8260B
o-Xylene	103	(70 - 130)			SW846 8260B
	97	(70 - 130)	5.9	(0-30)	SW846 8260B
Chloromethane	102	(70 - 130)			SW846 8260B
	91	(70 - 130)	11	(0-30)	SW846 8260B
Bromomethane	98	(70 - 130)			SW846 8260B
	92	(70 - 130)	6.2	(0-30)	SW846 8260B
Vinyl chloride	100	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.9	(0-30)	SW846 8260B
Chloroethane	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.1	(0-30)	SW846 8260B
Methylene chloride	113	(70 - 130)			SW846 8260B
	106	(70 - 130)	6.2	(0-30)	SW846 8260B
Acetone	94	(70 - 130)			SW846 8260B
	89	(70 - 130)	5.1	(0-30)	SW846 8260B
Carbon disulfide	138 a	(70 - 130)			SW846 8260B
	134 a	(70 - 130)	2.9	(0-30)	SW846 8260B
1,1-Dichloroethene	115	(70 - 130)			SW846 8260B
	115	(70 - 130)	0.26	(0-30)	SW846 8260B
1,1-Dichloroethane	98	(70 - 130)			SW846 8260B
	95	(70 - 130)	3.4	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.6	(0-30)	SW846 8260B
Chloroform	99	(70 - 130)			SW846 8260B
	94	(70 - 130)	6.0	(0-30)	SW846 8260B
1,2-Dichloroethane	101	(70 - 130)			SW846 8260B
	93	(70 - 130)	8.4	(0-30)	SW846 8260B
2-Butanone	106	(70 - 130)			SW846 8260B
	103	(70 - 130)	2.9	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 Work Order #...: MGP1D1AC-MS Matrix.....: WG
MS Lot-Sample #: A1D080405-002 MGP1D1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	103	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.6	(0-30)	SW846 8260B
Carbon tetrachloride	104	(70 - 130)			SW846 8260B
	106	(70 - 130)	2.0	(0-30)	SW846 8260B
Bromodichloromethane	103	(70 - 130)			SW846 8260B
	95	(70 - 130)	7.7	(0-30)	SW846 8260B
1,2-Dichloropropane	103	(70 - 130)			SW846 8260B
	96	(70 - 130)	6.6	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	98	(70 - 130)			SW846 8260B
	91	(70 - 130)	7.5	(0-30)	SW846 8260B
Trichloroethene	97	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.5	(0-30)	SW846 8260B
Dibromochloromethane	105	(70 - 130)			SW846 8260B
	98	(70 - 130)	7.1	(0-30)	SW846 8260B
1,1,2-Trichloroethane	102	(70 - 130)			SW846 8260B
	98	(70 - 130)	4.0	(0-30)	SW846 8260B
Benzene	101	(70 - 130)			SW846 8260B
	95	(70 - 130)	6.0	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	111	(70 - 130)			SW846 8260B
	105	(70 - 130)	5.4	(0-30)	SW846 8260B
Bromoform	100	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.7	(0-30)	SW846 8260B
4-Methyl-2-pentanone	112	(70 - 130)			SW846 8260B
	108	(70 - 130)	3.3	(0-30)	SW846 8260B
2-Hexanone	116	(70 - 130)			SW846 8260B
	116	(70 - 130)	0.03	(0-30)	SW846 8260B
Tetrachloroethene	95	(70 - 130)			SW846 8260B
	92	(70 - 130)	3.1	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	94	(70 - 130)			SW846 8260B
	90	(70 - 130)	4.2	(0-30)	SW846 8260B
Toluene	101	(70 - 130)			SW846 8260B
	94	(70 - 130)	7.2	(0-30)	SW846 8260B
Chlorobenzene	97	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.4	(0-30)	SW846 8260B
Ethylbenzene	102	(70 - 130)			SW846 8260B
	98	(70 - 130)	4.1	(0-30)	SW846 8260B
Styrene	106	(70 - 130)			SW846 8260B
	99	(70 - 130)	7.0	(0-30)	SW846 8260B
Xylenes (total)	102	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.8	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP1D1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-002 MGP1D1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	77	(50 - 150)
	77	(50 - 150)
1,2-Dichloroethane-d4	74	(50 - 150)
	73	(50 - 150)
Toluene-d8	81	(50 - 150)
	80	(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

a Spiked analyte recovery is outside stated control limits.

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\UXJ6735.D
Report Date: 19-Apr-2011 10:04

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 19-APR-2011 09:48
Lab File ID: UXJ6735.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 4 Dibromofluoromethane	0.25974	0.20485	0.20485	0.010	21.13104	50.00000	Averaged	
$ 5 1,2-Dichloroethane-d4	0.36608	0.28691	0.28691	0.010	21.62610	50.00000	Averaged	
$ 6 Toluene-d8	1.58383	1.25593	1.25593	0.010	20.70318	50.00000	Averaged	
$ 7 Bromofluorobenzene	0.46792	0.44258	0.44258	0.010	5.41547	50.00000	Averaged	
8 Dichlorodifluoromethane	0.17985	0.15961	0.15961	0.010	11.25618	50.00000	Averaged	
9 Chloromethane	0.28503	0.32391	0.32391	0.100	-13.64229	50.00000	Averaged	
10 Vinyl Chloride	0.29220	0.29827	0.29827	0.010	-2.07657	20.00000	Averaged	
11 Bromomethane	0.11098	0.10915	0.10915	0.010	1.64570	50.00000	Averaged	
12 Chloroethane	0.13415	0.12846	0.12846	0.010	4.24116	50.00000	Averaged	
13 Trichlorofluoromethane	0.23588	0.25167	0.25167	0.010	-6.69469	50.00000	Averaged	
15 Acrolein	0.03332	0.03709	0.03709	0.010	-11.30575	50.00000	Averaged	
16 Acetone	100	106	0.08333	0.010	-6.15658	0.000e+000	Wt Linear	
17 1,1-Dichloroethene	0.18050	0.18367	0.18367	0.010	-1.75544	20.00000	Averaged	
18 Freon-113	0.10774	0.09632	0.09632	0.010	10.59878	50.00000	Averaged	
19 Iodomethane	0.18442	0.20922	0.20922	0.010	-13.44705	50.00000	Averaged	
20 Carbon Disulfide	0.39346	0.44765	0.44765	0.010	-13.77331	50.00000	Averaged	
21 Methylene Chloride	0.19948	0.23626	0.23626	0.010	-18.44170	50.00000	Averaged	
22 Acetonitrile	0.02417	0.02608	0.02608	0.010	-7.90214	50.00000	Averaged	
23 Acrylonitrile	0.09347	0.10843	0.10843	0.010	-15.99825	50.00000	Averaged	
24 Methyl tert-butyl ether	0.75233	0.74941	0.74941	0.010	0.38812	50.00000	Averaged	
25 trans-1,2-Dichloroethene	0.28939	0.28455	0.28455	0.010	1.67315	50.00000	Averaged	
26 Hexane	0.07922	0.06294	0.06294	0.010	20.55657	20.00000	Averaged	<-
27 Vinyl acetate	0.48325	0.49245	0.49245	0.010	-1.90361	50.00000	Averaged	
28 1,1-Dichloroethane	0.54218	0.52083	0.52083	0.100	3.93869	50.00000	Averaged	
29 tert-Butyl Alcohol	0.01466	0.01438	0.01438	0.010	1.95351	50.00000	Averaged	
30 2-Butanone	0.11189	0.12617	0.12617	0.010	-12.75512	50.00000	Averaged	
M 31 1,2-Dichloroethene (total)	0.30104	0.28858	0.28858	0.010	4.14024	50.00000	Averaged	
32 cis-1,2-dichloroethene	0.31269	0.29261	0.29261	0.010	6.42353	50.00000	Averaged	
33 2,2-Dichloropropane	0.21702	0.22345	0.22345	0.010	-2.96314	50.00000	Averaged	
34 Bromochloromethane	0.14161	0.14370	0.14370	0.010	-1.47700	50.00000	Averaged	
35 Chloroform	0.50905	0.49857	0.49857	0.010	2.05772	20.00000	Averaged	
36 Tetrahydrofuran	0.07305	0.07600	0.07600	0.010	-4.03755	50.00000	Averaged	
37 1,1,1-Trichloroethane	0.32666	0.31675	0.31675	0.010	3.03333	50.00000	Averaged	
38 1,1-Dichloropropene	0.42519	0.39896	0.39896	0.010	6.16856	50.00000	Averaged	
39 Carbon Tetrachloride	0.29162	0.27521	0.27521	0.010	5.62850	50.00000	Averaged	
40 1,2-Dichloroethane	0.43979	0.44152	0.44152	0.010	-0.39365	50.00000	Averaged	
41 Benzene	1.25459	1.24206	1.24206	0.010	0.99820	50.00000	Averaged	
42 Trichloroethene	0.30048	0.28273	0.28273	0.010	5.90743	50.00000	Averaged	
43 1,2-Dichloropropane	0.31378	0.31545	0.31545	0.010	-0.53427	20.00000	Averaged	
44 1,4-Dioxane	0.00202	0.00184	0.00184	0.010	8.62097	50.00000	Averaged	<-
45 Dibromomethane	0.16625	0.17664	0.17664	0.010	-6.25064	50.00000	Averaged	
46 Bromodichloromethane	0.34286	0.35146	0.35146	0.010	-2.50955	50.00000	Averaged	
47 2-Chloroethyl vinyl ether	0.17112	0.18713	0.18713	0.010	-9.35572	50.00000	Averaged	

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\UXJ6735.D
Report Date: 19-Apr-2011 10:04

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 19-APR-2011 09:48
Lab File ID: UXJ6735.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
48 cis-1,3-Dichloropropene	0.40462	0.43803	0.43803	0.010	-8.25584	50.00000	Averaged
49 4-Methyl-2-pentanone	0.21859	0.26330	0.26330	0.010	-20.45077	50.00000	Averaged
50 Toluene	1.86792	1.86229	1.86229	0.010	0.30123	20.00000	Averaged
51 trans-1,3-Dichloropropene	0.48234	0.53780	0.53780	0.010	-11.49680	50.00000	Averaged
52 Ethyl Methacrylate	0.46666	0.49712	0.49712	0.010	-6.52748	50.00000	Averaged
53 1,1,2-Trichloroethane	0.34340	0.35616	0.35616	0.010	-3.71629	50.00000	Averaged
54 1,3-Dichloropropane	0.66131	0.67772	0.67772	0.010	-2.48262	50.00000	Averaged
55 Tetrachloroethene	0.33197	0.30671	0.30671	0.010	7.60776	50.00000	Averaged
56 2-Hexanone	0.19815	0.24150	0.24150	0.010	-21.87935	50.00000	Averaged
57 Dibromochloromethane	0.31240	0.33703	0.33703	0.010	-7.88324	50.00000	Averaged
58 1,2-Dibromoethane	0.32344	0.34599	0.34599	0.010	-6.97178	50.00000	Averaged
59 Chlorobenzene	1.16010	1.13183	1.13183	0.300	2.43628	50.00000	Averaged
60 1,1,1,2-Tetrachloroethane	0.35359	0.36810	0.36810	0.010	-4.10344	50.00000	Averaged
61 Ethylbenzene	0.60603	0.61873	0.61873	0.010	-2.09591	20.00000	Averaged
62 m + p-Xylene	0.76602	0.77007	0.77007	0.010	-0.52804	50.00000	Averaged
M 63 Xylenes (total)	0.74685	0.75571	0.75571	0.010	-1.18614	50.00000	Averaged
64 Xylene-o	0.70850	0.72698	0.72698	0.010	-2.60922	50.00000	Averaged
65 Styrene	1.10338	1.23568	1.23568	0.010	-11.99067	50.00000	Averaged
66 Bromoform	50.00000	50.22463	0.16680	0.100	-0.44926	0.000e+000	Wt Linear
67 Isopropylbenzene	1.75232	1.74314	1.74314	0.010	0.52405	50.00000	Averaged
68 1,1,2,2-Tetrachloroethane	0.99123	0.97869	0.97869	0.300	1.26453	50.00000	Averaged
69 1,4-Dichloro-2-butene	50.00000	47.15065	0.21292	0.010	5.69871	0.000e+000	Wt Linear
70 1,2,3-Trichloropropane	0.32774	0.31811	0.31811	0.010	2.93994	50.00000	Averaged
71 Bromobenzene	1.15566	1.02278	1.02278	0.010	11.49813	50.00000	Averaged
72 n-Propylbenzene	1.27783	1.12183	1.12183	0.010	12.20819	50.00000	Averaged
73 2-Chlorotoluene	1.11057	1.00914	1.00914	0.010	9.13302	50.00000	Averaged
74 1,3,5-Trimethylbenzene	3.47092	3.10875	3.10875	0.010	10.43436	50.00000	Averaged
75 4-Chlorotoluene	1.14500	1.08627	1.08627	0.010	5.12912	50.00000	Averaged
76 tert-Butylbenzene	2.93625	2.55685	2.55685	0.010	12.92121	50.00000	Averaged
77 1,2,4-Trimethylbenzene	3.27311	3.08845	3.08845	0.010	5.64184	50.00000	Averaged
78 sec-Butylbenzene	3.90997	3.40608	3.40608	0.010	12.88734	50.00000	Averaged
79 4-Isopropyltoluene	2.91119	2.69468	2.69468	0.010	7.43716	50.00000	Averaged
80 1,3-Dichlorobenzene	1.70300	1.63869	1.63869	0.010	3.77652	50.00000	Averaged
81 1,4-Dichlorobenzene	1.71671	1.67603	1.67603	0.010	2.36980	50.00000	Averaged
82 n-Butylbenzene	2.24550	1.98844	1.98844	0.010	11.44788	50.00000	Averaged
83 1,2-Dichlorobenzene	1.38991	1.39379	1.39379	0.010	-0.27872	50.00000	Averaged
84 1,2-Dibromo-3-chloropropane	50.00000	39.10015	0.06416	0.010	21.79969	0.000e+000	Wt Linear
85 1,2,4-Trichlorobenzene	0.72673	0.42064	0.42064	0.010	42.11834	50.00000	Averaged
86 Hexachlorobutadiene	0.29980	0.16470	0.16470	0.010	45.06256	50.00000	Averaged
87 Naphthalene	1.52045	0.82981	0.82981	0.010	45.42366	50.00000	Averaged
88 1,2,3-Trichlorobenzene	0.67411	0.36748	0.36748	0.010	45.48590	50.00000	Averaged
98 Cyclohexane	0.41389	0.36811	0.36811	0.010	11.06106	50.00000	Averaged
143 Methyl Acetate	0.20101	0.22480	0.22480	0.010	-11.83449	50.00000	Averaged

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\UXJ6735.D
Report Date: 19-Apr-2011 10:04

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 19-APR-2011 09:48
Lab File ID: UXJ6735.D Init. Cal. Date(s): 17-JUN-2010 08-MAR-2011
Analysis Type: WATER Init. Cal. Times: 12:26 10:36
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
144 Methylcyclohexane	0.47028	0.38344	0.38344	0.010	18.46578	50.00000	Averaged
141 1,3,5-Trichlorobenzene	0.80914	0.52540	0.52540	0.010	35.06705	50.00000	Averaged
150 Vinyl Acetate-86	0.04983	0.04829	0.04829	0.010	3.10545	50.00000	Averaged

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\UXJ6737.D
Report Date: 19-Apr-2011 10:55

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

Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\8260LLUX11.m
Misc Info: J10419A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	0.8748	87.48	70-130
	42	Trichloroethene	1.000	1.108	110.81	70-130
	59	Chlorobenzene	1.000	1.160	116.05	70-130
	50	Toluene	1.000	1.182	118.20	70-130
	41	Benzene	1.000	1.176	117.62	70-130
	16	Acetone	2.000	1.746	87.28	70-130
	20	Carbon Disulfide	1.000	1.371	137.08*	70-130
	9	Chloromethane	1.000	1.534	153.42*	70-130
	11	Bromomethane	1.000	1.190	119.01	70-130
	10	Vinyl Chloride	1.000	1.310	130.95*	70-130
	12	Chloroethane	1.000	1.344	134.36*	70-130
	21	Methylene Chloride	1.000	2.128	212.83*	70-130
	28	1,1-Dichloroethane	1.000	1.139	113.89	70-130
M	31	1,2-Dichloroethene	2.000	2.269	113.43	70-130
	35	Chloroform	1.000	1.175	117.47	70-130
	40	1,2-Dichloroethane	1.000	1.205	120.54	70-130
	30	2-Butanone	2.000	2.445	122.25	70-130
	37	1,1,1-Trichloroeth	1.000	1.158	115.82	70-130
	39	Carbon Tetrachlori	1.000	1.062	106.20	70-130
	46	Bromodichlorometha	1.000	1.031	103.11	70-130
	43	1,2-Dichloropropan	1.000	1.157	115.70	70-130
	48	cis-1,3-Dichloropr	1.000	1.042	104.16	70-130
	54	1,3-Dichloropropan	1.000	1.150	115.04	70-130
	57	Dibromochlorometha	1.000	1.031	103.07	70-130
	53	1,1,2-Trichloroeth	1.000	1.136	113.58	70-130
	51	trans-1,3-Dichloro	1.000	0.9822	98.22	70-130
	49	4-Methyl-2-pentano	2.000	1.868	93.41	70-130
	56	2-Hexanone	2.000	1.823	91.14	70-130
	55	Tetrachloroethene	1.000	1.158	115.85	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.166	116.61	70-130
	66	Bromoform	1.000	1.294	129.44	70-130
	61	Ethylbenzene	1.000	1.101	110.13	70-130
	65	Styrene	1.000	1.012	101.15	70-130
M	63	Xylenes (total)	3.000	3.162	105.39	70-130
	32	cis-1,2-dichloroet	1.000	1.169	116.93	70-130
	25	trans-1,2-Dichloro	1.000	1.099	109.94	70-130
	8	Dichlorodifluorome	1.000	1.125	112.47	70-130
	13	Trichlorofluoromet	1.000	1.336	NT 133.60*	70-130
	70	1,2,3-Trichloropro	1.000	1.203	120.29	70-130
	18	Freon-113	1.000	1.124	112.44	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\UXJ6737.D
Report Date: 19-Apr-2011 10:55

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	1.105	110.53	70-130
58 1,2-Dibromoethane	1.000	1.153	115.32	70-130
67 Isopropylbenzene	1.000	0.9773	97.73	70-130
80 1,3-Dichlorobenzen	1.000	1.110	111.01	70-130
81 1,4-Dichlorobenzen	1.000	1.164	116.36	70-130
83 1,2-Dichlorobenzen	1.000	1.178	117.77	70-130
84 1,2-Dibromo-3-chlo	1.000	1.453	NT 145.27*	70-130
85 1,2,4-Trichloroben	1.000	1.014	101.45	70-130
98 Cyclohexane	1.000	0.9708	97.08	70-130
143 Methyl Acetate	2.000	2.416	120.79	70-130
144 Methylcyclohexane	1.000	0.9244	92.44	70-130
71 Bromobenzene	1.000	1.075	107.53	70-130
34 Bromochloromethane	1.000	1.167	116.73	70-130
82 n-Butylbenzene	1.000	0.9816	98.17	70-130
78 sec-Butylbenzene	1.000	0.9182	91.82	70-130
76 tert-Butylbenzene	1.000	0.9149	91.49	70-130
73 2-Chlorotoluene	1.000	1.058	105.78	70-130
75 4-Chlorotoluene	1.000	1.057	105.73	70-130
45 Dibromomethane	1.000	1.172	117.21	70-130
33 2,2-Dichloropropan	1.000	1.046	104.60	70-130
38 1,1-Dichloropropen	1.000	1.078	107.85	70-130
86 Hexachlorobutadien	1.000	1.231	123.08	70-130
19 Iodomethane	1.000	1.405	NT 140.47*	70-130
79 4-Isopropyltoluene	1.000	0.9381	93.81	70-130
87 Naphthalene	1.000	1.070	106.98	70-130
72 n-Propylbenzene	1.000	0.9215	92.15	70-130
60 1,1,1,2-Tetrachlor	1.000	1.054	105.36	70-130
88 1,2,3-Trichloroben	1.000	1.380	NT 137.98*	70-130
77 1,2,4-Trimethylben	1.000	0.9610	96.10	70-130
74 1,3,5-Trimethylben	1.000	0.9622	96.22	70-130
150 Vinyl Acetate-86	1.000	0.7905	79.05	70-130
62 m + p-Xylene	2.000	2.129	106.43	70-130
64 Xylene-o	1.000	1.033	103.30	70-130
49 4-Methyl-2-pentano	2.000	1.868	93.41	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	7.854	78.55	75-121
$ 5 1,2-Dichloroethane	10.000	7.368	73.69	63-129
$ 6 Toluene-d8	10.000	7.937	79.37	74-115
$ 7 Bromofluorobenzene	10.000	8.658	86.58	66-117

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\UXJ6752.D
Report Date: 20-Apr-2011 08:22

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: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\8260LLUX11.m
Misc Info: J10419A,8260LLUX11,,43582,3

Client SDG: SDGa01304
Fraction: VOA

Operator: 43582
SampleType: MRL
Quant Type: ISTD

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	1.086	108.60	70-130
	42	Trichloroethene	1.000	0.9112	91.12	70-130
	59	Chlorobenzene	1.000	1.014	101.37	70-130
	50	Toluene	1.000	0.9794	97.94	70-130
	41	Benzene	1.000	0.9457	94.57	70-130
	16	Acetone	2.000	1.581	79.07	70-130
	20	Carbon Disulfide	1.000	1.159	115.87	70-130
	9	Chloromethane	1.000	1.166	116.64	70-130
	11	Bromomethane	1.000	0.9856	98.56	70-130
	10	Vinyl Chloride	1.000	1.113	111.28	70-130
	12	Chloroethane	1.000	1.105	110.48	70-130
	21	Methylene Chloride	1.000	2.133	213.30*	70-130
	28	1,1-Dichloroethane	1.000	0.9890	98.90	70-130
M	31	1,2-Dichloroethene	2.000	1.951	97.56	70-130
	35	Chloroform	1.000	0.9376	93.77	70-130
	40	1,2-Dichloroethane	1.000	1.039	103.88	70-130
	30	2-Butanone	2.000	2.166	108.31	70-130
	37	1,1,1-Trichloroeth	1.000	0.8895	88.95	70-130
	39	Carbon Tetrachlori	1.000	0.8404	84.04	70-130
	46	Bromodichlorometha	1.000	0.9113	91.13	70-130
	43	1,2-Dichloropropan	1.000	0.9613	96.13	70-130
	48	cis-1,3-Dichloropr	1.000	0.8181	81.81	70-130
	54	1,3-Dichloropropan	1.000	0.9881	98.81	70-130
	57	Dibromochlorometha	1.000	0.7790	77.90	70-130
	53	1,1,2-Trichloroeth	1.000	1.082	108.19	70-130
	51	trans-1,3-Dichloro	1.000	0.7629	76.29	70-130
	49	4-Methyl-2-pentano	2.000	1.823	91.14	70-130
	56	2-Hexanone	2.000	1.786	89.32	70-130
	55	Tetrachloroethene	1.000	0.8404	84.04	70-130
	68	1,1,2,2-Tetrachlor	1.000	0.9717	97.17	70-130
	66	Bromoform	1.000	1.144	114.45	70-130
	61	Ethylbenzene	1.000	0.8333	83.33	70-130
	65	Styrene	1.000	0.7946	79.46	70-130
M	63	Xylenes (total)	3.000	2.480	82.68	70-130
	32	cis-1,2-dichloroet	1.000	0.9801	98.01	70-130
	25	trans-1,2-Dichloro	1.000	0.9711	97.11	70-130
	8	Dichlorodifluorome	1.000	0.7259	72.59	70-130
	13	Trichlorofluoromet	1.000	0.9889	98.89	70-130
	70	1,2,3-Trichloropro	1.000	0.9618	96.18	70-130
	18	Freon-113	1.000	0.8298	82.98	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10419A.b\UXJ6752.D
Report Date: 20-Apr-2011 08:22

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.8828	88.28	70-130
58 1,2-Dibromoethane	1.000	0.9572	95.72	70-130
67 Isopropylbenzene	1.000	0.6993	NT, OK 69.93*	70-130
80 1,3-Dichlorobenzen	1.000	0.9339	93.39	70-130
81 1,4-Dichlorobenzen	1.000	1.036	103.65	70-130
83 1,2-Dichlorobenzen	1.000	0.9955	99.55	70-130
84 1,2-Dibromo-3-chlo	1.000	1.196	119.57	70-130
85 1,2,4-Trichloroben	1.000	0.4224	NT 42.24*	70-130
98 Cyclohexane	1.000	0.6593	NT 65.93*	70-130
143 Methyl Acetate	2.000	2.268	113.42	70-130
144 Methylcyclohexane	1.000	0.5855	NT 58.55*	70-130
71 Bromobenzene	1.000	0.9006	90.06	70-130
34 Bromochloromethane	1.000	1.066	106.56	70-130
82 n-Butylbenzene	1.000	0.6033	NT 60.33*	70-130
78 sec-Butylbenzene	1.000	0.6492	NT 64.92*	70-130
76 tert-Butylbenzene	1.000	0.7116	71.16	70-130
73 2-Chlorotoluene	1.000	0.7614	76.14	70-130
75 4-Chlorotoluene	1.000	0.8287	82.87	70-130
45 Dibromomethane	1.000	1.042	104.26	70-130
33 2,2-Dichloropropan	1.000	0.8340	83.40	70-130
38 1,1-Dichloropropen	1.000	0.7951	79.51	70-130
86 Hexachlorobutadien	1.000	0.3405	NT 34.05*	70-130
19 Iodomethane	1.000	1.194	119.36	70-130
79 4-Isopropyltoluene	1.000	0.6014	NT 60.14*	70-130
87 Naphthalene	1.000	0.3490	NT 34.91*	70-130
72 n-Propylbenzene	1.000	0.7344	73.44	70-130
60 1,1,1,2-Tetrachlor	1.000	0.8745	87.45	70-130
88 1,2,3-Trichloroben	1.000	0.3992	NT 39.92*	70-130
77 1,2,4-Trimethylben	1.000	0.7226	72.26	70-130
74 1,3,5-Trimethylben	1.000	0.7060	70.60	70-130
150 Vinyl Acetate-86	1.000	0.6297	NT 62.97*	70-130
62 m + p-Xylene	2.000	1.682	84.08	70-130
64 Xylene-o	1.000	0.7990	79.90	70-130
49 4-Methyl-2-pentano	2.000	1.823	91.14	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	7.565	75.65	75-121
$ 5 1,2-Dichloroethane	10.000	7.562	75.62	63-129
$ 6 Toluene-d8	10.000	7.903	79.03	74-115
$ 7 Bromofluorobenzene	10.000	8.591	85.91	66-117

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.: A1D080405

Lab File ID: BFB632 BFB Injection Date: 04/15/11

Instrument ID: A3UX11 BFB Injection Time: 0945

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	23.5
75	30.0 - 60.0% of mass 95	54.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	50.0 - 100.0% of mass 95	76.3
175	5.0 - 9.0% of mass 174	5.4 (7.1)1
176	Greater than 95.0%, but less than 101.0% of mass 174	75.2 (98.5)1
177	5.0 - 9.0% of mass 176	4.8 (6.4)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-CC	UXJ6671	04/15/11	1038
02	MG3ACCHK	MG3AC1AC	UXJ6674	04/15/11	1146
03	MG3ACBLK	MG3AC1AA	UXJ6676	04/15/11	1231
04	FWGBKGMW-005	MGP1H1AA	UXJ6687	04/15/11	1640
05	FWGCBLMW-004	MGP1L1AA	UXJ6688	04/15/11	1703
06	FWGTEAM2-TRI	MGP1N1AA	UXJ6689	04/15/11	1725
07	FWGLL2MW-267	MGP1P1AA	UXJ6690	04/15/11	1748
08	FWGLL2MW-DUP	MGP1R1AA	UXJ6691	04/15/11	1811
09	FWGLL2MW-266	MGP1V1AA	UXJ6692	04/15/11	1833
10	FWGLL3MW-239	MGP1X1AA	UXJ6693	04/15/11	1856
11	FWGTEAM3-TRI	MGP111AA	UXJ6694	04/15/11	1919
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

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.: A1D080405

Lab File ID: BFB634 BFB Injection Date: 04/19/11

Instrument ID: A3UX11 BFB Injection Time: 0822

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	22.0
75	30.0 - 60.0% of mass 95	53.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	50.0 - 100.0% of mass 95	75.9
175	5.0 - 9.0% of mass 174	5.8 (7.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	73.3 (96.6)1
177	5.0 - 9.0% of mass 176	4.5 (6.2)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-CC	UXJ6735	04/19/11	0948
02	MG6XCCHK	MG6XC1AC	UXJ6736	04/19/11	1011
03	MG6XCBLK	MG6XC1AA	UXJ6739	04/19/11	1119
04	FWGTEAM1-TRI	MGP1C1AA	UXJ6740	04/19/11	1141
05	FWGBKGMW-018	MGP1D1AA	UXJ6741	04/19/11	1204
06	FWGBKGMW-018	MGP1D1AC	UXJ6742	04/19/11	1226
07	FWGBKGMW-018	MGP1D1AD	UXJ6743	04/19/11	1249
08	FWGLL2MW-269	MGP131AC	UXJ6744	04/19/11	1311
09	FWGLL2MW-269	MGP131AD	UXJ6745	04/19/11	1334
10	FWGLL2MW-269	MGP131AA	UXJ6746	04/19/11	1356
11	FWGLL3MW-236	MGP161AA	UXJ6747	04/19/11	1419
12	FWGASYMW-003	MGP181AA	UXJ6748	04/19/11	1442
13	FWGEQUIPRINS	MGP2A1AA	UXJ6749	04/19/11	1504
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V VOA 1/87 Rev.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 11, 2011

SDG: A1D080405 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 1.1 and 2.9 °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)?		✓		Sample FWGLL2mw-269c-1723-GW was initially extracted within hold. Upon analysis it was determined the sample was not spiked with surrogate. The sample was re extracted and reanalyzed outside of hold but within two times hold. The results for sample FWGLL2mw-269c-1723-GW were qualified as estimated, "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?	✓			A4HP10-4/12/2011, 4/26/11 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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 11, 2011

SDG: A1D080405 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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?	✓			4/12/11-Benzoic acid and pentachlorophenol used a quadratic fit. No qualifications were made as coefficients of determination (COD), r were ≥0.99. 4/26/11-Benzoic acid and 2,4-dinitrophenol, 4-nitrophenol, 4,6-dinitro-2-methylphenol, pentachlorophenol, 3,3'-dimethylbenzidine 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?	✓			4/12/11	LCG Table 2 R
17. Was a MRL Level Verification run at the beginning and end of the sequence or every 12 hours?	✓				LCG Table 2
18. Were the QC/MRL recoveries 70-130%?	✓			The closing MRL analyzed 4/20/11 @ 1603 recovered below control limits for 4,6-dinitro-2-methylphenol at 61%, pentachlorophenol at 55%, 2,4-dinitrophenol at 43% and 4-nitrophenol at 51%. An MDL check was analyzed following the closing MRL with detected results for all targets except 2,4-dinitrophenol. The 4,6-dinitro-2-methylphenol, pentachlorophenol and 4-nitrophenol results for all samples with the exception of FWGLL2mw-269c-1723-GW were qualified as estimated, "UJ". The bracketed 2,4-dinitrophenol samples were reanalyzed with acceptable MRL recoveries on 4/28/11.	LCG Table 2 >130%=J; <50%=J/R 50-70%=J/UJ
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			4/12/11 @ 2000, 4/26/11 @2012	LCG Table 2 >130%=J; <50%=J/R 50-70%=J/UJ;
20. Was a CCV analyzed every 12 hours?	✓			4/20/11 @0930, 4/27/11 @0924 and 4/28/11 @0917 (2,4-dinitrophenol only)	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 11, 2011

SDG: A1D080405 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. .	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 equipment rinse at 3.0ug/L. The bis(2-ethylhexyl) phthalate results for samples FWGASYmw-003c-1704-GW, FWGLL2mw-267c-1722-GW, FWGLL2mw-DUP3-1748-GW and FWGLL3mw-236c-1724-GW were qualified, "B" as the detected concentrations were less than 5x contamination	<5/10x blank = B
31. Was a field duplicate analyzed?	✓				
32. Were the field duplicate RPDs ≤30%?	✓				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 analyzed 4/27/11 associated with the reextracted sample FWGLL2mw-269c-1723-GW recovered below control limits for 4-chlorophenylphenyl ether at 39%. The 4-chlorophenylphenyl ether result for sample FWGLL2mw-269c-1723-GW was qualified as estimated, "UJ".	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 11, 2011

SDG: A1D080405 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
35. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 2
36. Was the MS/MSD parent a Ravenna sample?	✓				
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		Checked by ADR. • For the matrix spike analysis performed on sample FWGBKGmw-018c-1710-GW, the matrix spike and spike duplicate were below control limits for 3,3'-dichlorobenzidine at 27% and 28% and below limits for hexachlorocyclopentadiene at 41% in both the MS and MSD. No qualifications were made for the matrix spike outliers since there were no additional QC outliers associated with the sample FWGBKGmw-018c-1710-GW. • For the matrix spike analysis performed on sample FWGLL2mw-269c-1723-GW, the matrix spike and spike duplicate were below control limits for 4-chloroanailine at 11% and 10%,4-chlorophenylphenyl ether at 33% and 36%, and phenol at 38%. The 4-chloroanailine,4-chlorophenylphenyl ether and phenol results were qualified as estimated, "UJ"	LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?		✓		Checked by ADR. • For sample FWGASYmw-003c-1704-GW, all surrogates recovered below control limits of 50% but above 10%. The results for FWGASYmw-003c-1704-GW were qualified as estimated, "J/UJ". • Terphenyl-d14 recovered below control limits at 46% for sample FWGLL3mw-239c-1725. For sample FWGLL2mw-266c-1721-GW, 2,4,6-tribromophenol recovered below control limits at 49% and terphenyl-d14 recovered below control limits at 47%. No qualifiers were applied , as LCG allows for one surrogate per fraction to be outside control limits without qualification. • All acid surrogates recovered below control limits of 50% for samples FWGLL2mw-269c-1723-GW and FWGLL3mw-236c-1724-GW but above 10%. The associated acid targets 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.		✓			

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 11, 2011

SDG: A1D080405 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
41. 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 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 Compounds	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: FWGBKGmw-018C-1710-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-002 **Work Order #...:** MGP1D1AE **Matrix.....:** WG
Date Sampled...: 04/07/11 09:01 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/20/11
Prep Batch #...: 1101055
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: FWGBKGmw-018C-1710-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-002 **Work Order #...:** MGP1D1AE **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	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: FWGBKGmw-018C-1710-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-002 Work Order #...: MGP1D1AE Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	71	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-018C-1710-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-002	**Work Order #...:** MGP1D2AE	**Matrix.....:** WG	
Date Sampled...: 04/07/11 09:01	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/28/11		
Prep Batch #...: 1101055			
Dilution Factor: 1	**Initial Wgt/Vol:** 1010 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	70	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-005C-1705-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-004 Work Order #...: MGP1H1AC Matrix.....: WG
Date Sampled...: 04/07/11 11:31 Date Received..: 04/08/11
Prep Date.....: 04/11/11 Analysis Date..: 04/20/11
Prep Batch #...: 1101055
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: FWGBKGmw-005C-1705-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-004 Work Order #...: MGP1H1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	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: FWGBKGmw-005C-1705-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-004 **Work Order #...:** MGP1H1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	66	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-005C-1705-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-004	**Work Order #...:** MGP1H2AC	**Matrix.....:** WG	
Date Sampled...: 04/07/11 11:31	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/28/11		
Prep Batch #...: 1101055			
Dilution Factor: 1	**Initial Wgt/Vol:** 1050 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	59	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	58	(50 - 150)
Phenol-d5	66	(50 - 150)
2-Fluorophenol	67	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBLmw-004C-1714-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-006 **Work Order #...:** MGP1L1AC **Matrix.....:** WG
Date Sampled...: 04/07/11 13:21 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/20/11
Prep Batch #...: 1101055
Dilution Factor: 1 **Initial Wgt/Vol:** 970 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: FWGCBLmw-004C-1714-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-006 Work Order #...: MGP1L1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	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: FWGCBLmw-004C-1714-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-006 Work Order #...: MGP1L1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	71	(50 - 150)
2,4,6-Tribromophenol	80	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBLmw-004C-1714-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-006	**Work Order #...:** MGP1L2AC	**Matrix.....:** WG	
Date Sampled...: 04/07/11 13:21	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/28/11		
Prep Batch #...: 1101055			
Dilution Factor: 1	**Initial Wgt/Vol:** 970 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	57	(50 - 150)
2-Fluorobiphenyl	59	(50 - 150)
Terphenyl-d14	70	(50 - 150)
Phenol-d5	60	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-009 **Work Order #...:** MGP1P1AC **Matrix.....:** WG
Date Sampled...: 04/07/11 08:52 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/20/11
Prep Batch #...: 1101055
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	**0.97 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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-009 **Work Order #...:** MGP1P1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	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-1722-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-009 **Work Order #...:** MGP1P1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
Terphenyl-d14	66	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	81	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-009	**Work Order #...:** MGP1P2AC	**Matrix.....:** WG	
Date Sampled...: 04/07/11 08:52	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/28/11		
Prep Batch #...: 1101055			
Dilution Factor: 1	**Initial Wgt/Vol:** 1040 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	59	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	56	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	71	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1748-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-011 **Work Order #...:** MGP1R1AC **Matrix.....:** WG
Date Sampled...: 04/07/11 10:10 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/20/11
Prep Batch #...: 1101055
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	**0.94 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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1748-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-011 **Work Order #...:** MGP1R1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	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-DUP3-1748-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-011 Work Order #...: MGP1R1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	58	(50 - 150)
Phenol-d5	70	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	81	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1748-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-011	**Work Order #...:** MGP1R2AC	**Matrix.....:** WG	
Date Sampled...: 04/07/11 10:10	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/28/11		
Prep Batch #...: 1101055			
Dilution Factor: 1	**Initial Wgt/Vol:** 980 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	57	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	51	(50 - 150)
Phenol-d5	59	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1721-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-013 Work Order #...: MGP1V1AC Matrix.....: WG
Date Sampled...: 04/07/11 11:04 Date Received..: 04/08/11
Prep Date.....: 04/11/11 Analysis Date..: 04/20/11
Prep Batch #...: 1101055
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	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-266C-1721-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-013 Work Order #...: MGP1V1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	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-1721-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-013 **Work Order #...:** MGP1V1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	50	(50 - 150)
Phenol-d5	54	(50 - 150)
2-Fluorophenol	58	(50 - 150)
2,4,6-Tribromophenol	62	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1721-GW

GC/MS Semivolatiles

Lot-Sample #...:	A1D080405-013	**Work Order #...:**	MGP1V2AC	**Matrix.....:**	WG
Date Sampled...:	04/07/11 11:04	**Date Received..:**	04/08/11		
Prep Date.....:	04/11/11	**Analysis Date..:**	04/28/11		
Prep Batch #...:	1101055				
Dilution Factor:	1	**Initial Wgt/Vol:**	950 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	53	(50 - 150)
2-Fluorobiphenyl	54	(50 - 150)
Terphenyl-d14	47 *	(50 - 150)
Phenol-d5	50	(50 - 150)
2-Fluorophenol	55	(50 - 150)
2,4,6-Tribromophenol	49 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1725-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-015 **Work Order #...:** MGP1X1AC **Matrix.....:** WG
Date Sampled...: 04/07/11 12:32 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/20/11
Prep Batch #...: 1101055
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	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: FWGLL3mw-239C-1725-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-015 **Work Order #...:** MGP1X1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	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-1725-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-015 **Work Order #...:** MGP1X1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	62	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	55	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1725-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-015	**Work Order #...:** MGP1X2AC	**Matrix.....:** WG	
Date Sampled...: 04/07/11 12:32	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/28/11		
Prep Batch #...: 1101055			
Dilution Factor: 1	**Initial Wgt/Vol:** 930 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	55	(50 - 150)
2-Fluorobiphenyl	55	(50 - 150)
Terphenyl-d14	46 *	(50 - 150)
Phenol-d5	53	(50 - 150)
2-Fluorophenol	55	(50 - 150)
2,4,6-Tribromophenol	59	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1723-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-018 Work Order #...: MGP132AE Matrix.....: WG
Date Sampled...: 04/07/11 08:59 Date Received..: 04/08/11
Prep Date.....: 04/21/11 Analysis Date..: 04/27/11
Prep Batch #...: 1111325
Dilution Factor: 1 Initial Wgt/Vol: 920 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1723-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-018 **Work Order #...:** MGP132AE **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
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-1723-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-018 **Work Order #...:** MGP132AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	46 *	(50 - 150)
2-Fluorobiphenyl	50	(50 - 150)
Terphenyl-d14	71	(50 - 150)
Phenol-d5	17 *	(50 - 150)
2-Fluorophenol	30 *	(50 - 150)
2,4,6-Tribromophenol	59	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1724-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-020 **Work Order #...:** MGP161AC **Matrix.....:** WG
Date Sampled...: 04/07/11 11:59 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/20/11
Prep Batch #...: 1101055
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	**1.2 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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1724-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-020 **Work Order #...:** MGP161AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	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-236C-1724-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-020 Work Order #...: MGP161AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	53	(50 - 150)
Phenol-d5	50	(50 - 150)
2-Fluorophenol	48 *	(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-236C-1724-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-020	**Work Order #...:** MGP162AC	**Matrix.....:** WG	
Date Sampled...: 04/07/11 11:59	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/28/11		
Prep Batch #...: 1101055			
Dilution Factor: 1	**Initial Wgt/Vol:** 980 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	54	(50 - 150)
2-Fluorobiphenyl	57	(50 - 150)
Terphenyl-d14	48 *	(50 - 150)
Phenol-d5	45 *	(50 - 150)
2-Fluorophenol	45 *	(50 - 150)
2,4,6-Tribromophenol	52	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1704-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-022	**Work Order #...:** MGP181AC	**Matrix.....:** WG	
Date Sampled...: 04/07/11 13:33	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/20/11		
Prep Batch #...: 1101055			
Dilution Factor: 1	**Initial Wgt/Vol:** 1000 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
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**	**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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1704-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-022 Work Order #...: MGP181AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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-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
2,4,6-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: FWGASYmw-003C-1704-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-022 Work Order #...: MGP181AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	47 *	(50 - 150)
2-Fluorobiphenyl	47 *	(50 - 150)
Terphenyl-d14	24 *	(50 - 150)
Phenol-d5	40 *	(50 - 150)
2-Fluorophenol	43 *	(50 - 150)
2,4,6-Tribromophenol	44 *	(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: FWGASYmw-003C-1704-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-022	**Work Order #...:** MGP182AC	**Matrix.....:** WG	
Date Sampled...: 04/07/11 13:33	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/28/11		
Prep Batch #...: 1101055			
Dilution Factor: 1	**Initial Wgt/Vol:** 1000 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	42 *	(50 - 150)
2-Fluorobiphenyl	41 *	(50 - 150)
Terphenyl-d14	21 *	(50 - 150)
Phenol-d5	35 *	(50 - 150)
2-Fluorophenol	38 *	(50 - 150)
2,4,6-Tribromophenol	39 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-024 **Work Order #...:** MGP2A1AC **Matrix.....:** WQ
Date Sampled...: 04/07/11 14:33 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/20/11
Prep Batch #...: 1101055
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	**3.0 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

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-024 Work Order #...: MGP2A1AC Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	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: FWGEQUIPRINSE4-1760-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-024 **Work Order #...:** MGP2A1AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

GC/MS Semivolatiles

Lot-Sample #...: A1D080405-024	**Work Order #...:** MGP2A2AC	**Matrix.....:** WQ	
Date Sampled...: 04/07/11 14:33	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/28/11		
Prep Batch #...: 1101055			
Dilution Factor: 1	**Initial Wgt/Vol:** 960 mL	**Final Wgt/Vol..:** 2 mL	
	Method.....: SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-Dinitrophenol	ND	5.0	ug/L	2.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	57	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	64	(50 - 150)
Phenol-d5	55	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	54	(50 - 150)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGTVT1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D110000-055

Prep Date.....: 04/11/11 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 04/20/11 **Prep Batch #...:** 1101055
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4-Bromophenyl phenyl ether	ND	2.0	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
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
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-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
Hexachlorocyclopentadiene	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

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGTVT1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
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
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	ND	10	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	79	(50 - 150)
Terphenyl-d14	91	(50 - 150)
Phenol-d5	80	(50 - 150)
2-Fluorophenol	76	(50 - 150)
2,4,6-Tribromophenol	85	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 Work Order #...: MGTVT1AA 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 #...: A1D080405 **Work Order #...:** MHCRM1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D210000-325

Prep Date.....: 04/21/11 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 04/27/11 **Prep Batch #...:** 1111325
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	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

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MHCRM1AA **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	63	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
Terphenyl-d14	84	(50 - 150)
Phenol-d5	41 *	(50 - 150)
2-Fluorophenol	59	(50 - 150)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MHCRM1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	70	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 Work Order #...: MGTVT1AC Matrix.....: WATER
LCS Lot-Sample#: A1D110000-055
Prep Date.....: 04/11/11 Analysis Date..: 04/20/11
Prep Batch #...: 1101055
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	66	(30 - 120)	SW846 8270C
Acenaphthene	73	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	76	(34 - 151)	SW846 8270C
Pyrene	72	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	66	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	71	(30 - 115)	SW846 8270C
Pentachlorophenol	67	(30 - 150)	SW846 8270C
Phenol	78	(30 - 115)	SW846 8270C
2-Chlorophenol	77	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	78	(31 - 121)	SW846 8270C
4-Nitrophenol	79	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	73	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	69	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	75	(36 - 135)	SW846 8270C
4-Methylphenol	76	(31 - 115)	SW846 8270C
4-Nitroaniline	67	(30 - 140)	SW846 8270C
Acenaphthylene	73	(37 - 115)	SW846 8270C
Anthracene	73	(45 - 118)	SW846 8270C
Benzo(a)anthracene	69	(43 - 138)	SW846 8270C
Benzo(a)pyrene	61	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	63	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	73	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	85	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	74	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	75	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	70	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	71	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 Work Order #...: MGTVT1AC Matrix.....: WATER
LCS Lot-Sample#: A1D110000-055

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	75	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	76	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	62	(31 - 120)	SW846 8270C
2,6-Dinitrotoluene	79	(43 - 122)	SW846 8270C
2-Chloronaphthalene	72	(35 - 115)	SW846 8270C
2-Methylnaphthalene	83	(32 - 115)	SW846 8270C
2-Methylphenol	75	(30 - 116)	SW846 8270C
2-Nitroaniline	67	(36 - 140)	SW846 8270C
2-Nitrophenol	78	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	44	(30 - 160)	SW846 8270C
3-Nitroaniline	63	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	74	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	78	(43 - 118)	SW846 8270C
4-Chloroaniline	56	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	75	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	79	(37 - 136)	SW846 8270C
Carbazole	73	(49 - 126)	SW846 8270C
Chrysene	72	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	72	(38 - 130)	SW846 8270C
Dibenzofuran	72	(40 - 115)	SW846 8270C
Diethyl phthalate	74	(43 - 132)	SW846 8270C
Dimethyl phthalate	74	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	63	(36 - 151)	SW846 8270C
Fluoranthene	75	(47 - 132)	SW846 8270C
Fluorene	72	(41 - 115)	SW846 8270C
Hexachlorobenzene	78	(42 - 123)	SW846 8270C
Hexachlorobutadiene	67	(30 - 120)	SW846 8270C
Hexachloroethane	66	(30 - 120)	SW846 8270C
Isophorone	71	(33 - 115)	SW846 8270C
Naphthalene	69	(30 - 119)	SW846 8270C
Nitrobenzene	72	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	64	(35 - 124)	SW846 8270C
Phenanthrene	72	(45 - 117)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGTVT1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D110000-055

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Indeno(1,2,3-cd)pyrene	**72**	**(37 - 130)**	**SW846 8270C**
Di-n-butyl phthalate	**76**	**(46 - 123)**	**SW846 8270C**
Hexachlorocyclopenta-diene	**44**	**(30 - 115)**	**SW846 8270C**
Benzoic acid	**54**	**(30 - 136)**	**SW846 8270C**
Benzyl alcohol	**78**	**(29 - 115)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	72	(50 - 150)
Terphenyl-d14	85	(50 - 150)
Phenol-d5	79	(50 - 150)
2-Fluorophenol	75	(50 - 150)
2,4,6-Tribromophenol	83	(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 Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGTVT1AE **Matrix.....:** WATER
LCS Lot-Sample#: A1D110000-055
Prep Date.....: 04/11/11 **Analysis Date..:** 04/28/11
Prep Batch #...: 1101055
Dilution Factor: 1 **Final Wgt/Vol..:** 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4-Dinitrophenol	**59**	**(29 - 146)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	74	(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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 Work Order #...: MHCRM1AC Matrix.....: WATER
LCS Lot-Sample#: A1D210000-325
Prep Date.....: 04/21/11 Analysis Date..: 04/27/11
Prep Batch #...: 1111325
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	69	(30 - 120)	SW846 8270C
Acenaphthene	71	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	84	(34 - 151)	SW846 8270C
Pyrene	79	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	73	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	68	(30 - 115)	SW846 8270C
Pentachlorophenol	77	(30 - 150)	SW846 8270C
Phenol	50	(30 - 115)	SW846 8270C
2-Chlorophenol	68	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	74	(31 - 121)	SW846 8270C
4-Nitrophenol	64	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	69	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	68	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	77	(36 - 135)	SW846 8270C
4-Methylphenol	69	(31 - 115)	SW846 8270C
4-Nitroaniline	80	(30 - 140)	SW846 8270C
Acenaphthylene	73	(37 - 115)	SW846 8270C
Anthracene	81	(45 - 118)	SW846 8270C
Benzo(a)anthracene	77	(43 - 138)	SW846 8270C
Benzo(a)pyrene	72	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	73	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	85	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	86	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	70	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	66	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	71	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	86	(30 - 154)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 Work Order #...: MHCRM1AC Matrix.....: WATER
LCS Lot-Sample#: A1D210000-325

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	74	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	72	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	67	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	57	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	84	(43 - 122)	SW846 8270C
2-Chloronaphthalene	70	(35 - 115)	SW846 8270C
2-Methylnaphthalene	80	(32 - 115)	SW846 8270C
2-Methylphenol	70	(30 - 116)	SW846 8270C
2-Nitroaniline	77	(36 - 140)	SW846 8270C
2-Nitrophenol	68	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	67	(30 - 160)	SW846 8270C
3-Nitroaniline	79	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	82	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	80	(43 - 118)	SW846 8270C
4-Chloroaniline	43	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	39 a	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	85	(37 - 136)	SW846 8270C
Carbazole	81	(49 - 126)	SW846 8270C
Chrysene	83	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	83	(38 - 130)	SW846 8270C
Dibenzofuran	74	(40 - 115)	SW846 8270C
Diethyl phthalate	83	(43 - 132)	SW846 8270C
Dimethyl phthalate	80	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	81	(36 - 151)	SW846 8270C
Fluoranthene	84	(47 - 132)	SW846 8270C
Fluorene	76	(41 - 115)	SW846 8270C
Hexachlorobenzene	81	(42 - 123)	SW846 8270C
Hexachlorobutadiene	67	(30 - 120)	SW846 8270C
Hexachloroethane	67	(30 - 120)	SW846 8270C
Isophorone	70	(33 - 115)	SW846 8270C
Naphthalene	68	(30 - 119)	SW846 8270C
Nitrobenzene	66	(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 #...: A1D080405 **Work Order #...:** MHCRM1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D210000-325

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	78	(45 - 117)	SW846 8270C
Indeno(1,2,3-cd)pyrene	85	(37 - 130)	SW846 8270C
Di-n-butyl phthalate	85	(46 - 123)	SW846 8270C
Hexachlorocyclopenta-diene	68	(30 - 115)	SW846 8270C
Benzoic acid	28 a	(30 - 136)	SW846 8270C
Benzyl alcohol	64	(29 - 115)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
Terphenyl-d14	89	(50 - 150)
Phenol-d5	50	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	80	(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 #...: A1D080405 Work Order #...: MGP1D1AF-MS Matrix.....: WG
MS Lot-Sample #: A1D080405-002 MGP1D1AG-MSD
Date Sampled...: 04/07/11 09:01 Date Received..: 04/08/11
Prep Date.....: 04/11/11 Analysis Date..: 04/20/11
Prep Batch #...: 1101055
Dilution Factor: 1 Initial Wgt/Vol: 510 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	64	(45 - 135)			SW846 8270C
	69	(45 - 135)	7.5	(0-40)	SW846 8270C
Acenaphthene	71	(45 - 135)			SW846 8270C
	76	(45 - 135)	6.2	(0-40)	SW846 8270C
2,4-Dinitrotoluene	73	(45 - 135)			SW846 8270C
	78	(45 - 135)	6.6	(0-40)	SW846 8270C
Pyrene	68	(45 - 135)			SW846 8270C
	72	(45 - 135)	6.5	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	62	(45 - 135)			SW846 8270C
	67	(45 - 135)	8.6	(0-40)	SW846 8270C
1,4-Dichlorobenzene	69	(45 - 135)			SW846 8270C
	75	(45 - 135)	9.3	(0-40)	SW846 8270C
Pentachlorophenol	62	(45 - 135)			SW846 8270C
	65	(45 - 135)	5.0	(0-40)	SW846 8270C
Phenol	73	(45 - 135)			SW846 8270C
	80	(45 - 135)	8.8	(0-40)	SW846 8270C
2-Chlorophenol	72	(45 - 135)			SW846 8270C
	77	(45 - 135)	6.4	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	75	(45 - 135)			SW846 8270C
	80	(45 - 135)	6.4	(0-40)	SW846 8270C
4-Nitrophenol	75	(45 - 135)			SW846 8270C
	77	(45 - 135)	2.3	(0-40)	SW846 8270C
Acenaphthylene	69	(45 - 135)			SW846 8270C
	74	(45 - 135)	7.0	(0-40)	SW846 8270C
Anthracene	71	(45 - 135)			SW846 8270C
	74	(45 - 135)	5.2	(0-40)	SW846 8270C
Benzo(a)anthracene	64	(45 - 135)			SW846 8270C
	69	(45 - 135)	7.3	(0-40)	SW846 8270C
Benzo(b)fluoranthene	59	(45 - 135)			SW846 8270C
	71	(45 - 135)	18	(0-40)	SW846 8270C
Benzo(k)fluoranthene	81	(45 - 135)			SW846 8270C
	76	(45 - 135)	6.8	(0-40)	SW846 8270C
Benzo(ghi)perylene	69	(45 - 135)			SW846 8270C
	74	(45 - 135)	6.3	(0-40)	SW846 8270C
Benzo(a)pyrene	58	(45 - 135)			SW846 8270C
	60	(45 - 135)	4.4	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 Work Order #...: MGP1D1AF-MS Matrix.....: WG
MS Lot-Sample #: A1D080405-002 MGP1D1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	70	(45 - 135)			SW846 8270C
	75	(45 - 135)	6.5	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	74	(45 - 135)			SW846 8270C
	72	(45 - 135)	2.7	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	65	(45 - 135)			SW846 8270C
	71	(45 - 135)	8.8	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	68	(45 - 135)			SW846 8270C
	69	(45 - 135)	1.3	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	74	(45 - 135)			SW846 8270C
	79	(45 - 135)	7.1	(0-40)	SW846 8270C
Butyl benzyl phthalate	73	(45 - 135)			SW846 8270C
	76	(45 - 135)	4.2	(0-40)	SW846 8270C
Carbazole	71	(45 - 135)			SW846 8270C
	76	(45 - 135)	6.1	(0-40)	SW846 8270C
4-Chloroaniline	52	(45 - 135)			SW846 8270C
	56	(45 - 135)	6.7	(0-40)	SW846 8270C
2-Chloronaphthalene	70	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.7	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	73	(45 - 135)			SW846 8270C
	77	(45 - 135)	5.9	(0-40)	SW846 8270C
Chrysene	72	(45 - 135)			SW846 8270C
	72	(45 - 135)	0.62	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	70	(45 - 135)			SW846 8270C
	74	(45 - 135)	5.5	(0-40)	SW846 8270C
Dibenzofuran	70	(45 - 135)			SW846 8270C
	74	(45 - 135)	6.2	(0-40)	SW846 8270C
Di-n-butyl phthalate	74	(45 - 135)			SW846 8270C
	79	(45 - 135)	6.1	(0-40)	SW846 8270C
1,2-Dichlorobenzene	69	(45 - 135)			SW846 8270C
	75	(45 - 135)	8.1	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP1D1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-002 MGP1D1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	67	(45 - 135)			SW846 8270C
	72	(45 - 135)	7.8	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	27 a	(45 - 135)			SW846 8270C
	28 a	(45 - 135)	1.9	(0-40)	SW846 8270C
2,4-Dichlorophenol	72	(45 - 135)			SW846 8270C
	76	(45 - 135)	5.3	(0-40)	SW846 8270C
Diethyl phthalate	72	(45 - 135)			SW846 8270C
	77	(45 - 135)	7.1	(0-40)	SW846 8270C
2,4-Dimethylphenol	62	(45 - 135)			SW846 8270C
	64	(45 - 135)	3.0	(0-40)	SW846 8270C
Dimethyl phthalate	72	(45 - 135)			SW846 8270C
	75	(45 - 135)	4.4	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	67	(45 - 135)			SW846 8270C
	72	(45 - 135)	7.6	(0-40)	SW846 8270C
2,6-Dinitrotoluene	75	(45 - 135)			SW846 8270C
	78	(45 - 135)	3.9	(0-40)	SW846 8270C
Di-n-octyl phthalate	62	(45 - 135)			SW846 8270C
	66	(45 - 135)	5.8	(0-40)	SW846 8270C
Fluoranthene	73	(45 - 135)			SW846 8270C
	78	(45 - 135)	6.3	(0-40)	SW846 8270C
Fluorene	70	(45 - 135)			SW846 8270C
	75	(45 - 135)	6.7	(0-40)	SW846 8270C
Hexachlorobenzene	74	(45 - 135)			SW846 8270C
	80	(45 - 135)	7.7	(0-40)	SW846 8270C
Hexachlorobutadiene	65	(45 - 135)			SW846 8270C
	70	(45 - 135)	7.5	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	41 a	(45 - 135)			SW846 8270C
	41 a	(45 - 135)	0.56	(0-40)	SW846 8270C
Hexachloroethane	65	(45 - 135)			SW846 8270C
	70	(45 - 135)	7.8	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	69	(45 - 135)			SW846 8270C
	72	(45 - 135)	4.4	(0-40)	SW846 8270C
Isophorone	67	(45 - 135)			SW846 8270C
	71	(45 - 135)	6.5	(0-40)	SW846 8270C
2-Methylnaphthalene	79	(45 - 135)			SW846 8270C
	84	(45 - 135)	6.6	(0-40)	SW846 8270C
2-Methylphenol	70	(45 - 135)			SW846 8270C
	76	(45 - 135)	7.8	(0-40)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP1D1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-002 MGP1D1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
4-Methylphenol	72	(45 - 135)			SW846 8270C
	76	(45 - 135)	5.1	(0-40)	SW846 8270C
Naphthalene	66	(45 - 135)			SW846 8270C
	71	(45 - 135)	7.7	(0-40)	SW846 8270C
2-Nitroaniline	64	(45 - 135)			SW846 8270C
	68	(45 - 135)	6.5	(0-40)	SW846 8270C
3-Nitroaniline	59	(45 - 135)			SW846 8270C
	62	(45 - 135)	5.2	(0-50)	SW846 8270C
4-Nitroaniline	66	(45 - 135)			SW846 8270C
	70	(45 - 135)	5.6	(0-40)	SW846 8270C
Nitrobenzene	69	(45 - 135)			SW846 8270C
	73	(45 - 135)	5.8	(0-40)	SW846 8270C
2-Nitrophenol	73	(45 - 135)			SW846 8270C
	79	(45 - 135)	7.2	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	60	(45 - 135)			SW846 8270C
	63	(45 - 135)	4.4	(0-40)	SW846 8270C
Phenanthrene	71	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.6	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	75	(45 - 135)			SW846 8270C
	78	(45 - 135)	4.3	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	73	(45 - 135)			SW846 8270C
	76	(45 - 135)	4.8	(0-40)	SW846 8270C
Benzoic acid	58	(45 - 135)			SW846 8270C
	69	(45 - 135)	17	(0-40)	SW846 8270C
Benzyl alcohol	76	(45 - 135)			SW846 8270C
	82	(45 - 135)	7.2	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(50 - 150)
	69	(50 - 150)
2-Fluorobiphenyl	69	(50 - 150)
	73	(50 - 150)
Terphenyl-d14	79	(50 - 150)
	84	(50 - 150)
Phenol-d5	74	(50 - 150)
	79	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP1D1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-002 MGP1D1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	72	(50 - 150)
	77	(50 - 150)
2,4,6-Tribromophenol	79	(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

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP1D1AT-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-002 MGP1D1AU-MSD
Date Sampled...: 04/07/11 09:01 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/28/11
Prep Batch #...: 1101055
Dilution Factor: 1 **Initial Wgt/Vol:** 500 mL **Final Wgt/Vol..:** 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4-Dinitrophenol	**55**	**(45 - 135)**			**SW846 8270C**
	60	**(45 - 135)**	**5.8**	**(0-40)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
	69	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
	65	(50 - 150)
Terphenyl-d14	70	(50 - 150)
	75	(50 - 150)
Phenol-d5	69	(50 - 150)
	74	(50 - 150)
2-Fluorophenol	69	(50 - 150)
	73	(50 - 150)
2,4,6-Tribromophenol	68	(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

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 Work Order #...: MGP131AT-MS Matrix.....: WG
MS Lot-Sample #: A1D080405-018 MGP131AU-MSD
Date Sampled...: 04/07/11 08:59 Date Received..: 04/08/11
Prep Date.....: 04/21/11 Analysis Date..: 04/27/11
Prep Batch #...: 1111325
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	64	(45 - 135)			SW846 8270C
	70	(45 - 135)	8.3	(0-40)	SW846 8270C
Acenaphthene	64	(45 - 135)			SW846 8270C
	69	(45 - 135)	7.0	(0-40)	SW846 8270C
2,4-Dinitrotoluene	69	(45 - 135)			SW846 8270C
	75	(45 - 135)	8.1	(0-40)	SW846 8270C
Pyrene	64	(45 - 135)			SW846 8270C
	71	(45 - 135)	10	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	65	(45 - 135)			SW846 8270C
	72	(45 - 135)	10	(0-40)	SW846 8270C
1,4-Dichlorobenzene	63	(45 - 135)			SW846 8270C
	69	(45 - 135)	9.1	(0-40)	SW846 8270C
Pentachlorophenol	64	(45 - 135)			SW846 8270C
	71	(45 - 135)	12	(0-40)	SW846 8270C
Phenol	38 a	(45 - 135)			SW846 8270C
	38 a	(45 - 135)	1.6	(0-40)	SW846 8270C
2-Chlorophenol	62	(45 - 135)			SW846 8270C
	69	(45 - 135)	9.8	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	66	(45 - 135)			SW846 8270C
	70	(45 - 135)	5.2	(0-40)	SW846 8270C
4-Nitrophenol	44 a	(45 - 135)			SW846 8270C
	45	(45 - 135)	2.9	(0-40)	SW846 8270C
Acenaphthylene	66	(45 - 135)			SW846 8270C
	71	(45 - 135)	7.4	(0-40)	SW846 8270C
Anthracene	66	(45 - 135)			SW846 8270C
	73	(45 - 135)	9.9	(0-40)	SW846 8270C
Benzo(a)anthracene	62	(45 - 135)			SW846 8270C
	69	(45 - 135)	11	(0-40)	SW846 8270C
Benzo(b)fluoranthene	58	(45 - 135)			SW846 8270C
	67	(45 - 135)	14	(0-40)	SW846 8270C
Benzo(k)fluoranthene	74	(45 - 135)			SW846 8270C
	71	(45 - 135)	4.6	(0-40)	SW846 8270C
Benzo(ghi)perylene	68	(45 - 135)			SW846 8270C
	71	(45 - 135)	3.6	(0-40)	SW846 8270C
Benzo(a)pyrene	59	(45 - 135)			SW846 8270C
	63	(45 - 135)	6.5	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 Work Order #...: MGP131AT-MS Matrix.....: WG
MS Lot-Sample #: A1D080405-018 MGP131AU-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	65	(45 - 135)			SW846 8270C
	70	(45 - 135)	8.0	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	60	(45 - 135)			SW846 8270C
	68	(45 - 135)	13	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	65	(45 - 135)			SW846 8270C
	71	(45 - 135)	9.3	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	67	(45 - 135)			SW846 8270C
	71	(45 - 135)	5.9	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	67	(45 - 135)			SW846 8270C
	75	(45 - 135)	11	(0-40)	SW846 8270C
Butyl benzyl phthalate	70	(45 - 135)			SW846 8270C
	76	(45 - 135)	8.5	(0-40)	SW846 8270C
Carbazole	66	(45 - 135)			SW846 8270C
	73	(45 - 135)	11	(0-40)	SW846 8270C
4-Chloroaniline	11 a	(45 - 135)			SW846 8270C
	10 a	(45 - 135)	13	(0-40)	SW846 8270C
2-Chloronaphthalene	64	(45 - 135)			SW846 8270C
	70	(45 - 135)	9.0	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	33 a	(45 - 135)			SW846 8270C
	36 a	(45 - 135)	8.9	(0-40)	SW846 8270C
Chrysene	69	(45 - 135)			SW846 8270C
	73	(45 - 135)	5.3	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	67	(45 - 135)			SW846 8270C
	71	(45 - 135)	5.6	(0-40)	SW846 8270C
Dibenzofuran	65	(45 - 135)			SW846 8270C
	70	(45 - 135)	7.8	(0-40)	SW846 8270C
Di-n-butyl phthalate	69	(45 - 135)			SW846 8270C
	76	(45 - 135)	9.2	(0-40)	SW846 8270C
1,2-Dichlorobenzene	62	(45 - 135)			SW846 8270C
	69	(45 - 135)	9.6	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP131AT-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-018 MGP131AU-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	63	(45 - 135)			SW846 8270C
	67	(45 - 135)	7.0	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	54	(45 - 135)			SW846 8270C
	58	(45 - 135)	7.1	(0-40)	SW846 8270C
2,4-Dichlorophenol	66	(45 - 135)			SW846 8270C
	72	(45 - 135)	8.3	(0-40)	SW846 8270C
Diethyl phthalate	68	(45 - 135)			SW846 8270C
	73	(45 - 135)	6.8	(0-40)	SW846 8270C
2,4-Dimethylphenol	61	(45 - 135)			SW846 8270C
	65	(45 - 135)	6.4	(0-40)	SW846 8270C
Dimethyl phthalate	68	(45 - 135)			SW846 8270C
	73	(45 - 135)	7.3	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	65	(45 - 135)			SW846 8270C
	75	(45 - 135)	15	(0-40)	SW846 8270C
2,4-Dinitrophenol	50	(45 - 135)			SW846 8270C
	56	(45 - 135)	11	(0-40)	SW846 8270C
2,6-Dinitrotoluene	71	(45 - 135)			SW846 8270C
	78	(45 - 135)	8.8	(0-40)	SW846 8270C
Di-n-octyl phthalate	63	(45 - 135)			SW846 8270C
	67	(45 - 135)	5.4	(0-40)	SW846 8270C
Fluoranthene	67	(45 - 135)			SW846 8270C
	75	(45 - 135)	11	(0-40)	SW846 8270C
Fluorene	64	(45 - 135)			SW846 8270C
	70	(45 - 135)	8.2	(0-40)	SW846 8270C
Hexachlorobenzene	67	(45 - 135)			SW846 8270C
	73	(45 - 135)	8.8	(0-40)	SW846 8270C
Hexachlorobutadiene	62	(45 - 135)			SW846 8270C
	68	(45 - 135)	9.4	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	64	(45 - 135)			SW846 8270C
	70	(45 - 135)	9.3	(0-40)	SW846 8270C
Hexachloroethane	64	(45 - 135)			SW846 8270C
	70	(45 - 135)	10	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	67	(45 - 135)			SW846 8270C
	71	(45 - 135)	5.7	(0-40)	SW846 8270C
Isophorone	65	(45 - 135)			SW846 8270C
	70	(45 - 135)	8.0	(0-40)	SW846 8270C
2-Methylnaphthalene	74	(45 - 135)			SW846 8270C
	80	(45 - 135)	7.8	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP131AT-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-018 MGP131AU-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	62	(45 - 135)			SW846 8270C
	64	(45 - 135)	4.0	(0-40)	SW846 8270C
4-Methylphenol	59	(45 - 135)			SW846 8270C
	63	(45 - 135)	6.5	(0-40)	SW846 8270C
Naphthalene	62	(45 - 135)			SW846 8270C
	69	(45 - 135)	11	(0-40)	SW846 8270C
2-Nitroaniline	66	(45 - 135)			SW846 8270C
	74	(45 - 135)	11	(0-40)	SW846 8270C
3-Nitroaniline	60	(45 - 135)			SW846 8270C
	61	(45 - 135)	2.4	(0-50)	SW846 8270C
4-Nitroaniline	65	(45 - 135)			SW846 8270C
	71	(45 - 135)	8.8	(0-40)	SW846 8270C
Nitrobenzene	61	(45 - 135)			SW846 8270C
	67	(45 - 135)	8.7	(0-40)	SW846 8270C
2-Nitrophenol	64	(45 - 135)			SW846 8270C
	70	(45 - 135)	7.9	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	64	(45 - 135)			SW846 8270C
	70	(45 - 135)	9.1	(0-40)	SW846 8270C
Phenanthrene	64	(45 - 135)			SW846 8270C
	71	(45 - 135)	10	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	69	(45 - 135)			SW846 8270C
	75	(45 - 135)	7.5	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	65	(45 - 135)			SW846 8270C
	71	(45 - 135)	8.4	(0-40)	SW846 8270C
Benzoic acid	32 a	(45 - 135)			SW846 8270C
	24 a	(45 - 135)	28	(0-40)	SW846 8270C
Benzyl alcohol	51	(45 - 135)			SW846 8270C
	52	(45 - 135)	3.3	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	61	(50 - 150)
	67	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
	67	(50 - 150)
Terphenyl-d14	72	(50 - 150)
	77	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP131AT-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-018 MGP131AU-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	37 *	(50 - 150)
	37 *	(50 - 150)
2-Fluorophenol	51	(50 - 150)
	54	(50 - 150)
2,4,6-Tribromophenol	69	(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.

* Surrogate recovery is outside stated control limits.

Data File: \\cansvr11\dd\chem\MSS\a4hp10.i\10420a.b\QCMRLCL.D Page 1
Report Date: 20-Apr-2011 15:43

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa00195
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: qcmrlcl
Level: LOW Operator: 001710
Data Type: MS DATA SampleType: mrl
SpikeList File: qcmrl.spk Quant Type: ISTD
Sublist File: qcmrl.sub
Method File: \\cansvr11\dd\chem\MSS\a4hp10.i\10420a.b\8270C-625A.m
Misc Info:

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
82	Acenaphthene	10.000	10.310	103.10	70-130
79	Acenaphthylene	10.000	9.9068	99.07	70-130
116	Anthracene	10.000	9.8844	98.84	70-130
136	Benzo(a)Anthracene	10.000	9.6286	96.29	70-130
141	Benzo(b)fluoranthe	10.000	9.2634	92.63	70-130
151	Benzo(g,h,i)peryle	10.000	9.8320	98.32	70-130
146	Benzo(a)pyrene	10.000	9.5105	95.10	70-130
29	Benzyl Alcohol	10.000	10.408	104.08	70-130
44	bis(2-Chloroethoxy	10.000	10.172	101.72	70-130
23	bis(2-Chloroethyl)	10.000	11.007	110.07	70-130
31	bis(2-Chloroisopro	10.000	9.6582	96.58	70-130
139	bis(2-ethylhexyl)P	10.000	9.9772	99.77	70-130
106	4-Bromophenyl-phen	10.000	10.286	102.86	70-130
131	Butylbenzylphthala	10.000	9.9190	99.19	70-130
52	4-Chloroaniline	10.000	10.000	100.01	70-130
70	2-Chloronaphthalen	10.000	10.179	101.79	70-130
95	4-Chlorophenyl-phe	10.000	10.433	104.33	70-130
137	Chrysene	10.000	9.9282	99.28	70-130
150	Dibenz(a,h)anthrac	10.000	9.9376	99.38	70-130
86	Dibenzofuran	10.000	10.069	100.69	70-130
120	Di-n-Butylphthalat	10.000	10.119	101.19	70-130
28	1,2-Dichlorobenzen	10.000	10.565	105.65	70-130
26	1,3-Dichlorobenzen	10.000	10.376	103.76	70-130
27	1,4-Dichlorobenzen	10.000	10.452	104.52	70-130
135	3,3'-Dichlorobenzi	10.000	9.6823	96.82	70-130
93	Diethylphthalate	10.000	10.265	102.65	70-130
76	Dimethylphthalate	10.000	10.224	102.24	70-130
87	2,4-Dinitrotoluene	10.000	10.330	103.30	70-130
78	2,6-Dinitrotoluene	10.000	10.523	105.23	70-130
140	Di-n-octylphthalat	10.000	9.5528	95.53	70-130
123	Fluoranthene	10.000	9.9145	99.14	70-130
94	Fluorene	10.000	10.140	101.40	70-130
107	Hexachlorobenzene	10.000	10.708	107.08	70-130
56	Hexachlorobutadien	10.000	10.193	101.93	70-130
64	Hexachlorocyclopen	10.000	8.2689	82.69	70-130
34	Hexachloroethane	10.000	10.329	103.29	70-130
149	Indeno(1,2,3-cd)py	10.000	10.122	101.22	70-130
41	Isophorone	10.000	9.9364	99.36	70-130
63	1-Methylnaphthalen	10.000	10.068	100.68	70-130
62	2-Methylnaphthalen	10.000	9.9964	99.96	70-130

4/29/11

Good for everything except:
4,6-Dinitro-2-methylphenol
2,4 Dinitrophenol
4-Nitrophenol
Pentachlorophenol

4/20/11 @1603

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
51	Naphthalene	10.000	9.7881	97.88	70-130
73	2-Nitroaniline	10.000	10.206	102.06	70-130
81	3-Nitroaniline	10.000	10.177	101.77	70-130
96	4-Nitroaniline	10.000	10.495	104.95	70-130
35	Nitrobenzene	10.000	9.9410	99.41	70-130
32	N-Nitroso-di-n-pro	10.000	10.346	103.46	70-130
99	N-Nitrosodiphenyla	10.000	10.148	101.48	70-130
115	Phenanthrene	10.000	9.9665	99.67	70-130
125	Pyrene	10.000	9.8230	98.23	70-130
50	1,2,4-Trichloroben	10.000	9.9329	99.33	70-130
49	Benzoic Acid	20.000	15.157	75.78	70-130
59	4-Chloro-3-Methylp	10.000	10.076	100.76	70-130
24	2-Chlorophenol	10.000	10.397	103.97	70-130
48	2,4-Dichlorophenol	10.000	10.180	101.80	70-130
43	2,4-Dimethylphenol	10.000	9.9470	99.47	70-130
98	4,6-Dinitro-2-meth	10.000	6.0972	60.97*	70-130
83	2,4-Dinitrophenol	20.000	8.6144	NT 43.07*	70-130
30	2-Methylphenol	10.000	10.216	102.16	70-130
192	4-Methylphenol	10.000	10.393	103.93	70-130
42	2-Nitrophenol	10.000	9.5389	95.39	70-130
85	4-Nitrophenol	10.000	5.1117	51.12*	70-130
111	Pentachlorophenol	20.000	11.018	55.09*	70-130
22	Phenol	10.000	10.274	102.74	70-130
67	2,4,5-Trichlorophe	10.000	9.2361	92.36	70-130
66	2,4,6-Trichlorophe	10.000	9.3332	93.33	70-130
119	Carbazole	10.000	10.210	102.10	70-130
142	Benzo(k)fluoranthe	10.000	10.334	103.34	70-130
37	Acetophenone	10.000	10.566	105.66	70-130
209	Benzaldehyde	10.000	11.529	115.29	70-130
210	Caprolactam	10.000	9.2553	92.55	70-130
211	1,1'-Biphenyl	10.000	10.220	102.20	70-130
212	Atrazine	10.000	10.178	101.78	70-130
21	Aniline	10.000	9.9956	99.96	70-130
10	N-Nitrosodimethyla	10.000	10.230	102.30	70-130
80	1,2-Dinitrobenzene	10.000	10.307	103.07	70-130
91	2,3,5,6-Tetrachlor	10.000	8.2646	82.65	70-130

Reanalyzed 4/28/11

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1D080405

Lab File ID: 1DF0427 DFTPP Injection Date: 04/27/11

Instrument ID: A4HP10 DFTPP Injection Time: 0905

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	55.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	47.8
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	25.0 - 75.0% of mass 198	56.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	20.5
365	Greater than 0.75% of mass 198	1.94
441	Present, but less than mass 443	8.1
442	40.0 - 110.0% of mass 198	50.4
443	15.0 - 24.0% of mass 442	10.3 (20.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD006	L6	1SMH0427	04/27/11	0924
02	MHCRMBLK	MHCRM1AA	MHCRM1AA	04/27/11	1002
03	MHCRMCHK	MHCRM1AC	MHCRM1AC	04/27/11	1021
04	FWGLL2MW-269	MGP132AE	MGP132AE	04/27/11	1040
05	FWGLL2MW-269	MGP131AT	MGP131AT	04/27/11	1059
06	FWGLL2MW-269	MGP131AU	MGP131AU	04/27/11	1118
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1D080405

Lab File ID: 1DF0420 DFTPP Injection Date: 04/20/11

Instrument ID: A4HP10 DFTPP Injection Time: 0912

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	49.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	48.3
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	25.0 - 75.0% of mass 198	53.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	24.0
365	Greater than 0.75% of mass 198	2.29
441	Present, but less than mass 443	11.9
442	40.0 - 110.0% of mass 198	64.9
443	15.0 - 24.0% of mass 442	12.7 (19.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD006	L6	1SMH0420	04/20/11	0930
02	MGTVTBLK	MGTVT1AA	MGTVT1AA	04/20/11	1008
03	MGTVTCHK	MGTVT1AC	MGTVT1AC	04/20/11	1027
04	FWGBKGMW-018	MGP1D1AE	MGP1D1AE	04/20/11	1200
05	FWGBKGMW-018	MGP1D1AF	MGP1D1AF	04/20/11	1219
06	FWGBKGMW-018	MGP1D1AG	MGP1D1AG	04/20/11	1238
07	FWGLL2MW-267	MGP1P1AC	MGP1P1AC	04/20/11	1256
08	FWGLL3MW-239	MGP1X1AC	MGP1X1AC	04/20/11	1315
09	FWGBKGMW-005	MGP1H1AC	MGP1H1AC	04/20/11	1334
10	FWGLL3MW-236	MGP161AC	MGP161AC	04/20/11	1352
11	FWGASYMW-003	MGP181AC	MGP181AC	04/20/11	1411
12	FWGEQUIPRINS	MGP2A1AC	MGP2A1AC	04/20/11	1430
13	FWGLL2MW-DUP	MGP1R1AC	MGP1R1AC	04/20/11	1448
14	FWGLL2MW-266	MGP1V1AC	MGP1V1AC	04/20/11	1507
15	FWGCBLMW-004	MGP1L1AC	MGP1L1AC	04/20/11	1526
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22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

2,4-Dinitrophenol only

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1D080405

Lab File ID: 1DF0428 DFTPP Injection Date: 04/28/11

Instrument ID: A4HP10 DFTPP Injection Time: 0858

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	48.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	42.5
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	25.0 - 75.0% of mass 198	52.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	21.5
365	Greater than 0.75% of mass 198	2.07
441	Present, but less than mass 443	9.4
442	40.0 - 110.0% of mass 198	58.5
443	15.0 - 24.0% of mass 442	12.0 (20.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD006	L6	1SMH0428	04/28/11	0917
02	MGTVTBLK	MGTVT1AD	MGTVT1AD	04/28/11	1013
03	MGTVTCHK	MGTVT1AE	MGTVT1AE	04/28/11	1032
04	FWGBKGMW-018	MGP1D2AE	MGP1D2AE	04/28/11	1051
05	FWGBKGMW-018	MGP1D1AT	MGP1D1AT	04/28/11	1110
06	FWGBKGMW-018	MGP1D1AU	MGP1D1AU	04/28/11	1129
07	FWGLL2MW-267	MGP1P2AC	MGP1P2AC	04/28/11	1147
08	FWGLL2MW-DUP	MGP1R2AC	MGP1R2AC	04/28/11	1206
09	FWGCBLMW-004	MGP1L2AC	MGP1L2AC	04/28/11	1225
10	FWGLL3MW-239	MGP1X2AC	MGP1X2AC	04/28/11	1244
11	FWGBKGMW-005	MGP1H2AC	MGP1H2AC	04/28/11	1303
12	FWGLL3MW-236	MGP162AC	MGP162AC	04/28/11	1321
13	FWGASYMW-003	MGP182AC	MGP182AC	04/28/11	1340
14	FWGEQUIPRINS	MGP2A2AC	MGP2A2AC	04/28/11	1359
15	FWGLL2MW-266	MGP1V2AC	MGP1V2AC	04/28/11	1418
16					
17					
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19					
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1D080405

Lab File ID: 1DF0426 DFTPP Injection Date: 04/26/11

Instrument ID: A4HP10 DFTPP Injection Time: 1700

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	58.4
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	47.7
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	25.0 - 75.0% of mass 198	57.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	20.9
365	Greater than 0.75% of mass 198	2.00
441	Present, but less than mass 443	7.4
442	40.0 - 110.0% of mass 198	49.7
443	15.0 - 24.0% of mass 442	10.4 (20.9)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD005	L5	1SMM0426	04/26/11	1719
02	SSTD004	L4	1SM0426	04/26/11	1738
03	SSTD003	L3	1SML0426	04/26/11	1757
04	SSTD002	L2	1SL0426	04/26/11	1817
05	SSTD001	L1	1SLL0426	04/26/11	1836
06	SSTD009	L9	1SHHH0426	04/26/11	1855
07	SSTD008	L8	1SHH0426	04/26/11	1914
08	SSTD007	L7	1SH0426	04/26/11	1933
09	SSTD006	L6	1SMH0426	04/26/11	1953
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PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 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 1.1 and 2.9 °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 4/15/11, 4/19/11 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?	✓			Instrument A2HP9 3/15/11	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%?		✓			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%?		✓		Instrument A2HP9 4/15/11 @ 0632, tox 4/15/11 @ 0352	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a CCV run every 12 hours?	✓				LCG Table 4
16. Was the %D for all target analytes ≤5%? 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.	LCG Appendix C >UL=J; <30%=J/R 30%-LL=J/UJ;
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%?	✓				*Was QAPP Table 3-2, Pj*
26. Were surrogate recoveries 50-150%?		✓		With the exception of sample FWGEQUIPRinse4-1760-GW, the surrogate, DCB, recovered below control limits of 50%, but above 10% in the field samples from this SDG. All sample results, with the exception of sample FWGEQUIPRinse4-1760-GW, were qualified as estimated, "UJ".	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R
27. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓				QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPD's ≤ 40?			✓	There were no detected results above the RL.	LCG Table 4 >40 RPD=J
29. Were reported sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
30. Were laboratory-generated Quality Control Exception Reports issued?		✓			
31. 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 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: FWGBKGmw-018C-1710-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-002 **Work Order #...:** MGP1D1AH **Matrix.....:** WG
Date Sampled...: 04/07/11 09:01 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1101049
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	66	(50 - 150)
Decachlorobiphenyl	27 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-005C-1705-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-004 **Work Order #...:** MGP1H1AD **Matrix.....:** WG
Date Sampled...: 04/07/11 11:31 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1101049
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	66	(50 - 150)
Decachlorobiphenyl	18 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: **FWGCBLmw-004C-1714-GW**

GC Semivolatiles

Lot-Sample #...: A1D080405-006 **Work Order #...:** MGP1L1AD **Matrix.....:** WG
Date Sampled...: 04/07/11 13:21 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1101049
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	73	(50 - 150)
Decachlorobiphenyl	23 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-009 **Work Order #...:** MGP1P1AD **Matrix.....:** WG
Date Sampled...: 04/07/11 08:52 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1101049
Dilution Factor: 1 **Initial Wgt/Vol:** 910 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	55	(50 - 150)
Decachlorobiphenyl	16 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1748-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-011 **Work Order #...:** MGP1R1AD **Matrix.....:** WG
Date Sampled...: 04/07/11 10:10 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1101049
Dilution Factor: 1 **Initial Wgt/Vol:** 970 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	60	(50 - 150)
Decachlorobiphenyl	17 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1721-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-013 **Work Order #...:** MGP1V1AD **Matrix.....:** WG
Date Sampled...: 04/07/11 11:04 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1101049
Dilution Factor: 1 **Initial Wgt/Vol:** 910 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	66	(50 - 150)
Decachlorobiphenyl	27 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1725-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-015 **Work Order #...:** MGP1X1AD **Matrix.....:** WG
Date Sampled...: 04/07/11 12:32 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1101049
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	72	(50 - 150)
Decachlorobiphenyl	25 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1723-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-018 **Work Order #...:** MGP131AH **Matrix.....:** WG
Date Sampled...: 04/07/11 08:59 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1101049
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	66	(50 - 150)
Decachlorobiphenyl	23 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1724-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-020 Work Order #...: MGP161AD Matrix.....: WG
Date Sampled...: 04/07/11 11:59 Date Received..: 04/08/11
Prep Date.....: 04/11/11 Analysis Date..: 04/18/11
Prep Batch #...: 1101049
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	78	(50 - 150)
Decachlorobiphenyl	36 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1704-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-022 **Work Order #...:** MGP181AD **Matrix.....:** WG
Date Sampled...: 04/07/11 13:33 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1101049
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	28 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-024 **Work Order #...:** MGP2A1AD **Matrix.....:** WQ
Date Sampled...: 04/07/11 14:33 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/18/11
Prep Batch #...: 1101049
Dilution Factor: 1 **Initial Wgt/Vol:** 970 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	86	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGTVH1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D110000-049

Prep Date.....: 04/11/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/28/11 **Prep Batch #...:** 1101049
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	78	(50 - 150)
Decachlorobiphenyl	85	(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 #...: A1D080405 Work Order #...: MGTVH1AC Matrix.....: WATER
LCS Lot-Sample#: A1D110000-049
Prep Date.....: 04/11/11 Analysis Date..: 04/28/11
Prep Batch #...: 1101049
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	**79**	**(50 - 135)**	**SW846 8081A**
delta-BHC	**75**	**(58 - 160)**	**SW846 8081A**
gamma-BHC (Lindane)	**83**	**(58 - 127)**	**SW846 8081A**
Heptachlor	**83**	**(48 - 150)**	**SW846 8081A**
Aldrin	**79**	**(53 - 128)**	**SW846 8081A**
Heptachlor epoxide	**80**	**(50 - 127)**	**SW846 8081A**
Endosulfan I	**52**	**(50 - 160)**	**SW846 8081A**
Dieldrin	**83**	**(50 - 124)**	**SW846 8081A**
4,4'-DDE	**79**	**(50 - 130)**	**SW846 8081A**
Endrin	**72**	**(50 - 137)**	**SW846 8081A**
Endosulfan II	**57**	**(50 - 144)**	**SW846 8081A**
4,4'-DDD	**83**	**(50 - 137)**	**SW846 8081A**
Endosulfan sulfate	**80**	**(50 - 160)**	**SW846 8081A**
4,4'-DDT	**86**	**(50 - 145)**	**SW846 8081A**
Methoxychlor	**86**	**(50 - 160)**	**SW846 8081A**
Endrin ketone	**84**	**(50 - 150)**	**SW846 8081A**
Endrin aldehyde	**75**	**(30 - 160)**	**SW846 8081A**
alpha-Chlordane	**80**	**(50 - 122)**	**SW846 8081A**
gamma-Chlordane	**80**	**(50 - 130)**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	99	(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 DATA REPORT

GC Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGTVH1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D110000-049
Prep Date.....: 04/11/11 **Analysis Date..:** 04/28/11
Prep Batch #...: 1101049
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
alpha-BHC	1.0	0.84	ug/L	84	**SW846 8081A**
beta-BHC	1.0	0.79	ug/L	79	**SW846 8081A**
delta-BHC	1.0	0.75	ug/L	75	**SW846 8081A**
gamma-BHC (Lindane)	1.0	0.83	ug/L	83	**SW846 8081A**
Heptachlor	1.0	0.83	ug/L	83	**SW846 8081A**
Aldrin	1.0	0.79	ug/L	79	**SW846 8081A**
Heptachlor epoxide	1.0	0.80	ug/L	80	**SW846 8081A**
Endosulfan I	1.0	0.52	ug/L	52	**SW846 8081A**
Dieldrin	1.0	0.83	ug/L	83	**SW846 8081A**
4,4'-DDE	1.0	0.79	ug/L	79	**SW846 8081A**
Endrin	1.0	0.72	ug/L	72	**SW846 8081A**
Endosulfan II	1.0	0.57	ug/L	57	**SW846 8081A**
4,4'-DDD	1.0	0.83	ug/L	83	**SW846 8081A**
Endosulfan sulfate	1.0	0.80	ug/L	80	**SW846 8081A**
4,4'-DDT	1.0	0.86	ug/L	86	**SW846 8081A**
Methoxychlor	1.0	0.86	ug/L	86	**SW846 8081A**
Endrin ketone	1.0	0.84	ug/L	84	**SW846 8081A**
Endrin aldehyde	1.0	0.75	ug/L	75	**SW846 8081A**
alpha-Chlordane	1.0	0.80	ug/L	80	**SW846 8081A**
gamma-Chlordane	1.0	0.80	ug/L	80	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	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

GC Semivolatiles

Client Lot #...: A1D080405 Work Order #...: MGP131AJ-MS Matrix.....: WG
MS Lot-Sample #: A1D080405-018 MGP131AK-MSD
Date Sampled...: 04/07/11 08:59 Date Received..: 04/08/11
Prep Date.....: 04/11/11 Analysis Date..: 04/28/11
Prep Batch #...: 1101049
Dilution Factor: 2 Initial Wgt/Vol: 515 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	97	(50 - 150)			SW846 8081A
	92	(50 - 150)	6.0	(0-50)	SW846 8081A
beta-BHC	92	(50 - 150)			SW846 8081A
	85	(50 - 150)	7.9	(0-50)	SW846 8081A
delta-BHC	87	(50 - 150)			SW846 8081A
	78	(50 - 150)	12	(0-50)	SW846 8081A
gamma-BHC (Lindane)	97	(50 - 150)			SW846 8081A
	89	(50 - 150)	8.8	(0-50)	SW846 8081A
Heptachlor	100	(50 - 150)			SW846 8081A
	89	(50 - 150)	11	(0-50)	SW846 8081A
Aldrin	91	(50 - 150)			SW846 8081A
	84	(50 - 150)	7.3	(0-50)	SW846 8081A
Heptachlor epoxide	94	(50 - 150)			SW846 8081A
	86	(50 - 150)	8.3	(0-50)	SW846 8081A
Endosulfan I	59	(50 - 150)			SW846 8081A
	54	(50 - 150)	9.0	(0-50)	SW846 8081A
Dieldrin	96	(50 - 150)			SW846 8081A
	88	(50 - 150)	9.2	(0-50)	SW846 8081A
4,4'-DDE	89	(50 - 150)			SW846 8081A
	80	(50 - 150)	11	(0-50)	SW846 8081A
Endrin	98	(50 - 150)			SW846 8081A
	92	(50 - 150)	6.9	(0-50)	SW846 8081A
Endosulfan II	67	(50 - 150)			SW846 8081A
	60	(50 - 150)	12	(0-50)	SW846 8081A
4,4'-DDD	98	(50 - 150)			SW846 8081A
	85	(50 - 150)	14	(0-50)	SW846 8081A
Endosulfan sulfate	95	(50 - 150)			SW846 8081A
	84	(50 - 150)	13	(0-50)	SW846 8081A
4,4'-DDT	100	(50 - 150)			SW846 8081A
	88	(50 - 150)	13	(0-50)	SW846 8081A
Methoxychlor	109	(50 - 150)			SW846 8081A
	98	(50 - 150)	10	(0-50)	SW846 8081A
Endrin ketone	97	(50 - 150)			SW846 8081A
	84	(50 - 150)	15	(0-50)	SW846 8081A
Endrin aldehyde	81	(50 - 150)			SW846 8081A
	73	(50 - 150)	9.7	(0-50)	SW846 8081A
alpha-Chlordane	93	(50 - 150)			SW846 8081A
	86	(50 - 150)	8.1	(0-50)	SW846 8081A
gamma-Chlordane	93	(50 - 150)			SW846 8081A
	84	(50 - 150)	10	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP131AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-018 MGP131AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	97	(50 - 150)
	93	(50 - 150)
Decachlorobiphenyl	74	(50 - 150)
	75	(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 #...: A1D080405 Work Order #...: MGP1D1AJ-MS Matrix.....: WG
MS Lot-Sample #: A1D080405-002 MGP1D1AK-MSD
Date Sampled...: 04/07/11 09:01 Date Received..: 04/08/11
Prep Date.....: 04/11/11 Analysis Date..: 04/28/11
Prep Batch #...: 1101049
Dilution Factor: 2 Initial Wgt/Vol: 500 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	95	(50 - 150)			SW846 8081A
	97	(50 - 150)	2.1	(0-50)	SW846 8081A
beta-BHC	91	(50 - 150)			SW846 8081A
	92	(50 - 150)	0.43	(0-50)	SW846 8081A
delta-BHC	85	(50 - 150)			SW846 8081A
	87	(50 - 150)	2.0	(0-50)	SW846 8081A
gamma-BHC (Lindane)	94	(50 - 150)			SW846 8081A
	95	(50 - 150)	1.2	(0-50)	SW846 8081A
Heptachlor	96	(50 - 150)			SW846 8081A
	98	(50 - 150)	2.2	(0-50)	SW846 8081A
Aldrin	89	(50 - 150)			SW846 8081A
	90	(50 - 150)	1.1	(0-50)	SW846 8081A
Heptachlor epoxide	92	(50 - 150)			SW846 8081A
	93	(50 - 150)	0.37	(0-50)	SW846 8081A
Endosulfan I	59	(50 - 150)			SW846 8081A
	58	(50 - 150)	1.1	(0-50)	SW846 8081A
Dieldrin	96	(50 - 150)			SW846 8081A
	95	(50 - 150)	0.94	(0-50)	SW846 8081A
4,4'-DDE	92	(50 - 150)			SW846 8081A
	89	(50 - 150)	3.7	(0-50)	SW846 8081A
Endrin	97	(50 - 150)			SW846 8081A
	97	(50 - 150)	0.25	(0-50)	SW846 8081A
Endosulfan II	68	(50 - 150)			SW846 8081A
	67	(50 - 150)	2.2	(0-50)	SW846 8081A
4,4'-DDD	100	(50 - 150)			SW846 8081A
	96	(50 - 150)	4.7	(0-50)	SW846 8081A
Endosulfan sulfate	98	(50 - 150)			SW846 8081A
	95	(50 - 150)	2.3	(0-50)	SW846 8081A
4,4'-DDT	106	(50 - 150)			SW846 8081A
	103	(50 - 150)	2.6	(0-50)	SW846 8081A
Methoxychlor	113	(50 - 150)			SW846 8081A
	110	(50 - 150)	3.2	(0-50)	SW846 8081A
Endrin ketone	99	(50 - 150)			SW846 8081A
	97	(50 - 150)	1.9	(0-50)	SW846 8081A
Endrin aldehyde	82	(50 - 150)			SW846 8081A
	81	(50 - 150)	1.8	(0-50)	SW846 8081A
alpha-Chlordane	92	(50 - 150)			SW846 8081A
	92	(50 - 150)	0.10	(0-50)	SW846 8081A
gamma-Chlordane	93	(50 - 150)			SW846 8081A
	92	(50 - 150)	0.91	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGP1D1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-002 MGP1D1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	100	(50 - 150)
	103	(50 - 150)
Decachlorobiphenyl	99	(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 North Canton

PESTICIDES 8081/608

Data file : \\cansvr11\dd\chem\GCS\a2hp9.i\110428-1.b\P9428004.D
Lab Smp Id: PEM F053
Inj Date : 28-APR-2011 02:27
Operator : 093905 Inst ID: a2hp9.i
Smp Info : PEM F053
Misc Info : 12-PEM.SUB
Comment :
Method : \\cansvr11\dd\chem\GCS\a2hp9.i\110428-1.b\PEST9.m
Meth Date : 28-Apr-2011 14:55 vandorenc Quant Type: ESTD
Cal Date : 31-MAR-2011 14:15 Cal File: P9033116.D
Als bottle: 4 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 12-PEM.SUB
Target Version: 4.14 Sample Matrix: None
Processing Host: CANPGCSV23

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ng)	TARGET RANGE	RATIO
4 alpha-BHC					CAS #: 319-84-6		
4.587	4.589	-0.002	1007536	0.00974	0.009745		
5 gamma-BHC (Lindane)					CAS #: 58-89-9		
5.021	5.023	-0.002	1379068	0.01060	0.01060		
6 beta-BHC					CAS #: 319-85-7		
5.171	5.174	-0.003	322126	0.01011	0.01011		
16 4,4'-DDE					CAS #: 72-55-9		
8.706	8.707	-0.001	94619	7e-004	0.0007176		
18 Endrin					CAS #: 72-20-8		

Peaks not detected for Quant. or Qual. signal(s).

20 4,4'-DDD					CAS #: 72-54-8		
9.861	9.866	-0.005	347206	0.00395	0.003947		
22 Endosulfan II					CAS #: 33213-65-9		

Peaks not detected for Quant. or Qual. signal(s).

23 4,4'-DDT					CAS #: 50-29-3		
10.341	10.346	-0.005	9299574	0.11130	0.1113		
25 Endrin aldehyde					CAS #: 7421-93-4		

Data File: \\cansvr11\dd\chem\GCS\a2hp9.i\110428-1.b/P9428004.D
Report Date: 04/28/2011

EVALB Degradation Report

Instrument ID: a2hp9.i Injection Date: 28-APR-2011 02:27
Lab File ID: P9428004.D Lab Sample ID: PEM F053
Analysis Type: NONE Method File: \\cansvr11\dd\chem\GCS\a2hp9.i\110428-1.b\PE

4,4'-DDT Degradation

RT	Area	Compound
10.342	9299574	4,4'-DDT
8.7069	94619	4,4'-DDE
9.8611	347206	4,4'-DDD

Percent Degradation of 4,4'-DDT: 4.54

Endrin Degradation

RT	Area	Compound
	0	Endrin
10.715	77800	Endrin aldehyde
11.803	208171	Endrin ketone

Percent Degradation of Endrin: 100.00

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 28-APR-2011 03:35
Lab File ID: P9428007.D Init. Cal. Date(s): 24-MAR-2011 19-APR-2011
Analysis Type: Init. Cal. Times: 16:05 10:40
Lab Sample ID: TOX3 F004 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110428-1.b\PEST9.m\PEST9r.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
23 Toxaphene(1)	1609367	1931869	193186	0.010	-20.03907	15.00000	Averaged	<-
(2)	772019	950563	950563	0.010	-23.12697	15.00000	Averaged	<-
(3)	1463327	1774460	1774460	0.010	-21.26204	15.00000	Averaged	<-
(4)	810799	1053743	1053743	0.010	-29.96350	15.00000	Averaged	<-
(5)	1327094	1683906	1683906	0.010	-26.88674	15.00000	Averaged	<-

Average %D / Drift Results.
Calculated Average %D/Drift = 24.25566
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

Data File: \\cansvr11\dd\chem\GCS\a2hp9.i\110428-1.b\P9428030.D Page 1
Report Date: 28-Apr-2011 15:01

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 28-APR-2011 12:23
Lab File ID: P9428030.D Init. Cal. Date(s): 24-MAR-2011 19-APR-2011
Analysis Type: Init. Cal. Times: 16:05 10:40
Lab Sample ID: TOX3 F004 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110428-1.b\PEST9.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
24 Toxaphene(1)	1328722	1424653	1424653	0.010	-7.21982	15.00000	Averaged	
(2)	1254376	1398873	1398873	0.010	-11.51944	15.00000	Averaged	
(3)	1142844	1259999	1259999	0.010	-10.25116	15.00000	Averaged	
(4)	1576540	1758960	1758960	0.010	-11.57092	15.00000	Averaged	
(5)	1442733	1668599	1668599	0.010	-15.65540	15.00000	Averaged	<-

Average %D / Drift Results.
Calculated Average %D/Drift = 11.24335
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

SW846 8081A METHOD BLANK SUMMARY

BLANK WORKORDER NO.: MGTVH1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALCAN

SDG Number:

Lab File ID: P9428027.

Lot Number: A1D080405

Matrix: WATER

Extraction Method:

Date Extracted: 04/11/11

Date Analyzed(1): 04/28/11

Date Analyzed(2): N/A

Time Analyzed(1): 11:13

Time Analyzed(2): N/A

Instrument ID(1): P9

Instrument ID(2): N/A

GC Column(1): RTXPESTCLP ID: 053

GC Column(2): N/A ID: N/A

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	CLIENT ID.	SAMPLE WORK ORDER #		DATE ANALYZED(1)	DATE ANALYZED(2)
01	FWGBKGmw-018C-1710-GW	MGP1D1AH		04/18/11	N/A
02	FWGBKGmw-018C-1710-GW	MGP1D1AJ	S	04/28/11	N/A
03	FWGBKGmw-018C-1710-GW	MGP1D1AK	D	04/28/11	N/A
04	FWGBKGmw-005C-1705-GW	MGP1H1AD		04/18/11	N/A
05	FWGCBLmw-004C-1714-GW	MGP1L1AD		04/18/11	N/A
06	FWGLL2mw-267C-1722-GW	MGP1P1AD		04/18/11	N/A
07	FWGLL2mw-DUP3-1748-GW	MGP1R1AD		04/18/11	N/A
08	FWGLL2mw-266C-1721-GW	MGP1V1AD		04/18/11	N/A
09	FWGLL3mw-239C-1725-GW	MGP1X1AD		04/18/11	N/A
10	FWGLL2mw-269C-1723-GW	MGP131AH		04/18/11	N/A
11	FWGLL2mw-269C-1723-GW	MGP131AJ	S	04/28/11	N/A
12	FWGLL2mw-269C-1723-GW	MGP131AK	D	04/28/11	N/A
13	FWGLL3mw-236C-1724-GW	MGP161AD		04/18/11	N/A
14	FWGASYmw-003C-1704-GW	MGP181AD		04/18/11	N/A
15	FWGEQUIPRINSE4-1760-GW	MGP2A1AD		04/18/11	N/A
16	CHECK SAMPLE	MGTVH1AC	C	04/28/11	N/A
17					
18					
19					
20					

COMMENTS:

Data File: \\cansvr11\dd\chem\GCS\a2hp9.i\110428-1.b\110428-1.b/P9428004.D
Report Date: 04/28/2011

EVALB Degradation Report

Instrument ID: a2hp9.i Injection Date: 28-APR-2011 02:27
Lab File ID: P9428004.D Lab Sample ID: PEM F053
Analysis Type: NONE Method File: \\cansvr11\dd\chem\GCS\a2hp9.i\110428-1.b\PE

4,4'-DDT Degradation

RT	Area	Compound
11.561	8301413	4,4'-DDT
10.109	102549	4,4'-DDE
11.079	365829	4,4'-DDD

Percent Degradation of 4,4'-DDT: 5.34

Endrin Degradation

RT	Area	Compound
10.755	5361483	Endrin
11.660	146780	Endrin aldehyde
12.824	236162	Endrin ketone

Percent Degradation of Endrin: 6.67

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 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 1.1 and 2.9°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 4/13/11 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?	✓			3/9/11	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%?	✓			4/13/11	LCG Table 3 >115%=J; <80%=J/R 80-85%=J/UJ;
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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 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; <30%=J/R LL-30%=J/UJ;
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.	QAPP Table 3-2 Pj
24. Was the surrogate spiked into all samples?	✓				
25. Were surrogate recoveries 50-150%?		✓		With the exception of sample FWGEQUIPRinse4-1760-GW, the surrogate, DCB, recovered below control limits of 50%, but above 10% in the field samples from this SDG. All sample results, with the exception of sample FWGEQUIPRinse4-1760-GW, 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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 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.		✓			

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:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-018C-1710-GW

GC Semivolatiles

Lot-Sample #...:	A1D080405-002	**Work Order #...:**	MGP1D1AP	**Matrix.....:**	WG
Date Sampled...:	04/07/11 09:01	**Date Received..:**	04/08/11		
Prep Date.....:	04/11/11	**Analysis Date..:**	04/16/11		
Prep Batch #...:	1101050				
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	24 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-005C-1705-GW

GC Semivolatiles

Lot-Sample #...:	A1D080405-004	**Work Order #...:**	MGP1H1AF	**Matrix.....:**	WG
Date Sampled...:	04/07/11 11:31	**Date Received..:**	04/08/11		
Prep Date.....:	04/11/11	**Analysis Date..:**	04/16/11		
Prep Batch #...:	1101050				
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	73	(50 - 150)
Decachlorobiphenyl	14 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBLmw-004C-1714-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-006	**Work Order #...:** MGP1L1AF	**Matrix.....:** WG	
Date Sampled...: 04/07/11 13:21	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/16/11		
Prep Batch #...: 1101050			
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	18 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-009 **Work Order #...:** MGP1P1AF **Matrix.....:** WG
Date Sampled...: 04/07/11 08:52 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1101050
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	72	(50 - 150)
Decachlorobiphenyl	14 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1748-GW

GC Semivolatiles

Lot-Sample #...:	A1D080405-011	**Work Order #...:**	MGP1R1AF	**Matrix.....:**	WG
Date Sampled...:	04/07/11 10:10	**Date Received..:**	04/08/11		
Prep Date.....:	04/11/11	**Analysis Date..:**	04/16/11		
Prep Batch #...:	1101050				
Dilution Factor:	1	**Initial Wgt/Vol:**	970 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	12 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1721-GW

GC Semivolatiles

Lot-Sample #...:	A1D080405-013	**Work Order #...:**	MGP1V1AF	**Matrix.....:**	WG
Date Sampled...:	04/07/11 11:04	**Date Received..:**	04/08/11		
Prep Date.....:	04/11/11	**Analysis Date..:**	04/16/11		
Prep Batch #...:	1101050				
Dilution Factor:	1	**Initial Wgt/Vol:**	910 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	21 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1725-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-015	**Work Order #...:** MGP1X1AF	**Matrix.....:** WG	
Date Sampled...: 04/07/11 12:32	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/16/11		
Prep Batch #...: 1101050			
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	79	(50 - 150)
Decachlorobiphenyl	19 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1723-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-018	**Work Order #...:** MGP131AP		**Matrix.....:** WG
Date Sampled...: 04/07/11 08:59	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/16/11		
Prep Batch #...: 1101050			
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	77	(50 - 150)
Decachlorobiphenyl	21 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1724-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-020 **Work Order #...:** MGP161AF **Matrix.....:** WG
Date Sampled...: 04/07/11 11:59 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1101050
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	88	(50 - 150)
Decachlorobiphenyl	32 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1704-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-022	**Work Order #...:** MGP181AF	**Matrix.....:** WG	
Date Sampled...: 04/07/11 13:33	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/16/11		
Prep Batch #...: 1101050			
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	85	(50 - 150)
Decachlorobiphenyl	24 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

GC Semivolatiles

Lot-Sample #...: A1D080405-024	**Work Order #...:** MGP2A1AF	**Matrix.....:** WQ	
Date Sampled...: 04/07/11 14:33	**Date Received..:** 04/08/11		
Prep Date.....: 04/11/11	**Analysis Date..:** 04/16/11		
Prep Batch #...: 1101050			
Dilution Factor: 1	**Initial Wgt/Vol:** 970 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	71	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1D080405 **Work Order #...:** MGTVK1AA **Matrix.....:** WATER
MB Lot-Sample #: A1D110000-050

Prep Date.....: 04/11/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 04/16/11 **Prep Batch #...:** 1101050
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	78	(50 - 150)
Decachlorobiphenyl	73	(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 #...: A1D080405 **Work Order #...:** MGTVK1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D110000-050
Prep Date.....: 04/11/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1101050
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	102	(58 - 141)	**SW846 8082**
Aroclor 1260	101	(71 - 143)	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	99	(50 - 150)
Decachlorobiphenyl	77	(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 #...: A1D080405 **Work Order #...:** MGP131AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A1D080405-018 MGP131AR-MSD
Date Sampled...: 04/07/11 08:59 **Date Received..:** 04/08/11
Prep Date.....: 04/11/11 **Analysis Date..:** 04/16/11
Prep Batch #...: 1101050
Dilution Factor: 2 **Initial Wgt/Vol:** 490 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**88**	**(50 - 150)**			**SW846 8082**
	90	**(50 - 150)**	**1.4**	**(0-50)**	**SW846 8082**
Aroclor 1260	**85**	**(50 - 150)**			**SW846 8082**
	85	**(50 - 150)**	**0.69**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
	87	(50 - 150)
Decachlorobiphenyl	64	(50 - 150)
	63	(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 #...:	A1D080405	**Work Order #...:**	MGP1D1AQ-MS	**Matrix.....:**	WG
MS Lot-Sample #:	A1D080405-002		MGP1D1AR-MSD		
Date Sampled...:	04/07/11 09:01	**Date Received..:**	04/08/11		
Prep Date.....:	04/11/11	**Analysis Date..:**	04/16/11		
Prep Batch #...:	1101050				
Dilution Factor:	2	**Initial Wgt/Vol:**	495 mL	**Final Wgt/Vol..:**	5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**88**	**(50 - 150)**			**SW846 8082**
	83	**(50 - 150)**	**6.0**	**(0-50)**	**SW846 8082**
Aroclor 1260	**82**	**(50 - 150)**			**SW846 8082**
	82	**(50 - 150)**	**0.06**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(50 - 150)
	79	(50 - 150)
Decachlorobiphenyl	66	(50 - 150)
	72	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

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METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 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 1.1 and 2.9°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?	✓			1/1/11	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
14. Was the ICB analyzed after the ICV with results <1/2 the MRL?		✓		ICPMS The ICB analyzed 4/13/11 had thallium detected at 0.16ug/L. The thallium result for sample FWGBKGmw-018c-1710-GFwas qualified "U" as the detected concentration was <5x the thallium 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.	LCG Table 7 < 5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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, <85%=J/R 90-85%=J/UJ;
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICPMS The CCBs analyzed 4/13/11 had detected thallium from 0.17ug/L to 0.23ug/L. No additional qualifications were made for thallium other than those made for the ICB 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.	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
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. Zinc recovered above control limits at 135% in the LCS. The zinc results for samples FWGBKGmw-018c-1710-GF,FWGCBLmw-004c-1714-GF, FWGLL2mw-DUP3-1748-GF, FWGLL2mw-266c-1721-GF, FWGLL2mw-2696c-1723-GFand FWGLL3mw-236c-1724-GF were qualified as estimated, "J".	LCG Appendix C >UL=J; <60%=J/R 60%-LL= J/UJ;
27. Was a MS prepared with each batch?	✓				LCG Table 7

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG:** A1D080405 R0
Sample Event: April 2011 **Analysis:** SW846 6010B/6020
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
28. Was the MS and Lab Duplicate parent a Ravenna sample?	✓				
29. Were the MS recoveries within 75-125%?		✓		Manganese recovered below control limits at 74%. All manganese results were qualified as estimated, "UJ/J"	LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤20%?	✓			Checked by ADR. Only sample results with detections above the RL were evaluated.	LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	Matrix spike recoveries were within control limits.	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%?	✓				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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 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 1.1 and 2.9°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?	✓			1/1/11	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 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%?	✓			Checked by ADR.	LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓				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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 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: FWGBKGmw-018C-1710-GF

TOTAL Metals

Lot-Sample #...: A1D080405-003 **Matrix.....:** WG
Date Sampled...: 04/07/11 09:01 **Date Received..:** 04/08/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1101020						
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1F1CE
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP1F1AA
		Dilution Factor: 1		Analysis Time..: 11:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1F1A4
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**12.0**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1F1CH**
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP1F1AE
		Dilution Factor: 1		Analysis Time..: 11:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**29000**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1F1CL**
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGP1F1AH
		Dilution Factor: 1		Analysis Time..: 11:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1F1CP
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1F1CT
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1F1CW
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-018C-1710-GF

TOTAL Metals

Lot-Sample #...: A1D080405-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP1F1AL
		Dilution Factor: 1		Analysis Time..: 11:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGP1F1DH
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**591 B**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1F1C1**
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**3960**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1F1C4**
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**2.7 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1F1C7**
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1710**	**1000**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1F1A1**
		Dilution Factor: 1		Analysis Time..: 11:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1F1DA
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1F1A7
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGP1F1AP
		Dilution Factor: 1		Analysis Time..: 11:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1F1CA
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-018C-1710-GF

TOTAL Metals

Lot-Sample #...: A1D080405-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.18 B**	**1.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1F1AW**
		Dilution Factor: 1		Analysis Time..: 11:52	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1F1DE
		Dilution Factor: 1		Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**7.3 B**	**10.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1F1AT**
		Dilution Factor: 1		Analysis Time..: 11:52	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: FWGBKGmw-005C-1705-GF

TOTAL Metals

Lot-Sample #...: A1D080405-005 **Matrix.....:** WG
Date Sampled...: 04/07/11 11:31 **Date Received..:** 04/08/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1101020						
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1K1AR
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**62.5**	**50.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1K1AE**
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1K1AC
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**14.5**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1K1AT**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP1K1AF
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**84400**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1K1AU**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGP1K1AG
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1K1AV
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1K1AW
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1K1AX
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-005C-1705-GF

TOTAL Metals

Lot-Sample #...: A1D080405-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**36.5 B**	**50.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1K1AH**
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGP1K1A2
		Dilution Factor: 1		Analysis Time..: 13:56	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**444 B**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1K1AM**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**19800**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1K1AN**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**6.1 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1K1AP**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**3560**	**1000**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1K1AA**
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1K1A0
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1K1AD
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGP1K1AJ
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1K1AQ
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-005C-1705-GF

TOTAL Metals

Lot-Sample #...: A1D080405-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP1K1AL
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1K1A1
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/11-04/13/11	MGP1K1AK
		Dilution Factor: 1		Analysis Time..: 12:14	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: FWGCBLmw-004C-1714-GF

TOTAL Metals

Lot-Sample #...: A1D080405-007 **Matrix.....:** WG
Date Sampled...: 04/07/11 13:21 **Date Received..:** 04/08/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1101020						
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1M1AR
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP1M1AE
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1M1AC
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**21.6**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1M1AT**
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP1M1AF
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**5470**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1M1AU**
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGP1M1AG
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1M1AV
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1M1AW
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1M1AX
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBLmw-004C-1714-GF

TOTAL Metals

Lot-Sample #...: A1D080405-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP1M1AH
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGP1M1A2
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1120**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1M1AM**
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**2340**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1M1AN**
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**9.4 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1M1AP**
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1940**	**1000**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1M1AA**
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**5.4 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1M1A0**
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1M1AD
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGP1M1AJ
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1M1AQ
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBLmw-004C-1714-GF

TOTAL Metals

Lot-Sample #...: A1D080405-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP1M1AL
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1M1A1
		Dilution Factor: 1		Analysis Time..: 19:54	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**6.8 B**	**10.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1M1AK**
		Dilution Factor: 1		Analysis Time..: 12:19	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-267C-1722-GF

TOTAL Metals

Lot-Sample #...: A1D080405-010 **Matrix.....:** WG
Date Sampled...: 04/07/11 08:52 **Date Received..:** 04/08/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1101020						
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1Q1AR
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**33.0 B**	**50.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1Q1AE**
		Dilution Factor: 1		Analysis Time..: 12:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1Q1AC
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**11.7**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1Q1AT**
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP1Q1AF
		Dilution Factor: 1		Analysis Time..: 12:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**37800**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1Q1AU**
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGP1Q1AG
		Dilution Factor: 1		Analysis Time..: 12:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.5 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1Q1AV**
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1Q1AW
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1Q1AX
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GF

TOTAL Metals

Lot-Sample #...: A1D080405-010 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	432	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP1Q1AH
		Dilution Factor: 1		Analysis Time..: 12:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGP1Q1A2
		Dilution Factor: 1		Analysis Time..: 13:58	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	581 B	1000	ug/L	SW846 6010B	04/11-04/14/11	MGP1Q1AM
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	19000	1000	ug/L	SW846 6010B	04/11-04/14/11	MGP1Q1AN
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	564	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1Q1AP
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	17900	1000	ug/L	SW846 6020	04/11-04/13/11	MGP1Q1AA
		Dilution Factor: 1		Analysis Time..: 12:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	2.8 B	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1Q1A0
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1Q1AD
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGP1Q1AJ
		Dilution Factor: 1		Analysis Time..: 12:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1Q1AQ
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GF

TOTAL Metals

Lot-Sample #...: A1D080405-010 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP1Q1AL
		Dilution Factor: 1		Analysis Time..: 12:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1Q1A1
		Dilution Factor: 1		Analysis Time..: 20:00	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/11-04/13/11	MGP1Q1AK
		Dilution Factor: 1		Analysis Time..: 12:23	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-DUP3-1748-GF

TOTAL Metals

Lot-Sample #...: A1D080405-012 **Matrix.....:** WG
Date Sampled...: 04/07/11 10:10 **Date Received..:** 04/08/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1101020						
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1T1AR
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**35.7 B**	**50.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1T1AE**
		Dilution Factor: 1		Analysis Time..: 12:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1T1AC
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**11.7**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1T1AT**
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP1T1AF
		Dilution Factor: 1		Analysis Time..: 12:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**37700**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1T1AU**
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGP1T1AG
		Dilution Factor: 1		Analysis Time..: 12:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.7 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1T1AV**
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1T1AW
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1T1AX
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1748-GF

TOTAL Metals

Lot-Sample #...: A1D080405-012 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**528**	**50.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1T1AH**
		Dilution Factor: 1		Analysis Time..: 12:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGP1T1A2
		Dilution Factor: 1		Analysis Time..: 13:48	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**570 B**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1T1AM**
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**19000**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1T1AN**
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**568**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1T1AP**
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**18900**	**1000**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1T1AA**
		Dilution Factor: 1		Analysis Time..: 12:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**2.5 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1T1A0**
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1T1AD
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGP1T1AJ
		Dilution Factor: 1		Analysis Time..: 12:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1T1AQ
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1748-GF

TOTAL Metals

Lot-Sample #...: A1D080405-012 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP1T1AL
		Dilution Factor: 1		Analysis Time..: 12:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1T1A1
		Dilution Factor: 1		Analysis Time..: 20:06	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**3.1 B**	**10.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1T1AK**
		Dilution Factor: 1		Analysis Time..: 12:28	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: FWGLL2mw-266C-1721-GF

TOTAL Metals

Lot-Sample #...: A1D080405-014 **Matrix.....:** WG
Date Sampled...: 04/07/11 11:04 **Date Received..:** 04/08/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1101020						
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1W1AR
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP1W1AE
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1W1AC
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**13.9**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1W1AT**
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP1W1AF
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**20900**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1W1AU**
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGP1W1AG
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**8.2**	**5.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1W1AV**
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1W1AW
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1W1AX
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1721-GF

TOTAL Metals

Lot-Sample #...: A1D080405-014 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**2470**	**50.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1W1AH**
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGP1W1A2
		Dilution Factor: 1		Analysis Time..: 13:54	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1210**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1W1AM**
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**9950**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1W1AN**
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**761**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1W1AP**
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**9850**	**1000**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1W1AA**
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**12.9**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP1W1A0**
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1W1AD
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGP1W1AJ
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1W1AQ
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1721-GF

TOTAL Metals

Lot-Sample #...: A1D080405-014 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP1W1AL
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP1W1A1
		Dilution Factor: 1		Analysis Time..: 20:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**5.6 B**	**10.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP1W1AK**
		Dilution Factor: 1		Analysis Time..: 12:45	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: FWGLL3mw-239C-1725-GF

TOTAL Metals

Lot-Sample #...: A1D080405-016 **Matrix.....:** WG
Date Sampled...: 04/07/11 12:32 **Date Received..:** 04/08/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1101020						
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP101AR
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP101AE
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**3.6 B**	5.0	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP101AC**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**11.1**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP101AT**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP101AF
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**11300**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP101AU**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGP101AG
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP101AV
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	**1.5 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP101AW**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP101AX
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1725-GF

TOTAL Metals

Lot-Sample #...: A1D080405-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP101AH
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGP101A2
		Dilution Factor: 1		Analysis Time..: 13:46	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1280**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP101AM**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**5930**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP101AN**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**101**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP101AP**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**18600**	**1000**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP101AA**
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**7.0 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP101A0**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGP101AD
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGP101AJ
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP101AQ
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1725-GF

TOTAL Metals

Lot-Sample #...: A1D080405-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP101AL
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP101A1
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/11-04/13/11	MGP101AK
		Dilution Factor: 1		Analysis Time..: 12:50	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-1723-GF

TOTAL Metals

Lot-Sample #...: A1D080405-019 **Matrix.....:** WG
Date Sampled...: 04/07/11 08:59 **Date Received..:** 04/08/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1101020						
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP151CP
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP151AL
		Dilution Factor: 1		Analysis Time..: 12:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP151AE
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**218**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP151CT**
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP151AP
		Dilution Factor: 1		Analysis Time..: 12:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**30900**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP151CW**
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGP151AT
		Dilution Factor: 1		Analysis Time..: 12:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP151C1
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP151C4
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP151C7
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1723-GF

TOTAL Metals

Lot-Sample #...: A1D080405-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**6800**	**50.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP151AW**
		Dilution Factor: 1		Analysis Time..: 12:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGP151DH
		Dilution Factor: 1		Analysis Time..: 13:39	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**3080**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP151CA**
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**15400**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP151CE**
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1590**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP151CH**
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**6250**	**1000**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP151AA**
		Dilution Factor: 1		Analysis Time..: 12:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP151DA
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGP151AH
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGP151A1
		Dilution Factor: 1		Analysis Time..: 12:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP151CL
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1723-GF

TOTAL Metals

Lot-Sample #...: A1D080405-019 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP151A7
		Dilution Factor: 1		Analysis Time..: 12:55	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP151DE
		Dilution Factor: 1		Analysis Time..: 20:35	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**4.7 B**	**10.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP151A4**
		Dilution Factor: 1		Analysis Time..: 12:55	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: FWGLL3mw-236C-1724-GF

TOTAL Metals

Lot-Sample #...: A1D080405-021 **Matrix.....:** WG
Date Sampled...: 04/07/11 11:59 **Date Received..:** 04/08/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1101020						
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP171AR
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP171AE
		Dilution Factor: 1		Analysis Time..: 13:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP171AC
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP171AT
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP171AF
		Dilution Factor: 1		Analysis Time..: 13:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**21400**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP171AU**
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGP171AG
		Dilution Factor: 1		Analysis Time..: 13:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**2.7 B**	**5.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP171AV**
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP171AW
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP171AX
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1724-GF

TOTAL Metals

Lot-Sample #...: A1D080405-021 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**388**	**50.0**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP171AH**
		Dilution Factor: 1		Analysis Time..: 13:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGP171A2
		Dilution Factor: 1		Analysis Time..: 13:45	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1170**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP171AM**
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**13500**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP171AN**
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**344**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP171AP**
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**3920**	**1000**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP171AA**
		Dilution Factor: 1		Analysis Time..: 13:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**9.0 B**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP171A0**
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGP171AD
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGP171AJ
		Dilution Factor: 1		Analysis Time..: 13:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP171AQ
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1724-GF

TOTAL Metals

Lot-Sample #...: A1D080405-021 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP171AL
		Dilution Factor: 1		Analysis Time..: 13:12	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP171A1
		Dilution Factor: 1		Analysis Time..: 20:59	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Prep Batch #...: 1105011						
Zinc	**15.4**	**10.0**	**ug/L**	**SW846 6020**	**04/15-04/18/11**	MGP172AK
		Dilution Factor: 1		Analysis Time..: 14:46	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: FWGASYmw-003C-1704-GF

TOTAL Metals

Lot-Sample #...: A1D080405-023 **Matrix.....:** WG
Date Sampled...: 04/07/11 13:33 **Date Received..:** 04/08/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1101020						
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP191AR
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP191AE
		Dilution Factor: 1		Analysis Time..: 13:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP191AC
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**18.6**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP191AT**
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP191AF
		Dilution Factor: 1		Analysis Time..: 13:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**173000**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP191AU**
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGP191AG
		Dilution Factor: 1		Analysis Time..: 13:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP191AV
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP191AW
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP191AX
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1704-GF

TOTAL Metals

Lot-Sample #...: A1D080405-023 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP191AH
		Dilution Factor: 1		Analysis Time..: 13:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGP191A2
		Dilution Factor: 1		Analysis Time..: 13:50	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**982 B**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP191AM**
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**57200**	**1000**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP191AN**
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**189**	**10.0**	**ug/L**	**SW846 6010B**	**04/11-04/14/11**	**MGP191AP**
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**26200**	**1000**	**ug/L**	**SW846 6020**	**04/11-04/13/11**	**MGP191AA**
		Dilution Factor: 1		Analysis Time..: 13:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP191A0
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGP191AD
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGP191AJ
		Dilution Factor: 1		Analysis Time..: 13:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP191AQ
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1704-GF

TOTAL Metals

Lot-Sample #...: A1D080405-023 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP191AL
		Dilution Factor: 1		Analysis Time..: 13:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP191A1
		Dilution Factor: 1		Analysis Time..: 21:05	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/11-04/13/11	MGP191AK
		Dilution Factor: 1		Analysis Time..: 13:17	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: FWGEQUIPRINSE4-1760-GW

TOTAL Metals

Lot-Sample #...: A1D080405-024 **Matrix.....:** WQ
Date Sampled...: 04/07/11 14:33 **Date Received..:** 04/08/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1101020						
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1AU
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP2A1AG
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1AQ
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1AV
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP2A1AH
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1AW
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGP2A1AJ
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1AX
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1A0
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1A1
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.4		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

TOTAL Metals

Lot-Sample #...: A1D080405-024 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGP2A1AK
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGP2A1A7
		Dilution Factor: 1		Analysis Time..: 13:47	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1A2
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1A3
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1A4
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6020	04/11-04/13/11	MGP2A1AP
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1A5
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1AR
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGP2A1AL
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1AT
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 4.0		

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Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

TOTAL Metals

Lot-Sample #...: A1D080405-024 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGP2A1AN
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGP2A1A6
		Dilution Factor: 1		Analysis Time..: 21:11	Analyst ID.....: 002260	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	04/11-04/13/11	MGP2A1AM
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1D080405 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1D110000-020 **Prep Batch #...:** 1101020						
Aluminum	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGTR71AA
		Dilution Factor: 1				
		Analysis Time..: 11:41		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	04/11-04/13/11	MGTR71AF
		Dilution Factor: 1				
		Analysis Time..: 11:41		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AK
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AP
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGTR71AC
		Dilution Factor: 1				
		Analysis Time..: 11:41		Analyst ID.....: 000079	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	04/11-04/13/11	MGTR71AD
		Dilution Factor: 1				
		Analysis Time..: 11:41		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AQ
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AT
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AR
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AU
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	04/11-04/13/11	MGTR71AE
		Dilution Factor: 1				
		Analysis Time..: 11:41		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1D080405 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AL
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AW
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AX
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	04/11-04/12/11	MGTR71A2
		Dilution Factor: 1				
		Analysis Time..: 13:30		Analyst ID.....: 002260	Instrument ID..: H1	
Nickel	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGTR71A0
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AV
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AM
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	04/11-04/14/11	MGTR71AN
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6020	04/11-04/13/11	MGTR71AJ
		Dilution Factor: 1				
		Analysis Time..: 11:41		Analyst ID.....: 000079	Instrument ID..: I8	
Thallium	ND	1.0	ug/L	SW846 6020	04/11-04/13/11	MGTR71AH
		Dilution Factor: 1				
		Analysis Time..: 11:41		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	04/11-04/14/11	MGTR71A1
		Dilution Factor: 1				
		Analysis Time..: 19:00		Analyst ID.....: 002260	Instrument ID..: I5	
Zinc	ND	10.0	ug/L	SW846 6020	04/11-04/13/11	MGTR71AG
		Dilution Factor: 1				
		Analysis Time..: 11:41		Analyst ID.....: 000079	Instrument ID..: I8	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1D080405 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1D150000-011 **Prep Batch #...:** 1105011						
Zinc	ND	10.0	ug/L	SW846 6020	04/15-04/18/11	MG2XW1AA

Dilution Factor: 1
Analysis Time..: 14:34 Analyst ID.....: 000079 Instrument ID..: I8

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D080405 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A1D110000-020 **Prep Batch #...:** 1101020					
Aluminum	101	(80 - 120)	SW846 6020	04/11-04/13/11	MGTR71A3
		Dilution Factor: 1	Analysis Time..: 11:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	106	(80 - 120)	SW846 6020	04/11-04/13/11	MGTR71A4
		Dilution Factor: 1	Analysis Time..: 11:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Cadmium	106	(80 - 120)	SW846 6020	04/11-04/13/11	MGTR71A5
		Dilution Factor: 1	Analysis Time..: 11:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	102	(80 - 120)	SW846 6020	04/11-04/13/11	MGTR71A6
		Dilution Factor: 1	Analysis Time..: 11:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	102	(80 - 120)	SW846 6020	04/11-04/13/11	MGTR71A7
		Dilution Factor: 1	Analysis Time..: 11:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	135 N	(80 - 120)	SW846 6020	04/11-04/13/11	MGTR71A8
		Dilution Factor: 1	Analysis Time..: 11:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	102	(80 - 120)	SW846 6020	04/11-04/13/11	MGTR71A9
		Dilution Factor: 1	Analysis Time..: 11:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Sodium	110	(80 - 120)	SW846 6020	04/11-04/13/11	MGTR71CA
		Dilution Factor: 1	Analysis Time..: 11:45	Analyst ID.....: 000079	
		Instrument ID..: I8			
Arsenic	92	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CC
		Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260	
		Instrument ID..: I5			
Lead	101	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CD
		Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D080405 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	103	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CE
	Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260		
	Instrument ID..: I5				
Silver	95	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CF
	Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260		
	Instrument ID..: I5				
Barium	103	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CG
	Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260		
	Instrument ID..: I5				
Calcium	95	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CH
	Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260		
	Instrument ID..: I5				
Cobalt	97	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CJ
	Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260		
	Instrument ID..: I5				
Chromium	96	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CK
	Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260		
	Instrument ID..: I5				
Copper	100	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CL
	Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260		
	Instrument ID..: I5				
Potassium	100	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CM
	Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260		
	Instrument ID..: I5				
Magnesium	96	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CN
	Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260		
	Instrument ID..: I5				
Manganese	105	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CP
	Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260		
	Instrument ID..: I5				
Nickel	99	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CQ
	Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260		
	Instrument ID..: I5				

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D080405 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	99	(80 - 120)	SW846 6010B	04/11-04/14/11	MGTR71CR
		Dilution Factor: 1	Analysis Time..: 19:18	Analyst ID.....: 002260	
		Instrument ID..: I5			
Mercury	96	(80 - 120)	SW846 7470A	04/11-04/12/11	MGTR71CT
		Dilution Factor: 1	Analysis Time..: 13:31	Analyst ID.....: 002260	
		Instrument ID..: H1			

LCS Lot-Sample#: A1D150000-011 **Prep Batch #...:** 1105011

Zinc	108	(80 - 120)	SW846 6020	04/15-04/18/11	MG2XW1AC
		Dilution Factor: 1	Analysis Time..: 14:39	Analyst ID.....: 000079	
		Instrument ID..: I8			

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 #...: A1D080405 **Matrix.....:** WG
Date Sampled...: 04/07/11 09:01 **Date Received..:** 04/08/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1D080405-003 **Prep Batch #...:** 1101020					
Aluminum	100	(75 - 125)	SW846 6020	04/11-04/13/11	MGP1F1AC
		Dilution Factor: 1	Analysis Time..: 11:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	99	(75 - 125)	SW846 6020	04/11-04/13/11	MGP1F1AQ
		Dilution Factor: 1	Analysis Time..: 11:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	95	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1A5
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Barium	100	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1CJ
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Beryllium	103	(75 - 125)	SW846 6020	04/11-04/13/11	MGP1F1AF
		Dilution Factor: 1	Analysis Time..: 11:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	104	(75 - 125)	SW846 6020	04/11-04/13/11	MGP1F1AJ
		Dilution Factor: 1	Analysis Time..: 11:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	96	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1CM
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Chromium	98	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1CU
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Cobalt	100	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1CQ
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Copper	98	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1CX
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D080405 **Matrix.....:** WG
Date Sampled...: 04/07/11 09:01 **Date Received..:** 04/08/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	98	(75 - 125)	SW846 6020	04/11-04/13/11	MGP1F1AM
		Dilution Factor: 1	Analysis Time..: 11:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	105	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1A8
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Magnesium	97	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1C5
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Manganese	106	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1C8
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Mercury	102	(80 - 120)	SW846 7470A	04/11-04/12/11	MGP1F1DJ
		Dilution Factor: 1	Analysis Time..: 13:33	Instrument ID..: H1	
		Analyst ID.....: 002260			
Nickel	102	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1DC
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Potassium	92	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1C2
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Selenium	106	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1CC
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Silver	94	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1CF
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Sodium	107	(75 - 125)	SW846 6020	04/11-04/13/11	MGP1F1A2
		Dilution Factor: 1	Analysis Time..: 11:52	Instrument ID..: I8	
		Analyst ID.....: 000079			
Thallium	101	(75 - 125)	SW846 6020	04/11-04/13/11	MGP1F1AX
		Dilution Factor: 1	Analysis Time..: 11:52	Instrument ID..: I8	
		Analyst ID.....: 000079			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D080405 **Matrix.....:** WG
Date Sampled...: 04/07/11 09:01 **Date Received..:** 04/08/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	100	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP1F1DF
		Dilution Factor: 1	Analysis Time..: 19:24	Instrument ID..: I5	
		Analyst ID.....: 002260			
Zinc	98	(75 - 125)	SW846 6020	04/11-04/13/11	MGP1F1AU
		Dilution Factor: 1	Analysis Time..: 11:52	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 #...: A1D080405 **Matrix.....:** WG
Date Sampled...: 04/07/11 08:59 **Date Received..:** 04/08/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1D080405-019 **Prep Batch #...:** 1101020					
Aluminum	100	(75 - 125)	SW846 6020	04/11-04/13/11	MGP151AM
		Dilution Factor: 1	Analysis Time..: 12:55	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	100	(75 - 125)	SW846 6020	04/11-04/13/11	MGP151A2
		Dilution Factor: 1	Analysis Time..: 12:55	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	92	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151AF
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Barium	102	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151CU
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Beryllium	103	(75 - 125)	SW846 6020	04/11-04/13/11	MGP151AQ
		Dilution Factor: 1	Analysis Time..: 12:55	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	104	(75 - 125)	SW846 6020	04/11-04/13/11	MGP151AU
		Dilution Factor: 1	Analysis Time..: 12:55	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	88	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151CX
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Chromium	95	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151C5
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Cobalt	96	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151C2
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Copper	99	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151C8
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D080405 **Matrix.....:** WG
Date Sampled...: 04/07/11 08:59 **Date Received..:** 04/08/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	101	(75 - 125)	SW846 6020	04/11-04/13/11	MGP151AX
		Dilution Factor: 1	Analysis Time..: 12:55	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	100	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151AJ
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Magnesium	92	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151CF
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Manganese	74 N	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151CJ
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Mercury	102	(80 - 120)	SW846 7470A	04/11-04/12/11	MGP151DJ
		Dilution Factor: 1	Analysis Time..: 13:39	Instrument ID..: H1	
		Analyst ID.....: 002260			
Nickel	99	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151DC
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Potassium	102	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151CC
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Selenium	102	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151CM
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Silver	93	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151CQ
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Sodium	105	(75 - 125)	SW846 6020	04/11-04/13/11	MGP151AC
		Dilution Factor: 1	Analysis Time..: 12:55	Instrument ID..: I8	
		Analyst ID.....: 000079			
Thallium	101	(75 - 125)	SW846 6020	04/11-04/13/11	MGP151A8
		Dilution Factor: 1	Analysis Time..: 12:55	Instrument ID..: I8	
		Analyst ID.....: 000079			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1D080405 **Matrix.....:** WG
Date Sampled...: 04/07/11 08:59 **Date Received..:** 04/08/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	98	(75 - 125)	SW846 6010B	04/11-04/14/11	MGP151DF
		Dilution Factor: 1	Analysis Time..: 20:35	Instrument ID..: I5	
		Analyst ID.....: 002260			
Zinc	102	(75 - 125)	SW846 6020	04/11-04/13/11	MGP151A5
		Dilution Factor: 1	Analysis Time..: 12:55	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 #...: A1D080405 **Work Order #...:** MGP1F-SMP MGP1F-DUP **Matrix.....:** WG

Date Sampled...: 04/07/11 09:01 **Date Received..:** 04/08/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 19:24	Analyst ID.....: 002260	
			Instrument ID..: I5					
Aluminum						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 11:52	Analyst ID.....: 000079	
			Instrument ID..: I8					
Arsenic						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 19:24	Analyst ID.....: 002260	
			Instrument ID..: I5					
Barium						SD Lot-Sample #: A1D080405-003		
	12.0	11.5	ug/L	3.9	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 19:24	Analyst ID.....: 002260	
			Instrument ID..: I5					
Beryllium						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 11:52	Analyst ID.....: 000079	
			Instrument ID..: I8					
Calcium						SD Lot-Sample #: A1D080405-003		
	29000	30800	ug/L	5.9	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 19:24	Analyst ID.....: 002260	
			Instrument ID..: I5					
Cadmium						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 11:52	Analyst ID.....: 000079	
			Instrument ID..: I8					
Cobalt						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 19:24	Analyst ID.....: 002260	
			Instrument ID..: I5					
Chromium						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 19:24	Analyst ID.....: 002260	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1D080405-000 **Work Order #...:** MGP1F-SMP MGP1F-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
		Dilution Factor: 1				Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/11-04/13/11	1101020
		Dilution Factor: 1				Analysis Time..: 11:52	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	04/11-04/12/11	1101020
		Dilution Factor: 1				Analysis Time..: 13:33	Analyst ID.....: 002260	
		Instrument ID..: H1						
Potassium						SD Lot-Sample #: A1D080405-003		
	591 B	619 B	ug/L	4.6	(0-20)	SW846 6010B	04/11-04/14/11	1101020
		Dilution Factor: 1				Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A1D080405-003		
	3960	4280	ug/L	7.6	(0-20)	SW846 6010B	04/11-04/14/11	1101020
		Dilution Factor: 1				Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A1D080405-003		
	2.7 B	ND	ug/L	200	(0-20)	SW846 6010B	04/11-04/14/11	1101020
		Dilution Factor: 1				Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A1D080405-003		
	1710	1630	ug/L	5.1	(0-20)	SW846 6020	04/11-04/13/11	1101020
		Dilution Factor: 1				Analysis Time..: 11:52	Analyst ID.....: 000079	
		Instrument ID..: I8						
Nickel						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
		Dilution Factor: 1				Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
		Dilution Factor: 1				Analysis Time..: 19:24	Analyst ID.....: 002260	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1D080405-000 **Work Order #...:** MGP1F-SMP MGP1F-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 11:52	Analyst ID.....: 000079	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 19:24	Analyst ID.....: 002260	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #: A1D080405-003		
	0.18 B	ND	ug/L	200	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 11:52	Analyst ID.....: 000079	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #: A1D080405-003		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 19:24	Analyst ID.....: 002260	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #: A1D080405-003		
	7.3 B	ND	ug/L	200	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 11:52	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.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: A1D080405 **Work Order #...:** MGP15-SMP MGP15-DUP **Matrix.....:** WG

Date Sampled...: 04/07/11 08:59 **Date Received..:** 04/08/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Aluminum						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 12:55	Analyst ID.....: 000079	
			Instrument ID..: I8					
Arsenic						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Barium						SD Lot-Sample #: A1D080405-019		
	218	226	ug/L	3.6	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Beryllium						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 12:55	Analyst ID.....: 000079	
			Instrument ID..: I8					
Calcium						SD Lot-Sample #: A1D080405-019		
	30900	30300	ug/L	2.2	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Cadmium						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 12:55	Analyst ID.....: 000079	
			Instrument ID..: I8					
Cobalt						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Chromium						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1D080405-000 **Work Order #...:** MGP15-SMP MGP15-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Iron						SD Lot-Sample #: A1D080405-019		
	6800	7010	ug/L	3.1	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 12:55	Analyst ID.....: 000079	
			Instrument ID..: I8					
Mercury						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	04/11-04/12/11	1101020
			Dilution Factor: 1			Analysis Time..: 13:39	Analyst ID.....: 002260	
			Instrument ID..: H1					
Potassium						SD Lot-Sample #: A1D080405-019		
	3080	3240	ug/L	5.1	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Magnesium						SD Lot-Sample #: A1D080405-019		
	15400	14900	ug/L	3.9	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Manganese						SD Lot-Sample #: A1D080405-019		
	1590	1580	ug/L	0.88	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Sodium						SD Lot-Sample #: A1D080405-019		
	6250	6490	ug/L	3.7	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 12:55	Analyst ID.....: 000079	
			Instrument ID..: I8					
Nickel						SD Lot-Sample #: A1D080405-019		
	ND	2.9 B	ug/L	200	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Lead						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1D080405-000 **Work Order #...:** MGP15-SMP MGP15-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 12:55	Analyst ID.....: 000079	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 12:55	Analyst ID.....: 000079	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #: A1D080405-019		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/11-04/14/11	1101020
			Dilution Factor: 1			Analysis Time..: 20:35	Analyst ID.....: 002260	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #: A1D080405-019		
	4.7 B	3.8 B	ug/L	21	(0-20)	SW846 6020	04/11-04/13/11	1101020
			Dilution Factor: 1			Analysis Time..: 12:55	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

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80413A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/13/2011 11:36 AM Found	Q	CCB 1 4/13/2011 12:40 PM Found	Q	CCB 2 4/13/2011 1:38 PM Found	Q	Found	Q	Found	Q
Aluminum	27	50	19	U	19	U	19	U				
Antimony	121	2	0.13	U	0.13	U	0.13	U				
Beryllium	9	1	0.2	U	0.2	U	0.2	U				
Cadmium	111	0.5	0.13	U	0.13	U	0.13	U				
Iron	56	50	26	U	26	U	26	U				
Sodium	23	1000	6.9	U	6.9	U	6.9	U				
Thallium	205	1	**0.23**	**B**	**0.17**	**B**	0.14	U				
Zinc	66	10	2.3	U	2.3	U	2.3	U				

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80413A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/13/2011 11:07 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	27	50	19	U								
Antimony	121	2	0.13	U								
Beryllium	9	1	0.2	U								
Cadmium	111	0.5	0.13	U								
Iron	56	50	26	U								
Sodium	23	1000	6.9	U								
Thallium	205	1	**0.16**	**B**								
Zinc	66	10	2.3	U								

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 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 1.1 and 2.9°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 ≥ .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?	✓			1/19/11	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 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%=J/R 75-80%=J/UJ;
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%=R 50-79%=J/UJ;
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%=J/R 30-75%=J/UJ;
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued?		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			Sample FWGASYmw-003c-1704-GW was analyzed on 4/18/11 with a ND result. The curve used in the analysis on 4/18/11 had a negative response for the low standard. Sample was reanalyzed with a new curve with the same result. Both results were provided by the lab. The reanalysis had elevated reporting limits due to limited sample volume on the reanalysis.	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 12, 2011

SDG: A1D080405 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

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-018C-1710-GW

General Chemistry

Lot-Sample #...: A1D080405-002 **Work Order #...:** MGP1D **Matrix.....:** WG
Date Sampled...: 04/07/11 09:01 **Date Received..:** 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-005C-1705-GW

General Chemistry

Lot-Sample #...: A1D080405-004 **Work Order #...:** MGP1H **Matrix.....:** WG
Date Sampled...: 04/07/11 11:31 **Date Received..:** 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBLmw-004C-1714-GW

General Chemistry

Lot-Sample #...: A1D080405-006 **Work Order #...:** MGP1L **Matrix.....:** WG
Date Sampled...: 04/07/11 13:21 **Date Received..:** 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GW

General Chemistry

Lot-Sample #...: A1D080405-009 **Work Order #...:** MGP1P **Matrix.....:** WG
Date Sampled...: 04/07/11 08:52 **Date Received..:** 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1748-GW

General Chemistry

Lot-Sample #...: A1D080405-011 Work Order #...: MGP1R Matrix.....: WG
Date Sampled...: 04/07/11 10:10 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1721-GW

General Chemistry

Lot-Sample #...: A1D080405-013 Work Order #...: MGP1V Matrix.....: WG
Date Sampled...: 04/07/11 11:04 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1725-GW

General Chemistry

Lot-Sample #...: A1D080405-015 **Work Order #...:** MGP1X **Matrix.....:** WG
Date Sampled...: 04/07/11 12:32 **Date Received..:** 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1723-GW

General Chemistry

Lot-Sample #...: A1D080405-018 **Work Order #...:** MGP13 **Matrix.....:** WG
Date Sampled...: 04/07/11 08:59 **Date Received..:** 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1724-GW

General Chemistry

Lot-Sample #...: A1D080405-020 Work Order #...: MGP16 Matrix.....: WG
Date Sampled...: 04/07/11 11:59 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1704-GW

General Chemistry

Lot-Sample #...: A1D080405-022 **Work Order #...:** MGP18 **Matrix.....:** WG
Date Sampled...: 04/07/11 13:33 **Date Received..:** 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/18/11	1108340
		Dilution Factor: 1		MDL.....: 0.0050		
Cyanide, Total	ND V	0.020	mg/L	SW846 9012A	04/21/11	1112227
		Dilution Factor: 2		MDL.....: 0.010		

NOTE(S):

RL Reporting Limit

V Elevated reporting limit. The reporting limit is elevated due to limited sample volume.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

General Chemistry

Lot-Sample #...: A1D080405-024 **Work Order #...:** MGP2A **Matrix.....:** WQ
Date Sampled...: 04/07/11 14:33 **Date Received..:** 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349
	Dilution Factor: 1			MDL.....: 0.0050		

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1D080405 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MG0MK1AA		MB Lot-Sample #:	A1D130000-349	
	ND	0.010	mg/L	SW846 9012A	04/13/11	1103349
		Dilution Factor: 1				
Cyanide, Total		Work Order #: MG6KR1AA		MB Lot-Sample #:	A1D180000-340	
	ND	0.010	mg/L	SW846 9012A	04/18/11	1108340
		Dilution Factor: 1				
Cyanide, Total		Work Order #: MHE9T1AA		MB Lot-Sample #:	A1D220000-227	
	ND	0.010	mg/L	SW846 9012A	04/21/11	1112227
		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 #...: A1D080405 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MG0MK1AC	LCS Lot-Sample#: A1D130000-349		
	101	(80 - 120)	SW846 9012A	04/13/11	1103349
		Dilution Factor: 1			
Cyanide, Total		Work Order #: MG6KR1AC	LCS Lot-Sample#: A1D180000-340		
	98	(80 - 120)	SW846 9012A	04/18/11	1108340
		Dilution Factor: 1			
Cyanide, Total		Work Order #: MHE9T1AC	LCS Lot-Sample#: A1D220000-227		
	107	(80 - 120)	SW846 9012A	04/21/11	1112227
		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 #...: A1D080405 **Matrix.....:** WATER
Date Sampled...: 04/07/11 12:00 **Date Received..:** 04/08/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: MGM891AM-MS/MGM891AN-MSD				MS Lot-Sample #: A1D070402-030	
	99	(80 - 120)			SW846 9012A	04/13/11	1103349
	90	(80 - 120)	8.7	(0-20)	SW846 9012A	04/13/11	1103349
		Dilution Factor: 1					
Cyanide, Total		WO#: MGP5R1AX-MS/MGP5R1A0-MSD				MS Lot-Sample #: A1D080416-007	
	99	(80 - 120)			SW846 9012A	04/21/11	1112227
	88	(80 - 120)	11	(0-20)	SW846 9012A	04/21/11	1112227
		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 #...: A1D080405 **Matrix.....:** WG
Date Sampled...: 04/07/11 13:33 **Date Received..:** 04/08/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: MGP1D1AM-MS/MGP1D1AN-MSD				MS Lot-Sample #: A1D080405-002	
	92	(80 - 120)			SW846 9012A	04/13/11	1103349
	97	(80 - 120)	5.8	(0-20)	SW846 9012A	04/13/11	1103349
		Dilution Factor: 1					
Cyanide, Total		WO#: MGP131AM-MS/MGP131AN-MSD				MS Lot-Sample #: A1D080405-018	
	103	(80 - 120)			SW846 9012A	04/13/11	1103349
	98	(80 - 120)	4.5	(0-20)	SW846 9012A	04/13/11	1103349
		Dilution Factor: 1					
Cyanide, Total		WO#: MGP181AG-MS/MGP181AH-MSD				MS Lot-Sample #: A1D080405-022	
	84	(80 - 120)			SW846 9012A	04/18/11	1108340
	99	(80 - 120)	15	(0-20)	SW846 9012A	04/18/11	1108340
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix 1

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1D080405										
6010B	FWGASYmw-003C-1704-GF	AQ	N							
				Manganese	10.0	189		J	ug/L	Ms
				Potassium	1000	982B		J	ug/L	RI
6010B	FWGBKGmw-005C-1705-GF	AQ	N							
				Manganese	10.0	6.1B		J	ug/L	Ms, RI
				Potassium	1000	444B		J	ug/L	RI
6010B	FWGBKGmw-018C-1710-GF	AQ	N							
				Manganese	10.0	2.7B		J	ug/L	Ms, RI
				Potassium	1000	591B		J	ug/L	RI
6010B	FWGCBLmw-004C-1714-GF	AQ	N							
				Manganese	10.0	9.4B		J	ug/L	Ms, RI
				Nickel	10.0	5.4B		J	ug/L	RI
6010B	FWGEQUIPRINSE4-1760-GW	AQ	EB							
				Manganese	10.0	10.0U		UJ	ug/L	Ms
6010B	FWGLL2mw-266C-1721-GF	AQ	N							
				Manganese	10.0	761		J	ug/L	Ms
6010B	FWGLL2mw-267C-1722-GF	AQ	N							
				Cobalt	5.0	1.5B		J	ug/L	RI
				Manganese	10.0	564		J	ug/L	Ms
				Nickel	10.0	2.8B		J	ug/L	RI
				Potassium	1000	581B		J	ug/L	RI
6010B	FWGLL2mw-269C-1723-GF	AQ	N							
				Manganese	10.0	1590		J	ug/L	Ms

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: A1D080405										
6010B	FWGLL2mw-DUP3-1748-GF	AQ	FD							
				Cobalt	5.0	1.7B		J	ug/L	RI
				Manganese	10.0	568		J	ug/L	Ms
				Nickel	10.0	2.5B		J	ug/L	RI
				Potassium	1000	570B		J	ug/L	RI
6010B	FWGLL3mw-236C-1724-GF	AQ	N							
				Cobalt	5.0	2.7B		J	ug/L	RI
				Manganese	10.0	344		J	ug/L	Ms
				Nickel	10.0	9.0B		J	ug/L	RI
6010B	FWGLL3mw-239C-1725-GF	AQ	N							
				Arsenic	5.0	3.6B		J	ug/L	RI
				Chromium	5.0	1.5B		J	ug/L	RI
				Manganese	10.0	101		J	ug/L	Ms
				Nickel	10.0	7.0B		J	ug/L	RI
6020	FWGBKGmw-005C-1705-GF	AQ	N							
				Iron	50.0	36.5B		J	ug/L	RI
6020	FWGBKGmw-018C-1710-GF	AQ	N							
				Thallium	1.0	0.18B		UJ	ug/L	Cb, RI
				Zinc	10.0	7.3B		J	ug/L	Lcs, RI
6020	FWGCBLmw-004C-1714-GF	AQ	N							
				Zinc	10.0	6.8B		J	ug/L	Lcs, RI
6020	FWGLL2mw-266C-1721-GF	AQ	N							
				Zinc	10.0	5.6B		J	ug/L	Lcs, RI
6020	FWGLL2mw-267C-1722-GF	AQ	N							
				Aluminum	50.0	33.0B		J	ug/L	RI

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: A1D080405										
6020	FWGLL2mw-269C-1723-GF	AQ	N							
				Zinc	10.0	4.7B		J	ug/L	Lcs, Rl
6020	FWGLL2mw-DUP3-1748-GF	AQ	FD							
				Aluminum	50.0	35.7B		J	ug/L	Rl
				Zinc	10.0	3.1B		J	ug/L	Lcs, Rl
8081A	FWGASYmw-003C-1704-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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: A1D080405										
8081A	FWGBKGmw-005C-1705-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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: A1D080405										
8081A	FWGBKGmw-018C-1710-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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: A1D080405										
8081A	FWGCBLmw-004C-1714-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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: A1D080405										
8081A	FWGLL2mw-266C-1721-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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: A1D080405										
8081A	FWGLL2mw-267C-1722-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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: A1D080405										
8081A	FWGLL2mw-269C-1723-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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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: A1D080405										
8081A	FWGLL2mw-DUP3-1748-GW	AQ	FD							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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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: A1D080405										
8081A	FWGLL3mw-236C-1724-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr

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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: A1D080405										
8081A	FWGLL3mw-239C-1725-GW	AQ	N							
				4,4'-DDD	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDE	0.030	0.030U		UJ	ug/L	Surr
				4,4'-DDT	0.030	0.030U		UJ	ug/L	Surr
				Aldrin	0.030	0.030U		UJ	ug/L	Surr
				alpha-BHC	0.030	0.030U		UJ	ug/L	Surr
				alpha-Chordane	0.030	0.030U		UJ	ug/L	Surr
				beta-BHC	0.030	0.030U		UJ	ug/L	Surr
				delta-BHC	0.030	0.030U		UJ	ug/L	Surr
				Dieldrin	0.030	0.030U		UJ	ug/L	Surr
				Endosulfan I	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan II	0.025	0.025U		UJ	ug/L	Surr
				Endosulfan sulfate	0.030	0.030U		UJ	ug/L	Surr
				Endrin	0.030	0.030U		UJ	ug/L	Surr
				Endrin aldehyde	0.030	0.030U		UJ	ug/L	Surr
				Endrin ketone	0.030	0.030U		UJ	ug/L	Surr
				gamma-BHC	0.030	0.030U		UJ	ug/L	Surr
				gamma-Chlordane	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor	0.030	0.030U		UJ	ug/L	Surr
				Heptachlor epoxide	0.030	0.030U		UJ	ug/L	Surr
				Methoxychlor	0.10	0.10U		UJ	ug/L	Surr
				Toxaphene	2.0	2.0U		UJ	ug/L	Surr
8082	FWGASYmw-003C-1704-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr

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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: A1D080405										
8082	FWGBKGmw-005C-1705-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGBKGmw-018C-1710-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGCBLmw-004C-1714-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr

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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: A1D080405										
8082	FWGLL2mw-266C-1721-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGLL2mw-267C-1722-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGLL2mw-269C-1723-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr

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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: A1D080405										
8082	FWGLL2mw-DUP3-1748-GW	AQ	FD							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGLL3mw-236C-1724-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr
8082	FWGLL3mw-239C-1725-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1221	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1232	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1242	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1248	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1254	0.50	0.50U		UJ	ug/L	Surr
				Aroclor 1260	0.50	0.50U		UJ	ug/L	Surr

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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: A1D080405										
8260B	FWGEQUIPRINSE4-1760-GW	AQ	EB							
				2-Butanone	10	1.9J		J	ug/L	RI
				Acetone	10	4.2J		J	ug/L	RI
				Chloroform	1.0	0.79J		JB	ug/L	Tb, RI
				Methylene chloride	2.0	2.0B		JB	ug/L	Mb, Lcs, P
				Toluene	1.0	0.23J		J	ug/L	RI
8260B	FWGLL2mw-269C-1723-GW	AQ	N							
				Methylene chloride	2.0	0.41J B		JB	ug/L	Mb, Eb, Lc
8260B	FWGLL2mw-DUP3-1748-GW	AQ	FD							
				Methylene chloride	2.0	0.42J B		JB	ug/L	Mb, Eb, Lc
8260B	FWGLL3mw-239C-1725-GW	AQ	N							
				Carbon tetrachloride	1.0	0.33J		J	ug/L	RI
				Chloroform	1.0	0.43J		JB	ug/L	Tb, Eb, RI
8260B	FWGTEAM1-TRIP	AQ	TB							
				Chloroform	1.0	0.23J		J	ug/L	RI
				Methylene chloride	2.0	0.36J B		JB	ug/L	Mb, Lcs, R
8260B	FWGTEAM2-TRIP	AQ	TB							
				Chloroform	1.0	0.22J		J	ug/L	RI
8260B	FWGTEAM3-TRIP	AQ	TB							
				Chloroform	1.0	0.25J		J	ug/L	RI
				Methylene chloride	2.0	0.39J B		JB	ug/L	Mb, Lcs, R

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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: A1D080405										
8270C	FWGASYmw-003C-1704-GW	AQ	N							
				1,2,4-Trichlorobenzene	1.0	1.0U		UJ	ug/L	Surr
				1,2-Dichlorobenzene	1.0	1.0U		UJ	ug/L	Surr
				1,3-Dichlorobenzene	1.0	1.0U		UJ	ug/L	Surr
				1,4-Dichlorobenzene	1.0	1.0U		UJ	ug/L	Surr
				2,2-OXYBIS (1-CHLOROPROPANE)	1.0	1.0U		UJ	ug/L	Surr
				2,4,5-Trichlorophenol	5.0	5.0U		UJ	ug/L	Surr
				2,4,6-Trichlorophenol	5.0	5.0U		UJ	ug/L	Surr
				2,4-Dichlorophenol	2.0	2.0U		UJ	ug/L	Surr
				2,4-Dimethylphenol	2.0	2.0U		UJ	ug/L	Surr
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Surr
				2,4-Dinitrotoluene	5.0	5.0U		UJ	ug/L	Surr
				2,6-Dinitrotoluene	5.0	5.0U		UJ	ug/L	Surr
				2-Chloronaphthalene	1.0	1.0U		UJ	ug/L	Surr
				2-Chlorophenol	1.0	1.0U		UJ	ug/L	Surr
				2-Methylnaphthalene	0.20	0.20U		UJ	ug/L	Surr
				2-Methylphenol	1.0	1.0U		UJ	ug/L	Surr
				2-Nitroaniline	2.0	2.0U		UJ	ug/L	Surr
				2-Nitrophenol	2.0	2.0U		UJ	ug/L	Surr
				3,3'-Dichlorobenzidine	5.0	5.0U		UJ	ug/L	Surr
				3-Nitroaniline	2.0	2.0U		UJ	ug/L	Surr
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Surr, ProfJ
				4-Bromophenyl phenyl ether	2.0	2.0U		UJ	ug/L	Surr
				4-Chloro-3-methylphenol	2.0	2.0U		UJ	ug/L	Surr
				4-Chloroaniline	2.0	2.0U		UJ	ug/L	Surr
				4-Chlorophenyl phenyl ether	2.0	2.0U		UJ	ug/L	Surr
				4-Methylphenol	1.0	1.0U		UJ	ug/L	Surr
				4-Nitroanaline	2.0	2.0U		UJ	ug/L	Surr
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	Surr, ProfJ
				Acenaphthene	0.20	0.20U		UJ	ug/L	Surr
				Acenaphthylene	0.20	0.20U		UJ	ug/L	Surr
				Anthracene	0.20	0.20U		UJ	ug/L	Surr

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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: A1D080405										
				Benzo(a)anthracene	0.20	0.20U		UJ	ug/L	Surr
				Benzo(a)pyrene	0.20	0.20U		UJ	ug/L	Surr
				Benzo(b)fluoranthene	0.20	0.20U		UJ	ug/L	Surr
				BENZO(G,H,I)PERYLENE	0.20	0.20U		UJ	ug/L	Surr
				Benzo(k)fluoranthene	0.20	0.20U		UJ	ug/L	Surr
				Benzoic acid	10	10U		UJ	ug/L	Surr
				Benzyl alcohol	5.0	5.0U		UJ	ug/L	Surr
				bis(2-Chloroethoxy)methane	1.0	1.0U		UJ	ug/L	Surr
				bis(2-Chloroethyl) ether	1.0	1.0U		UJ	ug/L	Surr
				bis(2-Ethylhexyl) phthalate	10	1.1J		UJB	ug/L	Eb, Surr, R
				Butylbenzyl Phthalate	1.0	1.0U		UJ	ug/L	Surr
				Carbazole	1.0	1.0U		UJ	ug/L	Surr
				Chrysene	0.20	0.20U		UJ	ug/L	Surr
				dibenzo(a,h)anthracene	0.20	0.20U		UJ	ug/L	Surr
				Dibenzofuran	1.0	1.0U		UJ	ug/L	Surr
				Diethyl phthalate	1.0	1.0U		UJ	ug/L	Surr
				Dimethyl phthalate	1.0	1.0U		UJ	ug/L	Surr
				Di-n-butyl phthalate	1.0	1.0U		UJ	ug/L	Surr
				Di-n-octyl phthalate	1.0	1.0U		UJ	ug/L	Surr
				Fluoranthene	0.20	0.20U		UJ	ug/L	Surr
				Fluorene	0.20	0.20U		UJ	ug/L	Surr
				Hexachlorobenzene	0.20	0.20U		UJ	ug/L	Surr
				Hexachlorobutadiene	1.0	1.0U		UJ	ug/L	Surr
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Surr
				Hexachloroethane	1.0	1.0U		UJ	ug/L	Surr
				Indeno(1,2,3-cd)pyrene	0.20	0.20U		UJ	ug/L	Surr
				Isophorone	1.0	1.0U		UJ	ug/L	Surr
				Naphthalene	0.20	0.20U		UJ	ug/L	Surr
				Nitrobenzene	1.0	1.0U		UJ	ug/L	Surr
				N-nitroso-di-n-propylamine	1.0	1.0U		UJ	ug/L	Surr
				N-Nitrosodiphenylamine	1.0	1.0U		UJ	ug/L	Surr
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Surr, ProfJ
				Phenanthrene	0.20	0.20U		UJ	ug/L	Surr

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: A1D080405										
				Phenol	1.0	1.0U		UJ	ug/L	Surr
				Pyrene	0.20	0.20U		UJ	ug/L	Surr
8270C	FWGBKGmw-005C-1705-GW	AQ	N							
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	ProfJudg
8270C	FWGBKGmw-018C-1710-GW	AQ	N							
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	ProfJudg
8270C	FWGCBLmw-004C-1714-GW	AQ	N							
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	ProfJudg
8270C	FWGEQUIPRINSE4-1760-GW	AQ	EB							
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				bis(2-Ethylhexyl) phthalate	10	3.0J		J	ug/L	RI
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	ProfJudg
8270C	FWGLL2mw-266C-1721-GW	AQ	N							
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	ProfJudg

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: A1D080405										
8270C	FWGLL2mw-267C-1722-GW	AQ	N							
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				bis(2-Ethylhexyl) phthalate	10	0.97J		JB	ug/L	Eb, RI
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	ProfJudg

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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: A1D080405										
8270C	FWGLL2mw-269C-1723-GW	AQ	N							
				1,2,4-Trichlorobenzene	1.0	1.0U		UJ	ug/L	StoE
				1,2-Dichlorobenzene	1.0	1.0U		UJ	ug/L	StoE
				1,3-Dichlorobenzene	1.0	1.0U		UJ	ug/L	StoE
				1,4-Dichlorobenzene	1.0	1.0U		UJ	ug/L	StoE
				2,2-OXYBIS (1-CHLOROPROPANE)	1.0	1.0U		UJ	ug/L	StoE
				2,4,5-Trichlorophenol	5.0	5.0U		UJ	ug/L	StoE, Surr
				2,4,6-Trichlorophenol	5.0	5.0U		UJ	ug/L	StoE, Surr
				2,4-Dichlorophenol	2.0	2.0U		UJ	ug/L	StoE, Surr
				2,4-Dimethylphenol	2.0	2.0U		UJ	ug/L	StoE, Surr
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	StoE, Surr
				2,4-Dinitrotoluene	5.0	5.0U		UJ	ug/L	StoE
				2,6-Dinitrotoluene	5.0	5.0U		UJ	ug/L	StoE
				2-Chloronaphthalene	1.0	1.0U		UJ	ug/L	StoE
				2-Chlorophenol	1.0	1.0U		UJ	ug/L	StoE, Surr
				2-Methylnaphthalene	0.20	0.20U		UJ	ug/L	StoE
				2-Methylphenol	1.0	1.0U		UJ	ug/L	StoE, Surr
				2-Nitroaniline	2.0	2.0U		UJ	ug/L	StoE
				2-Nitrophenol	2.0	2.0U		UJ	ug/L	StoE, Surr
				3,3'-Dichlorobenzidine	5.0	5.0U		UJ	ug/L	StoE
				3-Nitroaniline	2.0	2.0U		UJ	ug/L	StoE
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	StoE, Surr
				4-Bromophenyl phenyl ether	2.0	2.0U		UJ	ug/L	StoE
				4-Chloro-3-methylphenol	2.0	2.0U		UJ	ug/L	StoE, Surr
				4-Chloroaniline	2.0	2.0U		UJ	ug/L	StoE, Ms
				4-Chlorophenyl phenyl ether	2.0	2.0U		UJ	ug/L	StoE, Ms,
				4-Methylphenol	1.0	1.0U		UJ	ug/L	StoE, Surr
				4-Nitroanaline	2.0	2.0U		UJ	ug/L	StoE
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	StoE, Surr,
				Acenaphthene	0.20	0.20U		UJ	ug/L	StoE
				Acenaphthylene	0.20	0.20U		UJ	ug/L	StoE
				Anthracene	0.20	0.20U		UJ	ug/L	StoE

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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: A1D080405										
				Benzo(a)anthracene	0.20	0.20U		UJ	ug/L	StoE
				Benzo(a)pyrene	0.20	0.20U		UJ	ug/L	StoE
				Benzo(b)fluoranthene	0.20	0.20U		UJ	ug/L	StoE
				BENZO(G,H,I)PERYLENE	0.20	0.20U		UJ	ug/L	StoE
				Benzo(k)fluoranthene	0.20	0.20U		UJ	ug/L	StoE
				Benzoic acid	10	10U		UJ	ug/L	StoE, Surr
				Benzyl alcohol	5.0	5.0U		UJ	ug/L	StoE
				bis(2-Chloroethoxy)methane	1.0	1.0U		UJ	ug/L	StoE
				bis(2-Chloroethyl) ether	1.0	1.0U		UJ	ug/L	StoE
				bis(2-Ethylhexyl) phthalate	10	10U		UJ	ug/L	StoE
				Butylbenzyl Phthalate	1.0	1.0U		UJ	ug/L	StoE
				Carbazole	1.0	1.0U		UJ	ug/L	StoE
				Chrysene	0.20	0.20U		UJ	ug/L	StoE
				dibenzo(a,h)anthracene	0.20	0.20U		UJ	ug/L	StoE
				Dibenzofuran	1.0	1.0U		UJ	ug/L	StoE
				Diethyl phthalate	1.0	1.0U		UJ	ug/L	StoE
				Dimethyl phthalate	1.0	1.0U		UJ	ug/L	StoE
				Di-n-butyl phthalate	1.0	1.0U		UJ	ug/L	StoE
				Di-n-octyl phthalate	1.0	1.0U		UJ	ug/L	StoE
				Fluoranthene	0.20	0.20U		UJ	ug/L	StoE
				Fluorene	0.20	0.20U		UJ	ug/L	StoE
				Hexachlorobenzene	0.20	0.20U		UJ	ug/L	StoE
				Hexachlorobutadiene	1.0	1.0U		UJ	ug/L	StoE
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	StoE
				Hexachloroethane	1.0	1.0U		UJ	ug/L	StoE
				Indeno(1,2,3-cd)pyrene	0.20	0.20U		UJ	ug/L	StoE
				Isophorone	1.0	1.0U		UJ	ug/L	StoE
				Naphthalene	0.20	0.20U		UJ	ug/L	StoE
				Nitrobenzene	1.0	1.0U		UJ	ug/L	StoE
				N-nitroso-di-n-propylamine	1.0	1.0U		UJ	ug/L	StoE
				N-Nitrosodiphenylamine	1.0	1.0U		UJ	ug/L	StoE
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	StoE, Surr
				Phenanthrene	0.20	0.20U		UJ	ug/L	StoE

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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: A1D080405										
				Phenol	1.0	1.0U		UJ	ug/L	StoE, Surr,
				Pyrene	0.20	0.20U		UJ	ug/L	StoE
8270C	FWGLL2mw-DUP3-1748-GW	AQ	FD							
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				bis(2-Ethylhexyl) phthalate	10	0.94J		JB	ug/L	Eb, RI
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	ProfJudg

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: A1D080405										
8270C	FWGLL3mw-236C-1724-GW	AQ	N							
				1,2,4-Trichlorobenzene	1.0	1.0U		UJ	ug/L	Surr
				1,2-Dichlorobenzene	1.0	1.0U		UJ	ug/L	Surr
				1,3-Dichlorobenzene	1.0	1.0U		UJ	ug/L	Surr
				1,4-Dichlorobenzene	1.0	1.0U		UJ	ug/L	Surr
				2,2-OXYBIS (1-CHLOROPROPANE)	1.0	1.0U		UJ	ug/L	Surr
				2,4,5-Trichlorophenol	5.0	5.0U		UJ	ug/L	Surr
				2,4,6-Trichlorophenol	5.0	5.0U		UJ	ug/L	Surr
				2,4-Dichlorophenol	2.0	2.0U		UJ	ug/L	Surr
				2,4-Dimethylphenol	2.0	2.0U		UJ	ug/L	Surr
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Surr
				2,4-Dinitrotoluene	5.0	5.0U		UJ	ug/L	Surr
				2,6-Dinitrotoluene	5.0	5.0U		UJ	ug/L	Surr
				2-Chloronaphthalene	1.0	1.0U		UJ	ug/L	Surr
				2-Chlorophenol	1.0	1.0U		UJ	ug/L	Surr
				2-Methylnaphthalene	0.20	0.20U		UJ	ug/L	Surr
				2-Methylphenol	1.0	1.0U		UJ	ug/L	Surr
				2-Nitroaniline	2.0	2.0U		UJ	ug/L	Surr
				2-Nitrophenol	2.0	2.0U		UJ	ug/L	Surr
				3,3'-Dichlorobenzidine	5.0	5.0U		UJ	ug/L	Surr
				3-Nitroaniline	2.0	2.0U		UJ	ug/L	Surr
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	Surr, ProfJ
				4-Bromophenyl phenyl ether	2.0	2.0U		UJ	ug/L	Surr
				4-Chloro-3-methylphenol	2.0	2.0U		UJ	ug/L	Surr
				4-Chloroaniline	2.0	2.0U		UJ	ug/L	Surr
				4-Chlorophenyl phenyl ether	2.0	2.0U		UJ	ug/L	Surr
				4-Methylphenol	1.0	1.0U		UJ	ug/L	Surr
				4-Nitroanaline	2.0	2.0U		UJ	ug/L	Surr
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	Surr, ProfJ
				Acenaphthene	0.20	0.20U		UJ	ug/L	Surr
				Acenaphthylene	0.20	0.20U		UJ	ug/L	Surr
				Anthracene	0.20	0.20U		UJ	ug/L	Surr

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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: A1D080405										
				Benzo(a)anthracene	0.20	0.20U		UJ	ug/L	Surr
				Benzo(a)pyrene	0.20	0.20U		UJ	ug/L	Surr
				Benzo(b)fluoranthene	0.20	0.20U		UJ	ug/L	Surr
				BENZO(G,H,I)PERYLENE	0.20	0.20U		UJ	ug/L	Surr
				Benzo(k)fluoranthene	0.20	0.20U		UJ	ug/L	Surr
				Benzoic acid	10	10U		UJ	ug/L	Surr
				Benzyl alcohol	5.0	5.0U		UJ	ug/L	Surr
				bis(2-Chloroethoxy)methane	1.0	1.0U		UJ	ug/L	Surr
				bis(2-Chloroethyl) ether	1.0	1.0U		UJ	ug/L	Surr
				bis(2-Ethylhexyl) phthalate	10	1.2J		JB	ug/L	Eb, Surr, R
				Butylbenzyl Phthalate	1.0	1.0U		UJ	ug/L	Surr
				Carbazole	1.0	1.0U		UJ	ug/L	Surr
				Chrysene	0.20	0.20U		UJ	ug/L	Surr
				dibenzo(a,h)anthracene	0.20	0.20U		UJ	ug/L	Surr
				Dibenzofuran	1.0	1.0U		UJ	ug/L	Surr
				Diethyl phthalate	1.0	1.0U		UJ	ug/L	Surr
				Dimethyl phthalate	1.0	1.0U		UJ	ug/L	Surr
				Di-n-butyl phthalate	1.0	1.0U		UJ	ug/L	Surr
				Di-n-octyl phthalate	1.0	1.0U		UJ	ug/L	Surr
				Fluoranthene	0.20	0.20U		UJ	ug/L	Surr
				Fluorene	0.20	0.20U		UJ	ug/L	Surr
				Hexachlorobenzene	0.20	0.20U		UJ	ug/L	Surr
				Hexachlorobutadiene	1.0	1.0U		UJ	ug/L	Surr
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	Surr
				Hexachloroethane	1.0	1.0U		UJ	ug/L	Surr
				Indeno(1,2,3-cd)pyrene	0.20	0.20U		UJ	ug/L	Surr
				Isophorone	1.0	1.0U		UJ	ug/L	Surr
				Naphthalene	0.20	0.20U		UJ	ug/L	Surr
				Nitrobenzene	1.0	1.0U		UJ	ug/L	Surr
				N-nitroso-di-n-propylamine	1.0	1.0U		UJ	ug/L	Surr
				N-Nitrosodiphenylamine	1.0	1.0U		UJ	ug/L	Surr
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	Surr, ProfJ
				Phenanthrene	0.20	0.20U		UJ	ug/L	Surr

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: A1D080405										
				Phenol	1.0	1.0U		UJ	ug/L	Surr
				Pyrene	0.20	0.20U		UJ	ug/L	Surr
8270C	FWGLL3mw-239C-1725-GW	AQ	N							
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	ProfJudg
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	ProfJudg
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	ProfJudg

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: METALS

Method: 6010B *Matrix:* AQ

Sample ID: FWGASYmw-003C-1704-GF *Collected:* 4/7/2011 1:33:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	189		1.8	MDL	10.0	PQL	ug/L	J	Ms
POTASSIUM	982	B	300	MDL	1000	PQL	ug/L	J	RI

Sample ID: FWGBKGmw-005C-1705-GF *Collected:* 4/7/2011 11:31:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	6.1	B	1.8	MDL	10.0	PQL	ug/L	J	RI, Ms
POTASSIUM	444	B	300	MDL	1000	PQL	ug/L	J	RI

Sample ID: FWGBKGmw-018C-1710-GF *Collected:* 4/7/2011 9:01:00 AM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	2.7	B	1.8	MDL	10.0	PQL	ug/L	J	RI, Ms
POTASSIUM	591	B	300	MDL	1000	PQL	ug/L	J	RI

Sample ID: FWGCBLmw-004C-1714-GF *Collected:* 4/7/2011 1:21:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	9.4	B	1.8	MDL	10.0	PQL	ug/L	J	RI, Ms
NICKEL	5.4	B	2.2	MDL	10.0	PQL	ug/L	J	RI

Sample ID: FWGEQUIPRINSE4-1760-GW *Collected:* 4/7/2011 2:33:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	10.0	U	1.8	MDL	10.0	PQL	ug/L	UJ	Ms

Sample ID: FWGLL2mw-266C-1721-GF *Collected:* 4/7/2011 11:04:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	761		1.8	MDL	10.0	PQL	ug/L	J	Ms

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: METALS

Method: 6010B *Matrix:* AQ

Sample ID: FWGLL2mw-267C-1722-GF *Collected:* 4/7/2011 8:52:00 AM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	1.5	B	1.5	MDL	5.0	PQL	ug/L	J	RI
MANGANESE	564		1.8	MDL	10.0	PQL	ug/L	J	Ms
NICKEL	2.8	B	2.2	MDL	10.0	PQL	ug/L	J	RI
POTASSIUM	581	B	300	MDL	1000	PQL	ug/L	J	RI

Sample ID: FWGLL2mw-269C-1723-GF *Collected:* 4/7/2011 8:59:00 AM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	1590		1.8	MDL	10.0	PQL	ug/L	J	Ms

Sample ID: FWGLL2mw-DUP3-1748-GF *Collected:* 4/7/2011 10:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	1.7	B	1.5	MDL	5.0	PQL	ug/L	J	RI
MANGANESE	568		1.8	MDL	10.0	PQL	ug/L	J	Ms
NICKEL	2.5	B	2.2	MDL	10.0	PQL	ug/L	J	RI
POTASSIUM	570	B	300	MDL	1000	PQL	ug/L	J	RI

Sample ID: FWGLL3mw-236C-1724-GF *Collected:* 4/7/2011 11:59:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	2.7	B	1.5	MDL	5.0	PQL	ug/L	J	RI
MANGANESE	344		1.8	MDL	10.0	PQL	ug/L	J	Ms
NICKEL	9.0	B	2.2	MDL	10.0	PQL	ug/L	J	RI

Sample ID: FWGLL3mw-239C-1725-GF *Collected:* 4/7/2011 12:32:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.6	B	3.3	MDL	5.0	PQL	ug/L	J	RI
CHROMIUM	1.5	B	1.4	MDL	5.0	PQL	ug/L	J	RI
MANGANESE	101		1.8	MDL	10.0	PQL	ug/L	J	Ms
NICKEL	7.0	B	2.2	MDL	10.0	PQL	ug/L	J	RI

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: METALS

Method: 6020 **Matrix: AQ**

Sample ID: FWGBKGmw-005C-1705-GF *Collected:* 4/7/2011 11:31:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	36.5	B	26.0	MDL	50.0	PQL	ug/L	J	RI

Sample ID: FWGBKGmw-018C-1710-GF *Collected:* 4/7/2011 9:01:00 AM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.18	B	0.14	MDL	1.0	PQL	ug/L	UJ	RI, Cb
ZINC	7.3	B	2.3	MDL	10.0	PQL	ug/L	J	RI, Lcs

Sample ID: FWGCBLmw-004C-1714-GF *Collected:* 4/7/2011 1:21:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	6.8	B	2.3	MDL	10.0	PQL	ug/L	J	RI, Lcs

Sample ID: FWGLL2mw-266C-1721-GF *Collected:* 4/7/2011 11:04:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	5.6	B	2.3	MDL	10.0	PQL	ug/L	J	RI, Lcs

Sample ID: FWGLL2mw-267C-1722-GF *Collected:* 4/7/2011 8:52:00 AM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	33.0	B	19.0	MDL	50.0	PQL	ug/L	J	RI

Sample ID: FWGLL2mw-269C-1723-GF *Collected:* 4/7/2011 8:59:00 AM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	4.7	B	2.3	MDL	10.0	PQL	ug/L	J	RI, Lcs

Sample ID: FWGLL2mw-DUP3-1748-GF *Collected:* 4/7/2011 10:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	35.7	B	19.0	MDL	50.0	PQL	ug/L	J	RI
ZINC	3.1	B	2.3	MDL	10.0	PQL	ug/L	J	RI, Lcs

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: FWGASYmw-003C-1704-GW *Collected:* 4/7/2011 1:33:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: FWGBKGmw-005C-1705-GW *Collected:* 4/7/2011 11:31:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8081A *Matrix:* AQ

Sample ID: FWGBKGmw-005C-1705-GW *Collected:* 4/7/2011 11:31:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: FWGBKGmw-018C-1710-GW *Collected:* 4/7/2011 9:01:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: **FWGBKGmw-018C-1710-GW** ***Collected:*** **4/7/2011 9:01:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: **FWGCBLmw-004C-1714-GW** ***Collected:*** **4/7/2011 1:21:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: **FWGLL2mw-266C-1721-GW** ***Collected:*** **4/7/2011 11:04:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: **FWGLL2mw-267C-1722-GW** ***Collected:*** **4/7/2011 8:52:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: FWGLL2mw-267C-1722-GW *Collected:* 4/7/2011 8:52:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: FWGLL2mw-269C-1723-GW *Collected:* 4/7/2011 8:59:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: **FWGLL2mw-269C-1723-GW** ***Collected:*** **4/7/2011 8:59:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: **FWGLL2mw-DUP3-1748-GW** ***Collected:*** **4/7/2011 10:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: **FWGLL3mw-236C-1724-GW** ***Collected:*** **4/7/2011 11:59:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Sample ID: **FWGLL3mw-239C-1725-GW** ***Collected:*** **4/7/2011 12:32:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.030	U	0.0096	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDE	0.030	U	0.0097	MDL	0.030	PQL	ug/L	UJ	Surr
4,4'-DDT	0.030	U	0.016	MDL	0.030	PQL	ug/L	UJ	Surr
ALDRIN	0.030	U	0.0082	MDL	0.030	PQL	ug/L	UJ	Surr
ALPHA-BHC	0.030	U	0.0070	MDL	0.030	PQL	ug/L	UJ	Surr
alpha-Chordane	0.030	U	0.014	MDL	0.030	PQL	ug/L	UJ	Surr
BETA-BHC	0.030	U	0.0084	MDL	0.030	PQL	ug/L	UJ	Surr
DELTA-BHC	0.030	U	0.0087	MDL	0.030	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA **Method:** 8081A **Matrix:** AQ

Sample ID: FWGLL3mw-239C-1725-GW *Collected:* 4/7/2011 12:32:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.030	U	0.0075	MDL	0.030	PQL	ug/L	UJ	Surr
ENDOSULFAN I	0.025	U	0.013	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN II	0.025	U	0.012	MDL	0.025	PQL	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.030	U	0.011	MDL	0.030	PQL	ug/L	UJ	Surr
ENDRIN KETONE	0.030	U	0.0078	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-BHC	0.030	U	0.0064	MDL	0.030	PQL	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.030	U	0.012	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR	0.030	U	0.0080	MDL	0.030	PQL	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.030	U	0.0071	MDL	0.030	PQL	ug/L	UJ	Surr
METHOXYCHLOR	0.10	U	0.032	MDL	0.10	PQL	ug/L	UJ	Surr
TOXAPHENE	2.0	U	0.32	MDL	2.0	PQL	ug/L	UJ	Surr

Method Category: SVOA **Method:** 8082 **Matrix:** AQ

Sample ID: FWGASYmw-003C-1704-GW *Collected:* 4/7/2011 1:33:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGBKGmw-005C-1705-GW *Collected:* 4/7/2011 11:31:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8082 **Matrix: AQ**

Sample ID: FWGBKGmw-005C-1705-GW *Collected:* 4/7/2011 11:31:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGBKGmw-018C-1710-GW *Collected:* 4/7/2011 9:01:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGCBLmw-004C-1714-GW *Collected:* 4/7/2011 1:21:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGLL2mw-266C-1721-GW *Collected:* 4/7/2011 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8082 *Matrix:* AQ

Sample ID: FWGLL2mw-266C-1721-GW *Collected:* 4/7/2011 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGLL2mw-267C-1722-GW *Collected:* 4/7/2011 8:52:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGLL2mw-269C-1723-GW *Collected:* 4/7/2011 8:59:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGLL2mw-DUP3-1748-GW *Collected:* 4/7/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8082 **Matrix: AQ**

Sample ID: FWGLL2mw-DUP3-1748-GW *Collected:* 4/7/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGLL3mw-236C-1724-GW *Collected:* 4/7/2011 11:59:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Sample ID: FWGLL3mw-239C-1725-GW *Collected:* 4/7/2011 12:32:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1221	0.50	U	0.13	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1232	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1242	0.50	U	0.22	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1248	0.50	U	0.10	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1254	0.50	U	0.16	MDL	0.50	PQL	ug/L	UJ	Surr
AROCLOR 1260	0.50	U	0.17	MDL	0.50	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: **FWGASYmw-003C-1704-GW** *Collected:* **4/7/2011 1:33:00 PM** *Analysis Type:* **RE-ACID** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Surr

Sample ID: **FWGASYmw-003C-1704-GW** *Collected:* **4/7/2011 1:33:00 PM** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	1.0	U	0.28	MDL	1.0	PQL	ug/L	UJ	Surr
1,2-DICHLOROBENZENE	1.0	U	0.29	MDL	1.0	PQL	ug/L	UJ	Surr
1,3-DICHLOROBENZENE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
1,4-DICHLOROBENZENE	1.0	U	0.34	MDL	1.0	PQL	ug/L	UJ	Surr
2,2-OXYBIS (1-CHLOROPROPANE)	1.0	U	0.40	MDL	1.0	PQL	ug/L	UJ	Surr
2,4,5-TRICHLOROPHENOL	5.0	U	0.30	MDL	5.0	PQL	ug/L	UJ	Surr
2,4,6-TRICHLOROPHENOL	5.0	U	0.80	MDL	5.0	PQL	ug/L	UJ	Surr
2,4-DICHLOROPHENOL	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
2,4-DIMETHYLPHENOL	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
2,4-DINITROTOLUENE	5.0	U	0.27	MDL	5.0	PQL	ug/L	UJ	Surr
2,6-DINITROTOLUENE	5.0	U	0.80	MDL	5.0	PQL	ug/L	UJ	Surr
2-CHLORONAPHTHALENE	1.0	U	0.10	MDL	1.0	PQL	ug/L	UJ	Surr
2-CHLOROPHENOL	1.0	U	0.29	MDL	1.0	PQL	ug/L	UJ	Surr
2-METHYLNAPHTHALENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
2-METHYLPHENOL	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
2-NITROANILINE	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
2-NITROPHENOL	2.0	U	0.28	MDL	2.0	PQL	ug/L	UJ	Surr
3,3'-DICHLOROBENZIDINE	5.0	U	0.37	MDL	5.0	PQL	ug/L	UJ	Surr
3-NITROANILINE	2.0	U	0.28	MDL	2.0	PQL	ug/L	UJ	Surr
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Surr, ProfJudg
4-BROMOPHENYL PHENYL ETHER	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
4-CHLORO-3-METHYLPHENOL	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
4-CHLOROANILINE	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
4-CHLOROPHENYL PHENYL ETHER	2.0	U	0.30	MDL	2.0	PQL	ug/L	UJ	Surr
4-METHYLPHENOL	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
4-Nitroanaline	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Surr, ProfJudg
ACENAPHTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8270C *Matrix:* AQ

Sample ID: FWGASYmw-003C-1704-GW *Collected:* 4/7/2011 1:33:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
ANTHRACENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
BENZO(A)ANTHRACENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
BENZO(A)PYRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
BENZO(B)FLUORANTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
BENZO(G,H,I)PERYLENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
BENZO(K)FLUORANTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
BENZOIC ACID	10	U	10	MDL	10	PQL	ug/L	UJ	Surr
BENZYL ALCOHOL	5.0	U	0.38	MDL	5.0	PQL	ug/L	UJ	Surr
BIS(2-CHLOROETHOXY)METHANE	1.0	U	0.32	MDL	1.0	PQL	ug/L	UJ	Surr
BIS(2-CHLOROETHYL) ETHER	1.0	U	0.10	MDL	1.0	PQL	ug/L	UJ	Surr
BIS(2-ETHYLHEXYL) PHTHALATE	1.1	J	0.80	MDL	10	PQL	ug/L	UJ MJB	RI, Surr, Eb
BUTYLBENZYL PHTHALATE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
CARBAZOLE	1.0	U	0.28	MDL	1.0	PQL	ug/L	UJ	Surr
CHRYSENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
DIBENZO(A,H)ANTHRACENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
DIBENZOFURAN	1.0	U	0.10	MDL	1.0	PQL	ug/L	UJ	Surr
DIETHYL PHTHALATE	1.0	U	0.60	MDL	1.0	PQL	ug/L	UJ	Surr
DIMETHYL PHTHALATE	1.0	U	0.29	MDL	1.0	PQL	ug/L	UJ	Surr
DI-N-BUTYL PHTHALATE	1.0	U	0.67	MDL	1.0	PQL	ug/L	UJ	Surr
DI-N-OCTYL PHTHALATE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
FLUORANTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
FLUORENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
HEXACHLOROBENZENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
HEXACHLOROBUTADIENE	1.0	U	0.27	MDL	1.0	PQL	ug/L	UJ	Surr
HEXACHLOROCYCLOPENTADIENE	10	U	0.80	MDL	10	PQL	ug/L	UJ	Surr
HEXACHLOROETHANE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
INDENO(1,2,3-CD)PYRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
ISOPHORONE	1.0	U	0.27	MDL	1.0	PQL	ug/L	UJ	Surr
NAPHTHALENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
NITROBENZENE	1.0	U	0.040	MDL	1.0	PQL	ug/L	UJ	Surr
N-NITROSO-DI-N-PROPYLAMINE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
N-NITROSODIPHENYLAMINE	1.0	U	0.31	MDL	1.0	PQL	ug/L	UJ	Surr

Project Name and Number: 030240.0006 - RVAAP (OH)

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method/Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: **FWGASYmw-003C-1704-GW** ***Collected:*** **4/7/2011 1:33:00 PM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Surr, ProfJudg
PHENANTHRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
PHENOL	1.0	U	0.60	MDL	1.0	PQL	ug/L	UJ	Surr
PYRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr

Sample ID: **FWGBKGmw-005C-1705-GW** ***Collected:*** **4/7/2011 11:31:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: **FWGBKGmw-018C-1710-GW** ***Collected:*** **4/7/2011 9:01:00 AM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: **FWGCBLmw-004C-1714-GW** ***Collected:*** **4/7/2011 1:21:00 PM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: **FWGEQUIPRINSE4-1760-GW** ***Collected:*** **4/7/2011 2:33:00 PM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
BIS(2-ETHYLHEXYL) PHTHALATE	3.0	J	0.80	MDL	10	PQL	ug/L	J	RI
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: **FWGLL2mw-266C-1721-GW** ***Collected:*** **4/7/2011 11:04:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: **FWGLL2mw-267C-1722-GW** ***Collected:*** **4/7/2011 8:52:00 AM** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
BIS(2-ETHYLHEXYL) PHTHALATE	0.97	J	0.80	MDL	10	PQL	ug/L	UJ JB	RI, Eb
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: **FWGLL2mw-269C-1723-GW** ***Collected:*** **4/7/2011 8:59:00 AM** ***Analysis Type:*** **RE-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	1.0	U	0.28	MDL	1.0	PQL	ug/L	UJ	StoE
1,2-DICHLOROBENZENE	1.0	U	0.29	MDL	1.0	PQL	ug/L	UJ	StoE
1,3-DICHLOROBENZENE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	StoE
1,4-DICHLOROBENZENE	1.0	U	0.34	MDL	1.0	PQL	ug/L	UJ	StoE
2,2-OXYBIS (1-CHLOROPROPANE)	1.0	U	0.40	MDL	1.0	PQL	ug/L	UJ	StoE
2,4,5-TRICHLOROPHENOL	5.0	U	0.30	MDL	5.0	PQL	ug/L	UJ	Surr, StoE
2,4,6-TRICHLOROPHENOL	5.0	U	0.80	MDL	5.0	PQL	ug/L	UJ	Surr, StoE
2,4-DICHLOROPHENOL	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr, StoE
2,4-DIMETHYLPHENOL	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr, StoE
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Surr, StoE
2,4-DINITROTOLUENE	5.0	U	0.27	MDL	5.0	PQL	ug/L	UJ	StoE
2,6-DINITROTOLUENE	5.0	U	0.80	MDL	5.0	PQL	ug/L	UJ	StoE
2-CHLORONAPHTHALENE	1.0	U	0.10	MDL	1.0	PQL	ug/L	UJ	StoE
2-CHLOROPHENOL	1.0	U	0.29	MDL	1.0	PQL	ug/L	UJ	Surr, StoE
2-METHYLNAPHTHALENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
2-METHYLPHENOL	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr, StoE
2-NITROANILINE	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	StoE
2-NITROPHENOL	2.0	U	0.28	MDL	2.0	PQL	ug/L	UJ	Surr, StoE

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: **FWGLL2mw-269C-1723-GW** ***Collected:*** **4/7/2011 8:59:00 AM** ***Analysis Type:*** **RE-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	5.0	U	0.37	MDL	5.0	PQL	ug/L	UJ	StoE
3-NITROANILINE	2.0	U	0.28	MDL	2.0	PQL	ug/L	UJ	StoE
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Surr, StoE
4-BROMOPHENYL PHENYL ETHER	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	StoE
4-CHLORO-3-METHYLPHENOL	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr, StoE
4-CHLOROANILINE	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Ms, StoE
4-CHLOROPHENYL PHENYL ETHER	2.0	U	0.30	MDL	2.0	PQL	ug/L	UJ	Ms, Lcs, StoE
4-METHYLPHENOL	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr, StoE
4-Nitroanaline	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	StoE
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Ms, Surr, StoE
ACENAPHTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
ACENAPHTHYLENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
ANTHRACENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
BENZO(A)ANTHRACENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
BENZO(A)PYRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
BENZO(B)FLUORANTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
BENZO(G,H,I)PERYLENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
BENZO(K)FLUORANTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
BENZOIC ACID	10	U	10	MDL	10	PQL	ug/L	UJ	Surr, StoE
BENZYL ALCOHOL	5.0	U	0.38	MDL	5.0	PQL	ug/L	UJ	StoE
BIS(2-CHLOROETHOXY)METHANE	1.0	U	0.32	MDL	1.0	PQL	ug/L	UJ	StoE
BIS(2-CHLOROETHYL) ETHER	1.0	U	0.10	MDL	1.0	PQL	ug/L	UJ	StoE
BIS(2-ETHYLHEXYL) PHTHALATE	10	U	0.80	MDL	10	PQL	ug/L	UJ	StoE
BUTYLBENZYL PHTHALATE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	StoE
CARBAZOLE	1.0	U	0.28	MDL	1.0	PQL	ug/L	UJ	StoE
CHRYSENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
DIBENZO(A,H)ANTHRACENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
DIBENZOFURAN	1.0	U	0.10	MDL	1.0	PQL	ug/L	UJ	StoE
DIETHYL PHTHALATE	1.0	U	0.60	MDL	1.0	PQL	ug/L	UJ	StoE
DIMETHYL PHTHALATE	1.0	U	0.29	MDL	1.0	PQL	ug/L	UJ	StoE
DI-N-BUTYL PHTHALATE	1.0	U	0.67	MDL	1.0	PQL	ug/L	UJ	StoE
DI-N-OCTYL PHTHALATE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	StoE
FLUORANTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: **FWGLL2mw-269C-1723-GW** ***Collected:*** **4/7/2011 8:59:00 AM** ***Analysis Type:*** **RE-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
HEXACHLOROBENZENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
HEXACHLOROBUTADIENE	1.0	U	0.27	MDL	1.0	PQL	ug/L	UJ	StoE
HEXACHLOROCYCLOPENTADIENE	10	U	0.80	MDL	10	PQL	ug/L	UJ	StoE
HEXACHLOROETHANE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	StoE
INDENO(1,2,3-CD)PYRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
ISOPHORONE	1.0	U	0.27	MDL	1.0	PQL	ug/L	UJ	StoE
NAPHTHALENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
NITROBENZENE	1.0	U	0.040	MDL	1.0	PQL	ug/L	UJ	StoE
N-NITROSO-DI-N-PROPYLAMINE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	StoE
N-NITROSODIPHENYLAMINE	1.0	U	0.31	MDL	1.0	PQL	ug/L	UJ	StoE
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Surr, StoE
PHENANTHRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE
PHENOL	1.0	U	0.60	MDL	1.0	PQL	ug/L	UJ	Ms, Surr, StoE
PYRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	StoE

Sample ID: **FWGLL2mw-DUP3-1748-GW** ***Collected:*** **4/7/2011 10:10:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
BIS(2-ETHYLHEXYL) PHTHALATE	0.94	J	0.80	MDL	10	PQL	ug/L	UJ JB	RI, Eb
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Sample ID: **FWGLL3mw-236C-1724-GW** ***Collected:*** **4/7/2011 11:59:00** ***Analysis Type:*** **RE-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	Surr

Sample ID: **FWGLL3mw-236C-1724-GW** ***Collected:*** **4/7/2011 11:59:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	1.0	U	0.28	MDL	1.0	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8270C *Matrix:* AQ

Sample ID: FWGLL3mw-236C-1724-GW *Collected:* 4/7/2011 11:59:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	1.0	U	0.29	MDL	1.0	PQL	ug/L	UJ	Surr
1,3-DICHLOROBENZENE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
1,4-DICHLOROBENZENE	1.0	U	0.34	MDL	1.0	PQL	ug/L	UJ	Surr
2,2-OXYBIS (1-CHLOROPROPANE)	1.0	U	0.40	MDL	1.0	PQL	ug/L	UJ	Surr
2,4,5-TRICHLOROPHENOL	5.0	U	0.30	MDL	5.0	PQL	ug/L	UJ	Surr
2,4,6-TRICHLOROPHENOL	5.0	U	0.80	MDL	5.0	PQL	ug/L	UJ	Surr
2,4-DICHLOROPHENOL	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
2,4-DIMETHYLPHENOL	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
2,4-DINITROTOLUENE	5.0	U	0.27	MDL	5.0	PQL	ug/L	UJ	Surr
2,6-DINITROTOLUENE	5.0	U	0.80	MDL	5.0	PQL	ug/L	UJ	Surr
2-CHLORONAPHTHALENE	1.0	U	0.10	MDL	1.0	PQL	ug/L	UJ	Surr
2-CHLOROPHENOL	1.0	U	0.29	MDL	1.0	PQL	ug/L	UJ	Surr
2-METHYLNAPHTHALENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
2-METHYLPHENOL	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
2-NITROANILINE	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
2-NITROPHENOL	2.0	U	0.28	MDL	2.0	PQL	ug/L	UJ	Surr
3,3'-DICHLOROBENZIDINE	5.0	U	0.37	MDL	5.0	PQL	ug/L	UJ	Surr
3-NITROANILINE	2.0	U	0.28	MDL	2.0	PQL	ug/L	UJ	Surr
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg, Surr
4-BROMOPHENYL PHENYL ETHER	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
4-CHLORO-3-METHYLPHENOL	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
4-CHLOROANILINE	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
4-CHLOROPHENYL PHENYL ETHER	2.0	U	0.30	MDL	2.0	PQL	ug/L	UJ	Surr
4-METHYLPHENOL	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
4-Nitroanaline	2.0	U	0.80	MDL	2.0	PQL	ug/L	UJ	Surr
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg, Surr
ACENAPHTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
ACENAPHTHYLENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
ANTHRACENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
BENZO(A)ANTHRACENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
BENZO(A)PYRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
BENZO(B)FLUORANTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
BENZO(G,H,I)PERYLENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: **FWGLL3mw-236C-1724-GW** ***Collected:*** **4/7/2011 11:59:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
BENZO(K)FLUORANTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
BENZOIC ACID	10	U	10	MDL	10	PQL	ug/L	UJ	Surr
BENZYL ALCOHOL	5.0	U	0.38	MDL	5.0	PQL	ug/L	UJ	Surr
BIS(2-CHLOROETHOXY)METHANE	1.0	U	0.32	MDL	1.0	PQL	ug/L	UJ	Surr
BIS(2-CHLOROETHYL) ETHER	1.0	U	0.10	MDL	1.0	PQL	ug/L	UJ	Surr
BIS(2-ETHYLHEXYL) PHTHALATE	1.2	J	0.80	MDL	10	PQL	ug/L	UJ	RI, Eb, Surr
BUTYLBENZYL PHTHALATE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
CARBAZOLE	1.0	U	0.28	MDL	1.0	PQL	ug/L	UJ	Surr
CHRYSENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
DIBENZO(A,H)ANTHRACENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
DIBENZOFURAN	1.0	U	0.10	MDL	1.0	PQL	ug/L	UJ	Surr
DIETHYL PHTHALATE	1.0	U	0.60	MDL	1.0	PQL	ug/L	UJ	Surr
DIMETHYL PHTHALATE	1.0	U	0.29	MDL	1.0	PQL	ug/L	UJ	Surr
DI-N-BUTYL PHTHALATE	1.0	U	0.67	MDL	1.0	PQL	ug/L	UJ	Surr
DI-N-OCTYL PHTHALATE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
FLUORANTHENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
FLUORENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
HEXACHLOROBENZENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
HEXACHLOROBUTADIENE	1.0	U	0.27	MDL	1.0	PQL	ug/L	UJ	Surr
HEXACHLOROCYCLOPENTADIENE	10	U	0.80	MDL	10	PQL	ug/L	UJ	Surr
HEXACHLOROETHANE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
INDENO(1,2,3-CD)PYRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
ISOPHORONE	1.0	U	0.27	MDL	1.0	PQL	ug/L	UJ	Surr
NAPHTHALENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
NITROBENZENE	1.0	U	0.040	MDL	1.0	PQL	ug/L	UJ	Surr
N-NITROSO-DI-N-PROPYLAMINE	1.0	U	0.80	MDL	1.0	PQL	ug/L	UJ	Surr
N-NITROSODIPHENYLAMINE	1.0	U	0.31	MDL	1.0	PQL	ug/L	UJ	Surr
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg, Surr
PHENANTHRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr
PHENOL	1.0	U	0.60	MDL	1.0	PQL	ug/L	UJ	Surr
PYRENE	0.20	U	0.10	MDL	0.20	PQL	ug/L	UJ	Surr

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: SVOA
Method: 8270C **Matrix:** AQ

Sample ID: FWGLL3mw-239C-1725-GW *Collected:* 4/7/2011 12:32:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
4-NITROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg
PENTACHLOROPHENOL	5.0	U	2.4	MDL	5.0	PQL	ug/L	UJ	ProfJudg

Method Category: VOA
Method: 8260B **Matrix:** AQ

Sample ID: FWGEQUIPRINSE4-1760-GW *Collected:* 4/7/2011 2:33:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE	1.9	J	0.57	MDL	10	PQL	ug/L	J	RI
ACETONE	4.2	J	1.1	MDL	10	PQL	ug/L	J	RI
CHLOROFORM	0.79	J	0.16	MDL	1.0	PQL	ug/L	UJ JB	RI, Tb
METHYLENE CHLORIDE	2.0	B	0.33	MDL	2.0	PQL	ug/L	UJ JB	Lcs, Mb, ProfJudg
TOLUENE	0.23	J	0.13	MDL	1.0	PQL	ug/L	J	RI

Sample ID: FWGLL2mw-269C-1723-GW *Collected:* 4/7/2011 8:59:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.41	J B	0.33	MDL	2.0	PQL	ug/L	UJ JB	RI, Lcs, Mb, Eb, ProfJudg

Sample ID: FWGLL2mw-DUP3-1748-GW *Collected:* 4/7/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.42	J B	0.33	MDL	2.0	PQL	ug/L	UJ JB	RI, Lcs, Mb, Eb, ProfJudg

Sample ID: FWGLL3mw-239C-1725-GW *Collected:* 4/7/2011 12:32:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBON TETRACHLORIDE	0.33	J	0.13	MDL	1.0	PQL	ug/L	J	RI
CHLOROFORM	0.43	J	0.16	MDL	1.0	PQL	ug/L	UJ JB	RI, Eb, Tb

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: **FWGTEAM1-TRIP** ***Collected:*** **4/7/2011 8:00:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
CHLOROFORM	0.23	J	0.16	MDL	1.0	PQL	ug/L	J	RI
METHYLENE CHLORIDE	0.36	J B	0.33	MDL	2.0	PQL	ug/L	UJ JB	RI, Lcs, Mb, ProfJudg

Sample ID: **FWGTEAM2-TRIP** ***Collected:*** **4/7/2011 8:00:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
CHLOROFORM	0.22	J	0.16	MDL	1.0	PQL	ug/L	J	RI

Sample ID: **FWGTEAM3-TRIP** ***Collected:*** **4/7/2011 8:00:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
CHLOROFORM	0.25	J	0.16	MDL	1.0	PQL	ug/L	J	RI
METHYLENE CHLORIDE	0.39	J B	0.33	MDL	2.0	PQL	ug/L	UJ JB	RI, Lcs, Mb, ProfJudg

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Reason Code Legend

Reason Code	*Description*
Cb	Calibration Blank Contamination
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
Ccv	Continuing Calibration Verification Percent Difference Lower Rejection
Ccv	Continuing Calibration Verification Percent Difference Upper Estimation
Ccv	Continuing Calibration Verification Percent Difference Upper Rejection
Ccv	Continuing Calibration Verification Percent Recovery Lower Estimation
Ccv	Continuing Calibration Verification Percent Recovery Lower Rejection
Ccv	Continuing Calibration Verification Percent Recovery Upper Estimation
Ccv	Continuing Calibration Verification Percent Recovery Upper Rejection
CcvCC	Continuing Calibration Verification Correlation Coefficient
CcvRrf	Continuing Calibration Verification Relative Response Factor
ContTune	Continuing Tune
Dup=0	Duplicate Sample Count = 0
Dup>1	Duplicate Sample Count > 1
Eb	Equipment Blank Contamination
EtoA	Extraction to Analysis Estimation
EtoA	Extraction to Analysis Rejection
Fb	Field Blank Contamination
Fd	Field Duplicate Precision
IcCC	Initial Calibration Correlation Coefficient
IcRrf	Initial Calibration Relative Response Factor
IcRsd	Initial Calibration Percent Relative Standard Deviation
Icv	Initial Calibration Verification Percent Difference Lower Estimation
Icv	Initial Calibration Verification Percent Difference Lower Rejection
Icv	Initial Calibration Verification Percent Difference Upper Estimation
Icv	Initial Calibration Verification Percent Difference Upper Rejection
Icv	Initial Calibration Verification Percent Recovery Lower Estimation
Icv	Initial Calibration Verification Percent Recovery Lower Rejection
Icv	Initial Calibration Verification Percent Recovery Upper Estimation

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

Icv	Initial Calibration Verification Percent Recovery Upper Rejection
IcvCC	Initial Calibration Verification Correlation Coefficient
IcvRrf	Initial Calibration Verification Relative Response Factor
IllogicalFraction	Illogical Fraction
InitTune	Initial Tune
Is	Internal Standard Estimation
Is	Internal Standard Rejection
Lcs	Laboratory Control Precision
Lcs	Laboratory Control Spike Lower Estimation
Lcs	Laboratory Control Spike Lower Rejection
Lcs	Laboratory Control Spike Upper Estimation
Lcs	Laboratory Control Spike Upper Rejection
Lcs=0	Laboratory Control Sample Count = 0
Lcs>1	Laboratory Control Sample Count > 1
Ld	Laboratory Duplicate Precision
Mb	Method Blank Contamination
Mb=0	Method Blank Sample Count = 0
Mb>1	Method Blank Sample Count > 1
Moist	Percent Moisture
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Lower Rejection
Ms	Matrix Spike Precision
Ms	Matrix Spike Upper Estimation
Ms	Matrix Spike Upper Rejection
Ms=0	Matrix Spike Sample Count = 0
Ms>1	Matrix Spike Sample Count > 1
PEM	Performance Evaluation Mixture
Preservation	Preservation
ProfJudg	Professional Judgment
REM	Resolution Check Mixture
RI	Reporting Limit

Data Qualifier Summary

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: PrepA1D080405 **eQAPP Name: Ravenna 111810**

RI	Reporting Limit > Project Maximum Contamination Limit
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoA	Sampling to Analysis Rejection
StoE	Sampling to Extraction Estimation
StoE	Sampling to Extraction Rejection
StoL	Sampling to Leaching Estimation
StoL	Sampling to Leaching Rejection
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Lower Rejection
Surr	Surrogate/Tracer Recovery Upper Estimation
Surr	Surrogate/Tracer Recovery Upper Rejection
Tb	Trip Blank Contamination
TempEst	Temperature Estimation
TempRej	Temperature Rejection

Reporting Limit Outliers

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 6010B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGASYmw-003C-1704-GF	POTASSIUM	B	982	1000	PQL	ug/L	J (all detects)
FWGBKGmw-005C-1705-GF	MANGANESE POTASSIUM	B B	6.1 444	10.0 1000	PQL PQL	ug/L ug/L	J (all detects)
FWGBKGmw-018C-1710-GF	MANGANESE POTASSIUM	B B	2.7 591	10.0 1000	PQL PQL	ug/L ug/L	J (all detects)
FWGCBLmw-004C-1714-GF	MANGANESE NICKEL	B B	9.4 5.4	10.0 10.0	PQL PQL	ug/L ug/L	J (all detects)
FWGLL2mw-267C-1722-GF	COBALT NICKEL POTASSIUM	B B B	1.5 2.8 581	5.0 10.0 1000	PQL PQL PQL	ug/L ug/L ug/L	J (all detects)
FWGLL2mw-DUP3-1748-GF	COBALT NICKEL POTASSIUM	B B B	1.7 2.5 570	5.0 10.0 1000	PQL PQL PQL	ug/L ug/L ug/L	J (all detects)
FWGLL3mw-236C-1724-GF	COBALT NICKEL	B B	2.7 9.0	5.0 10.0	PQL PQL	ug/L ug/L	J (all detects)
FWGLL3mw-239C-1725-GF	ARSENIC CHROMIUM NICKEL	B B B	3.6 1.5 7.0	5.0 5.0 10.0	PQL PQL PQL	ug/L ug/L ug/L	J (all detects)

Method: 6020
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGBKGmw-005C-1705-GF	IRON	B	36.5	50.0	PQL	ug/L	J (all detects)
FWGBKGmw-018C-1710-GF	THALLIUM ZINC	B B	0.18 7.3	1.0 10.0	PQL PQL	ug/L ug/L	J (all detects)
FWGCBLmw-004C-1714-GF	ZINC	B	6.8	10.0	PQL	ug/L	J (all detects)
FWGLL2mw-266C-1721-GF	ZINC	B	5.6	10.0	PQL	ug/L	J (all detects)
FWGLL2mw-267C-1722-GF	ALUMINUM	B	33.0	50.0	PQL	ug/L	J (all detects)
FWGLL2mw-269C-1723-GF	ZINC	B	4.7	10.0	PQL	ug/L	J (all detects)
FWGLL2mw-DUP3-1748-GF	ALUMINUM ZINC	B B	35.7 3.1	50.0 10.0	PQL PQL	ug/L ug/L	J (all detects)

Method: 8260B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGEQUIPRINSE4-1760-GW	2-BUTANONE ACETONE CHLOROFORM TOLUENE	J J J J	1.9 4.2 0.79 0.23	10 10 1.0 1.0	PQL PQL PQL PQL	ug/L ug/L ug/L ug/L	J (all detects)

Project Name and Number: 030240.0006 - RVAAP (OH)

Reporting Limit Outliers

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 8260B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGLL2mw-269C-1723-GW	METHYLENE CHLORIDE	J B	0.41	2.0	PQL	ug/L	J (all detects)
FWGLL2mw-DUP3-1748-GW	METHYLENE CHLORIDE	J B	0.42	2.0	PQL	ug/L	J (all detects)
FWGLL3mw-239C-1725-GW	CARBON TETRACHLORIDE CHLOROFORM	J J	0.33 0.43	1.0 1.0	PQL PQL	ug/L ug/L	J (all detects)
FWGTEAM1-TRIP	CHLOROFORM METHYLENE CHLORIDE	J J B	0.23 0.36	1.0 2.0	PQL PQL	ug/L ug/L	J (all detects)
FWGTEAM2-TRIP	CHLOROFORM	J	0.22	1.0	PQL	ug/L	J (all detects)
FWGTEAM3-TRIP	CHLOROFORM METHYLENE CHLORIDE	J J B	0.25 0.39	1.0 2.0	PQL PQL	ug/L ug/L	J (all detects)

Method: 8270C
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGASYmw-003C-1704-GW	BIS(2-ETHYLHEXYL) PHTHALATE	J	1.1	10	PQL	ug/L	J (all detects)
FWGEQUIPRINSE4-1760-GW	BIS(2-ETHYLHEXYL) PHTHALATE	J	3.0	10	PQL	ug/L	J (all detects)
FWGLL2mw-267C-1722-GW	BIS(2-ETHYLHEXYL) PHTHALATE	J	0.97	10	PQL	ug/L	J (all detects)
FWGLL2mw-DUP3-1748-GW	BIS(2-ETHYLHEXYL) PHTHALATE	J	0.94	10	PQL	ug/L	J (all detects)
FWGLL3mw-236C-1724-GW	BIS(2-ETHYLHEXYL) PHTHALATE	J	1.2	10	PQL	ug/L	J (all detects)

Method Blank Outlier Report

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 8260B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
A1D150000156B	4/15/2011 12:31:00 PM	METHYLENE CHLORIDE	1.0 ug/L	FWGBKGmw-005C-1705-GW FWGCBLmw-004C-1714-GW FWGLL2mw-266C-1721-GW FWGLL2mw-267C-1722-GW FWGLL2mw-DUP3-1748-GW FWGLL3mw-239C-1725-GW FWGTEAM2-TRIP FWGTEAM3-TRIP
A1D190000091B	4/19/2011 11:19:00 AM	METHYLENE CHLORIDE	0.86 ug/L	FWGASYmw-003C-1704-GW FWGBKGmw-018C-1710-GW FWGEQUIPRINSE4-1760-GW FWGLL2mw-269C-1723-GW FWGLL3mw-236C-1724-GW FWGTEAM1-TRIP

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
FWGEQUIPRINSE4-1760-GW(RES)	METHYLENE CHLORIDE	2.0 ug/L	2.0U ug/L
FWGLL2mw-269C-1723-GW(RES)	METHYLENE CHLORIDE	0.41 ug/L	2.0U ug/L
FWGLL2mw-DUP3-1748-GW(RES)	METHYLENE CHLORIDE	0.42 ug/L	2.0U ug/L
FWGTEAM1-TRIP(RES)	METHYLENE CHLORIDE	0.36 ug/L	2.0U ug/L
FWGTEAM3-TRIP(RES)	METHYLENE CHLORIDE	0.39 ug/L	2.0U ug/L

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: A1D080405 | **Laboratory: TALCAN**
EDD Filename: A1D080405 | **eQAPP Name: Ravenna 111810**

Method: 8270C | Preparation Method: 3520C
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
FWGLL2mw-269C-1723-GW (RE)	Sampling To Extraction	13.00	7.00	DAYS	J (all detects)
FWGLL2mw-269C-1723-GWMS (RE		13.00	7.00	DAYS	UJ (all non-detects)
FWGLL2mw-269C-1723-GWMSD (R		13.00	7.00	DAYS	

Surrogate Outlier Report

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 8270C
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
FWGASYmw-003C-1704-GW	2,4,6-TRIBROMOPHENOL	39	50.00-150.00	All Target Analytes	
	2-FLUOROBIPHENYL	41	50.00-150.00		
	2-FLUOROPHENOL	38	50.00-150.00		
	NITROBENZENE-D5	42	50.00-150.00		
	PHENOL-D5	35	50.00-150.00		
	TERPHENYL-D14	21	50.00-150.00		J(all detects)
	2,4,6-TRIBROMOPHENOL	44	50.00-150.00		UJ(all non-detects)
	2-FLUOROBIPHENYL	47	50.00-150.00		
	2-FLUOROPHENOL	43	50.00-150.00		
	NITROBENZENE-D5	47	50.00-150.00		
	PHENOL-D5	40	50.00-150.00		
	TERPHENYL-D14	24	50.00-150.00		
FWGLL2mw-266C-1721-GW	2,4,6-TRIBROMOPHENOL	49	50.00-150.00	No Affected Compounds	J(all detects)
	TERPHENYL-D14	47	50.00-150.00		UJ(all non-detects)
FWGLL2mw-269C-1723-GW	2-FLUOROPHENOL	30	50.00-150.00	All Acid Target Analytes	J(all detects)
	NITROBENZENE-D5	46	50.00-150.00		UJ(all non-detects)
	PHENOL-D5	17	50.00-150.00		
FWGLL3mw-236C-1724-GW	2-FLUOROPHENOL	45	50.00-150.00	All Acid Target Analytes	
	PHENOL-D5	45	50.00-150.00		J(all detects)
	TERPHENYL-D14	48	50.00-150.00		UJ(all non-detects)
	2-FLUOROPHENOL	48	50.00-150.00		
FWGLL3mw-239C-1725-GW	TERPHENYL-D14	46	50.00-150.00	No Affected Compounds	J(all detects)
					UJ(all non-detects)

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 8260B
Matrix: AQ

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FWGEQUIPRINSE4-1760-GW(RES)	4/7/2011 2:33:00 PM	2-BUTANONE ACETONE CHLOROFORM METHYLENE CHLORIDE TOLUENE	1.9 ug/L 4.2 ug/L 0.79 ug/L 2 ug/L 0.23 ug/L	FWGASYmw-003C-1704-GF FWGASYmw-003C-1704-GW FWGBKGmw-005C-1705-GF FWGBKGmw-005C-1705-GW FWGBKGmw-018C-1710-GF FWGBKGmw-018C-1710-GW FWGCBLmw-004C-1714-GF FWGCBLmw-004C-1714-GW FWGLL2mw-266C-1721-GF FWGLL2mw-266C-1721-GW FWGLL2mw-267C-1722-GF FWGLL2mw-267C-1722-GW FWGLL2mw-269C-1723-GF FWGLL2mw-269C-1723-GW FWGLL2mw-DUP3-1748-GF FWGLL2mw-DUP3-1748-GW FWGLL3mw-236C-1724-GF FWGLL3mw-236C-1724-GW FWGLL3mw-239C-1725-GF FWGLL3mw-239C-1725-GW

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
FWGLL2mw-269C-1723-GW(RES)	METHYLENE CHLORIDE	0.41 ug/L	2.0U ug/L
FWGLL2mw-DUP3-1748-GW(RES)	METHYLENE CHLORIDE	0.42 ug/L	2.0U ug/L
FWGLL3mw-239C-1725-GW(RES)	CHLOROFORM	0.43 ug/L	1.0U ug/L

Method: 8270C
Matrix: AQ

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FWGEQUIPRINSE4-1760-GW(RES)	4/7/2011 2:33:00 PM	BIS(2-ETHYLHEXYL) PHTHALATE	3 ug/L	FWGASYmw-003C-1704-GF FWGASYmw-003C-1704-GW FWGBKGmw-005C-1705-GF FWGBKGmw-005C-1705-GW FWGBKGmw-018C-1710-GF FWGBKGmw-018C-1710-GW FWGCBLmw-004C-1714-GF FWGCBLmw-004C-1714-GW FWGLL2mw-266C-1721-GF FWGLL2mw-266C-1721-GW FWGLL2mw-267C-1722-GF FWGLL2mw-267C-1722-GW FWGLL2mw-269C-1723-GF FWGLL2mw-269C-1723-GW FWGLL2mw-DUP3-1748-GF FWGLL2mw-DUP3-1748-GW FWGLL3mw-236C-1724-GF FWGLL3mw-236C-1724-GW FWGLL3mw-239C-1725-GF FWGLL3mw-239C-1725-GW

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 8270C
Matrix: AQ

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
FWGASYmw-003C-1704-GW(RES)	BIS(2-ETHYLHEXYL) PHTHALATE	1.1 ug/L	10U ug/L
FWGLL2mw-267C-1722-GW(RES)	BIS(2-ETHYLHEXYL) PHTHALATE	0.97 ug/L	10U ug/L
FWGLL2mw-DUP3-1748-GW(RES)	BIS(2-ETHYLHEXYL) PHTHALATE	0.94 ug/L	10U ug/L
FWGLL3mw-236C-1724-GW(RES)	BIS(2-ETHYLHEXYL) PHTHALATE	1.2 ug/L	10U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
FWGBKGmw-018C-1710-GWMS **FWGBKGmw-018C-1710-GWMSD** (FWGASYmw-003C-1704-GW FWGBKGmw-018C-1710-GW FWGEQUIPRINSE4-1760-GW FWGLL2mw-269C-1723-GW FWGLL3mw-236C-1724-GW FWGTEAM1-TRIP)	CARBON DISULFIDE	138	134	70.00-130.00	-	CARBON DISULFIDE	J(all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
FWGLL2mw-269C-1723-GWMS	4-CHLOROANILINE	11	10	45.00-135.00	-	4-CHLOROANILINE	J(all detects) UJ(all non-detects)
	4-CHLOROPHENYL PHENYL ET	33	36	45.00-135.00	-	4-CHLOROPHENYL PHENYL E	
FWGLL2mw-269C-1723-GWMSD	4-NITROPHENOL	44	-	45.00-135.00	-	4-NITROPHENOL	
(FWGLL2mw-269C-1723-GW)	PHENOL	38	38	45.00-135.00	-	PHENOL	

Surrogate Outlier Report

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 8081A
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
FWGASYmw-003C-1704-GW	DECACHLOROBIPHENYL	28	50.00-150.00	All Target Analytes	J (all detects) UJ (all non-detects)
FWGBKGmw-005C-1705-GW	DECACHLOROBIPHENYL	18	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGBKGmw-018C-1710-GW	DECACHLOROBIPHENYL	27	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGCBLmw-004C-1714-GW	DECACHLOROBIPHENYL	23	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL2mw-266C-1721-GW	DECACHLOROBIPHENYL	27	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL2mw-267C-1722-GW	DECACHLOROBIPHENYL	16	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL2mw-269C-1723-GW	DECACHLOROBIPHENYL	23	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL2mw-DUP3-1748-GW	DECACHLOROBIPHENYL	17	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL3mw-236C-1724-GW	DECACHLOROBIPHENYL	36	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL3mw-239C-1725-GW	DECACHLOROBIPHENYL	25	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
FWGASYmw-003C-1704-GW	DECACHLOROBIPHENYL	24	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGBKGmw-005C-1705-GW	DECACHLOROBIPHENYL	14	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGBKGmw-018C-1710-GW	DECACHLOROBIPHENYL	24	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGCBLmw-004C-1714-GW	DECACHLOROBIPHENYL	18	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL2mw-266C-1721-GW	DECACHLOROBIPHENYL	21	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL2mw-267C-1722-GW	DECACHLOROBIPHENYL	14	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL2mw-269C-1723-GW	DECACHLOROBIPHENYL	21	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL2mw-DUP3-1748-GW	DECACHLOROBIPHENYL	12	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL3mw-236C-1724-GW	DECACHLOROBIPHENYL	32	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
FWGLL3mw-239C-1725-GW	DECACHLOROBIPHENYL	19	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 6020
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
A1D110000020C (FWGASYmw-003C-1704-GF FWGBKGmw-005C-1705-GF FWGBKGmw-018C-1710-GF FWGCBLmw-004C-1714-GF FWGEQUIPRINSE4-1760-GW FWGLL2mw-266C-1721-GF FWGLL2mw-267C-1722-GF FWGLL2mw-269C-1723-GF FWGLL2mw-DUP3-1748-GF FWGLL3mw-236C-1724-GF FWGLL3mw-239C-1725-GF)	ZINC	135	-	80.00-120.00	-	ZINC	J (all detects)

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
A1D150000156C (FWGBKGmw-005C-1705-GW FWGCBLmw-004C-1714-GW FWGLL2mw-266C-1721-GW FWGLL2mw-267C-1722-GW FWGLL2mw-DUP3-1748-GW FWGLL3mw-239C-1725-GW FWGTEAM2-TRIP FWGTEAM3-TRIP)	CARBON DISULFIDE	130	-	74.00-123.00	-	CARBON DISULFIDE	J(all detects)
	METHYLENE CHLORIDE	130	-	69.00-118.00	-	METHYLENE CHLORIDE	
A1D190000091C (FWGASYmw-003C-1704-GW FWGBKGmw-018C-1710-GW FWGEQUIPRINSE4-1760-GW FWGLL2mw-269C-1723-GW FWGLL3mw-236C-1724-GW FWGTEAM1-TRIP)	CARBON DISULFIDE	130	-	74.00-123.00	-	CARBON DISULFIDE	J(all detects)
	METHYLENE CHLORIDE	121	-	69.00-118.00	-	METHYLENE CHLORIDE	

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
A1D210000325C (FWGLL2mw-269C-1723-GW)	4-CHLOROPHENYL PHENYL ET	39	-	40.00-115.00	-	4-CHLOROPHENYL PHENYL E	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 6010B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
FWGLL2mw-269C-1723-GFMS (FWGASYmw-003C-1704-GF FWGBKGmw-005C-1705-GF FWGBKGmw-018C-1710-GF FWGCBLmw-004C-1714-GF FWGEQUIPRINSE4-1760-GW FWGLL2mw-266C-1721-GF FWGLL2mw-267C-1722-GF FWGLL2mw-269C-1723-GF FWGLL2mw-DUP3-1748-GF FWGLL3mw-236C-1724-GF FWGLL3mw-239C-1725-GF)	MANGANESE	74	-	75.00-125.00	-	MANGANESE	J (all detects) UJ (all non-detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
FWGBKGmw-018C-1710-GWMS **FWGBKGmw-018C-1710-GWMSD** (FWGASYmw-003C-1704-GW FWGBKGmw-005C-1705-GW FWGBKGmw-018C-1710-GW FWGCBLmw-004C-1714-GW FWGEQUIPRINSE4-1760-GW FWGLL2mw-266C-1721-GW FWGLL2mw-267C-1722-GW FWGLL2mw-DUP3-1748-GW FWGLL3mw-236C-1724-GW FWGLL3mw-239C-1725-GW)	3,3'-DICHLOROBENZIDINE	27	28	45.00-135.00	-	3,3'-DICHLOROBENZIDINE	J(all detects) UJ(all non-detects)
	HEXACHLOROCYCLOPENTADI	41	41	45.00-135.00	-	HEXACHLOROCYCLOPENTAD	

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
FWGLL2mw-269C-1723-GWMS **FWGLL2mw-269C-1723-GWMSD** (FWGASYmw-003C-1704-GW FWGBKGmw-018C-1710-GW FWGEQUIPRINSE4-1760-GW FWGLL2mw-269C-1723-GW FWGLL3mw-236C-1724-GW FWGTEAM1-TRIP)	CARBON DISULFIDE	132	133	70.00-130.00	-	CARBON DISULFIDE	J(all detects)

Project Name and Number: 030240.0006 - RVAAP (OH)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 6010B
Matrix: AQ

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
FWGLL2mw-269C-1723-GFDUP (FWGASYmw-003C-1704-GF FWGBKGmw-005C-1705-GF FWGBKGmw-018C-1710-GF FWGCBLmw-004C-1714-GF FWGEQUIPRINSE4-1760-GW FWGLL2mw-266C-1721-GF FWGLL2mw-267C-1722-GF FWGLL2mw-269C-1723-GF FWGLL2mw-DUP3-1748-GF FWGLL3mw-236C-1724-GF FWGLL3mw-239C-1725-GF)	NICKEL	200	20.00	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: AQ

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
FWGLL2mw-269C-1723-GFDUP (FWGASYmw-003C-1704-GF FWGBKGmw-005C-1705-GF FWGBKGmw-018C-1710-GF FWGCBLmw-004C-1714-GF FWGEQUIPRINSE4-1760-GW FWGLL2mw-266C-1721-GF FWGLL2mw-267C-1722-GF FWGLL2mw-269C-1723-GF FWGLL2mw-DUP3-1748-GF FWGLL3mw-236C-1724-GF FWGLL3mw-239C-1725-GF)	ZINC	21	20.00	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: AQ

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
FWGBKGmw-018C-1710-GFDUP (FWGASYmw-003C-1704-GF FWGBKGmw-005C-1705-GF FWGBKGmw-018C-1710-GF FWGCBLmw-004C-1714-GF FWGEQUIPRINSE4-1760-GW FWGLL2mw-266C-1721-GF FWGLL2mw-267C-1722-GF FWGLL2mw-269C-1723-GF FWGLL2mw-DUP3-1748-GF FWGLL3mw-236C-1724-GF FWGLL3mw-239C-1725-GF)	MANGANESE	200	20.00	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: A1D080405 **Laboratory: TALCAN**

EDD Filename: A1D080405 **eQAPP Name: Ravenna 111810**

Method: 6020
Matrix: AQ

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
FWGBKGmw-018C-1710-GFDUP	THALLIUM	200	20.00	
(FWGASYmw-003C-1704-GF	ZINC	200	20.00	
FWGBKGmw-005C-1705-GF				
FWGBKGmw-018C-1710-GF				
FWGCBLmw-004C-1714-GF				
FWGEQUIPRINSE4-1760-GW				J(all detects)
FWGLL2mw-266C-1721-GF				UJ(all non-detects)
FWGLL2mw-267C-1722-GF				
FWGLL2mw-269C-1723-GF				
FWGLL2mw-DUP3-1748-GF				
FWGLL3mw-236C-1724-GF				
FWGLL3mw-239C-1725-GF)				

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 5, 2011
TA Sample Delivery Group: A1D080404 **Revision:** 0

Data Validator: Angye Dragotta/Environmental Quality Management, Inc. (EQM, Inc.)

QA/QC Summary

On April 7, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1D080404.

Field Sample ID	Analytes	Method
FWGBKGmw-018c-1710-GW	Explosives	SW846 8330
FWGBKGmw-005c-1705-GW	Nitroguanidine	SW846 M8330
FWGCBLmw-004c-1714-GW	Nitrocellulose	TAL- SOP WS-WC-0050
FWGLL2mw-267c-1722-GW		
FWGLL2mw-DUP3-1748-GW		
FWGLL2mw-266c-1721-GW		
FWGLL3mw-239c-1725-GW		
FWGLL2mw-269c-1723-GW		
FWGLL3mw-236c-1724-GW		
FWGASYmw-003c-1704-GW		
FWGEQUIPRinse4-1760-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 cooler temperatures were documented as being received from 1.1°C – 2.9°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.

<u>Explosives- 8330</u>
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
- Retention time criteria
- MDL Verification
- Surrogate recovery criteria
- Equipment and method blanks free from contamination
- MS Recovery Criteria
- LCS Recovery Criteria

<u>MRL Recovery</u>
LC10- the following outliers were noted:

- The MRL analyzed 4/23/11 @1104 recovered above control limits with a %D of 42% for RDX and 35% 2-nitrotoluene.

LC12- the following outliers were noted:

- The MRL analyzed 4/19/11 @1618 recovered above control limits with a %D of 40% for RDX.
- The MRL analyzed 4/20/11 @1618 recovered above control limits with a %D of 31% for RDX.

Sample FWGLL2mw-267c-1722-GW was qualified as estimated, "J".

Site: Ravenna Army Ammunition Plant
Sampling Event: April 2011 **Date:** May 5, 2011
TA Sample Delivery Group: A1D080404 **Revision:** 0

Blanks
Due to excessive particulates, samples FWGLL2mw-DUP3-1748-GW, FWGLL2mw-269c-1723-GW and FWGASYmw-003c-1704-GW required filtration. A filter blank was prepared and analyzed with no detected concentrations.

Confirmation Column RPD
The HMX result for sample FWGLL3mw-239c-1725-GW had a confirmation column RPD above control limits and was qualified as estimated, "J".

Nitroguanidine- 8330M
The following QC criteria were reviewed with acceptable results, except as noted below:

- 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 – WS-WC-0050
The following QC criteria were reviewed with acceptable results, except as noted below:

- 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.

SAMPLE SUMMARY

A1D080404

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MGP0L	001	FWGBKGmw-018C-1710-GW	04/07/11	09:01
MGP0T	002	FWGBKGmw-005C-1705-GW	04/07/11	11:31
MGP0X	003	FWGCBLmw-004C-1714-GW	04/07/11	13:21
MGP01	004	FWGLL2mw-267C-1722-GW	04/07/11	08:52
MGP02	005	FWGLL2mw-DUP3-1748-GW	04/07/11	10:10
MGP04	006	FWGLL2mw-266C-1721-GW	04/07/11	11:04
MGP05	007	FWGLL3mw-239C-1725-GW	04/07/11	12:32
MGP07	008	FWGLL2mw-269C-1723-GW	04/07/11	08:59
MGP08	009	FWGLL3mw-236C-1724-GW	04/07/11	11:59
MGP09	010	FWGASYmw-003C-1704-GW	04/07/11	13:33
MGP1A	011	FWGEQUIPRINSE4-1760-GW	04/07/11	14:33

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

15

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/7/11	Chain of Custody Number: 000495
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513-825-7500	Lab Number:	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 (OH)	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 030240.0006 16726			

Matrix: Air, Aqueous, Sed., Soil

Containers & Preservatives: Unpres., H2SO4, HNO3, HCl, NaOH, ZnAc/NaOH

Analysis (Attach list if more space is needed): VOC 8260, SVOC 8270, Pest 8081, PCB 8082, Explosives 8330, Propellant, Cyanide 9012, Metals 6010/6020 7470

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellant	Cyanide 9012	Metals 6010/6020 7470	Special Instructions/ Conditions of Receipt
FWGTeam1-Trip	4/7/11	08:00		X						2			X								Cooler ID
FWGBKGmw-018C-1710-GW	4/7/11	09:01		X			27			9	3		X	X	X	X	X	X	X		ASD1
FWGBKGmw-018C-1710-GF	4/7/11	09:01		X					3											X	MS/MSD ASD1, 123, E
FWGBKGmw-005C-1705-GW	4/7/11	11:31		X			9			3	1		X	X	X	X	X	X	X		MS/MSD ASD1, 123, E
FWGBKGmw-005C-1705-GF	4/7/11	11:31		X					1											X	114
FWGCBLmw-004C-1714-GW	4/7/11	13:21		X			9			3	1		X	X	X	X	X	X	X		114
FWGCBLmw-004C-1714-GF	4/7/11	13:21		X					1											X	BRUFF4
																					BRUFF4

EC 4/7/11

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 [ ] 21 Days [ ] Other Per SOW

QC Requirements (Specify): Metals are field filtered

	Date	Time		Date	Time
1. Relinquished By: S. Stueger	4-7-11	1700	1. Received By: RC Robin	4/7/11	1700
2. Relinquished By: RC Robin	4/7/11	1822	2. Received By: J Miller	4/8/11	0700
3. Relinquished By:			3. Received By:		

Comments: Temps may not meet requirements if sample collection time is close to lab pick up time
All VOCs in Cooler ASD1.

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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TAL-4142 (0408)

Client: EQM	Project Manager: John Muller	Date: 4-7-11	Chain of Custody Number: 000476
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 825 7500 (513) FAX 7495	Lab Number: 320497396	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 Ravenna, Oh	Carrier/Waybill Number: LAB Pickup	
Contract/Purchase Order/Quote No.: PM302400006 PO# 16726		

Analysis (Attach list if more space is needed): VOC 8260, SVOC 8270, PEST, PCB, EXPL 8330, perchlorate, cyanide, metals

Special Instructions/ Conditions of Receipt: Cooler ID#

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 8260	SVOC 8270	PEST	PCB	EXPL 8330	perchlorate	cyanide	metals	Special Instructions/ Conditions of Receipt: Cooler ID#
FWG Team 2 - Trip	4-7-11	0800		/						2			X								54
FWGLL2mw-216C-1722-GW	1	0852		/			9			3	1		X	X	X	X	X	X	X		E-12c
FWGLL2mw-216C1722-GF	1	1		/																X	E-12c
FWGLL2mw-DUP3-1748-GW	1	1018		/			9			3	1		X	X	X	X	X	X	X		12
FWGLL2mw-DUP3-1748-GF	1	1		/																X	12
FWGLL2mw-216C-1721-GW	1	1104		/			9			3	1		X	X	X	X	X	X	X		M2
FWGLL2mw-216C-1721-GF	1	1104		/																X	M2
FWGLL3mw-239C-1725-GW	1	1232		/			9			3	1		X	X	X	X	X	X	X		54
FWGLL3mw-239C-1725-GF	1	1		/																X	54

ASD 4/7/11

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 [ ] 21 Days [ ] Other _____

QC Requirements (Specify): all metals field filtered (GF). ALL VOAs in 54

	Date	Time		Date	Time
1. Relinquished By	4/7/11	1700	1. Received By	4/7/11	1705
2. Relinquished By	4/7/11	1822	2. Received By	4/8/11	0700
3. Relinquished By			3. Received By		

Comments: temps may not meet requirements if sample collection is close to lab pickup time.

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

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 4/7/11	Chain of Custody Number: 000468
Address: 1800 Carillon	Telephone Number (Area Code)/Fax Number: 513 825 7500	Lab Number: 330 4979396	Page 1 of
City: Cincinnati; State: OH; Zip Code: 45240	Site Contact: E. Corbin; Lab Contact: M. Loeb		
Project Name and Location (State): RVAAP (OH)	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 30240.0006			

Analysis (Attach list if more space is needed)

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 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9010	Metals 6010 6020 7470	Special Instructions/ Conditions of Receipt: Cooler ID
FWG Team 3 - Trip	4-7-11	0800		X									X								173
FWGLL2mw-269C-1723-GW	↓	0859		X			27			9	3		X	X	X	X	X	X	X		173, EC1, ID27
FWGLL2mw-269C-1723-GF	↓	↓		X					3											X	173, EC1, ID27
FWGLL3mw-236C-1724-GW	↓	1159		X			9			3	1		X	X	X	X	X	X	X		PH12
FWGLL3mw-236C-1724-GF	↓	↓		X					1											X	PH12
FWGASYmw-003C-1704-GW	↓	1333		X			9			3	1		X	X	X	X	X	X	X		613
FWGASYmw-008C-1704GF	↓	↓		X					1											X	613
FWGEQUIPRinse4-~~GW~~ 1760-GW HD 4/7/11	4/7/11			X			9		1	3	1		X	X	X	X	X	X	X	X	B81

4/7/11 4/7/11

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 [X] Other NOW

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: J Strong	4/7/11	1700	1. Received By: RC Robin	4/7/11	170
2. Relinquished By: RC Robin	4/7/11	1822	2. Received By: JL Miller	4/8/11	0700
3. Relinquished By:			3. Received By:		

Comments: Metals (GF) were field filtered
Temps may not meet requirements if sample collection time is close to lab pick up time.
All VOAs in Cooler 173

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

North Canton

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TestAmerica Cooler Receipt Form/Narrative **Lot Number: 410804/04**

North Canton Facility

Client EQM Project RVAAP By: (Signature)

Cooler Received on 4/8/11 Opened on 4/8/11

FedEx [X] UPS [ ] DHL [ ] FAS [ ] Stetson [ ] Client Drop Off [ ] TestAmerica Courier [ ] Other

TestAmerica Cooler # Multiple Coolers [X] Foam Box [ ] Client Cooler [ ] Other

1. Were custody seals on the outside of the cooler(s)? Yes [X] No [ ] Intact? Yes [X] No [ ] NA [ ]
   If YES, Quantity 15 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes [X] No [ ] NA [ ]
   Were custody seals on the bottle(s)? Yes [ ] No [X]
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes [ ] No [X]
3. Did custody papers accompany the sample(s)? Yes [X] No [ ] Relinquished by client? Yes [X] No [ ]
4. Were the custody papers signed in the appropriate place? Yes [X] No [ ]
5. Packing material used: Bubble Wrap [X] Foam [ ] None [ ] Other
6. Cooler temperature upon receipt °C See back of form for multiple coolers/temps [X]
   METHOD: IR [X] Other [ ]
   COOLANT: Wet Ice [X] Blue Ice [ ] Dry Ice [ ] Water [ ] None [ ]
7. Did all bottles arrive in good condition (Unbroken)? Yes [X] No [ ]
8. Could all bottle labels be reconciled with the COC? Yes [X] No [ ]
9. Were sample(s) at the correct pH upon receipt? Yes [X] No [ ] NA [ ]
10. Were correct bottle(s) used for the test(s) indicated? Yes [X] No [ ]
11. Were air bubbles >6 mm in any VOA vials? Yes [ ] No [X] NA [ ]
12. Sufficient quantity received to perform indicated analyses? Yes [X] No [ ]
13. Was a trip blank present in the cooler(s)? Yes [X] No [ ] Were VOAs on the COC? Yes [X] No [ ]

Contacted PM Date by via Verbal [ ] Voice Mail [ ] Other [ ]

Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:

No collection times on COC for FWGEquipRinse4-1760-GW. Will log 1433 per time on bottle labels.

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#* 100110-HNO_3; *Sulfuric Acid Lot#* 110410-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
1710	<2 <2 <2 <2 >12 >12 >12 >12	4/8/11	[illegible]
1705	<2 >12		
1714	<2 >12		
1722	<2 >12		
1748	<2 >12		
1721	<2 >12		
1725	<2 >12		
1723	<2 <2 <2 <2 >12 >12 >12 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1724	<2 >12	4/8/11	[illegible]
1704	<2 >12	"	"
1760	<2 >12	"	"

Cooler #	Temp. °C	Cooler	Temp	Method	Coolant
ASD1	1.7	PH12	1.3	IR	Ice
123	1.8	613	1.1		
E-21	2.6	B81	1.8		
114	2.9				
BRVFF4	1.1				
54	2.1				
E-120	2.1				
12	1.2				
M23	1.7				
173	1.2				
EC1	2.0				
ID27	2.2				

Discrepancies Cont'd:

ANALYTICAL METHODS SUMMARY

A1D080404

PARAMETER	ANALYTICAL METHOD
Nitroaromatics and Nitramines by HPLC	SW846 8330
Nitrocellulose as N, WS-WC-0050 (Colorimetric)	TAL-SOP WS-WC-0050
Organics by UV/HPLC	SW846 8330 (Modified)

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

TAL-SOP TESTAMERICA LABORATORIES INC., LABORATORY STANDARD OPERATING PROCEDURE

CASE NARRATIVE

A1D080404

The following report contains the analytical results for eleven 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 April 08, 2011, according to documented sample acceptance procedures.

All analyses were performed at the TestAmerica West Sacramento Laboratory. Refer to the 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 April 26, 2011. 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. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

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 1.1 to 2.9° 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, a Matrix Spike/Matrix Spike Duplicate (MS/MSD) pair or a Matrix Spike/Sample Duplicate (MS/DU) pair.
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. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch, with the exception of poor performing analytes. A list of these analytes is listed below. No corrective action is taken if these analytes do not meet criteria.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.

Poor performers

Method 8270 Water and Solid:	
4-Nitrophenol	3,3' – Dichlorobenzidine
Benzoic Acid	2,4,6 - Tribromophenol
Phenol	2,4-Dinitrophenol
Phenol-d5	Pentachlorophenol
4,6-Dinitro-2-methylphenol	Hexachlorocyclopentadiene (LCG only)
Benzyl Alcohol	4-Chloroaniline
Method 8151 Solid	
Dinoseb	
Method 8260 Water and Solid	
Dichlorodifluoromethane	Hexachlorobutadiene
Trichlorofluoromethane	Naphthalene
Chloroethane	1,2,3-Trichlorobenzene
Acetone	1,2,4-Trichlorobenzene
Bromomethane	2,2-Dichloropropane
Bromoform	Chloromethane

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 ten 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 do 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 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 or Matrix Spike/Sample Duplicate.

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, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, 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), DoD ELAP (ADE-1437) USDA Soil Permit (P33-08-00123)

Case Narrative

TestAmerica West Sacramento Project Number A1D080404

General Comments
The samples were received at 1 degrees C.

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 integration being performed. The following samples and analytes required manual integration:

LC10
8330 MRL standard (analyzed on 4/13/11 @ 11:49) - Tetryl, 3-Nitrotoluene, & PETN
8330 MRL standard (analyzed on 4/23/11 @ 18:52) - 3,4-Dinitrotoluene & 2-Amino-4,6-Dinitrotoluene
Sample 4 - 2,4-Dinitrotoluene, 3,4-Dinitrotoluene, 2,4,6-Trinitrotoluene, 2-Amino-4,6-Dinitrotoluene, & 4-Amino-2,6-Dinitrotoluene
Sample 8 - HMX
Sample 2 - HMX

WATER, 8330, Explosives
Sample(s): 1, 1MS, 1MSD, 2, 3, 4, 5, 6, 7, 8, 8MS, 8MSD, 9, 10, 11
The percent difference values for RDX and/or 2-Nitrotoluene are above the project specific acceptance limit in the associated MRL standards. For corrective action a standard at approximately 2X the MDL was analyzed and these analytes were detected.

Sample(s): 5, 8, 8MS, 8MSD, 10
These samples were filtered prior to extraction since they contained excessive sediment/particulates. A filtered blank was included with the batch.

There were no other anomalies associated with this project.

WATER, 8330, Explosives

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 5, 2011

SDG: A1D080404 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 cooler temperatures were documented as being received from 1.1°C – 2.9°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%?		✓		LC10- the following outliers were noted: • The MRL analyzed 4/23/11 @1104 recovered above control limits with a %D of 42% for RDX and 35% 2-nitrotoluene. LC12- the following outliers were noted: • The MRL analyzed 4/19/11 @1618 recovered above control limits with a %D of 40% for RDX. • The MRL analyzed 4/20/11 @1618 recovered above control limits with a %D of 31% for RDX. Sample FWGLL2mw-267c-1722-GW was 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 4/23/11, LC12 4/12/11 LC12- 2-nitrotoluene coeluted with 4-nitrotoluene. LC12 is not used for quantitation purposes, so no qualification was made.	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 4/23/11@0856 , LC12 4/13/11 @ 0034	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: April 2011
Data Reviewer/Date: Angye Dragotta/ May 5, 2011

SDG: A1D080404 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
15. Was a method blank prepared and analyzed with each batch?	✓			Due to excessive particulates, samples FWGLL2mw-DUP3-1748-GW, FWGLL2mw-269c-1723-GW and FWGASYmw-003c-1704-GW required filtration. A filter blank was prepared and analyzed with no detected concentrations.	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%?			✓		QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Were the RPDs ≤ 40%?		✓		The HMX result for samples FWGLL3mw-239c-1725-GW had confirmation column RPD above control limits and was 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%?	✓				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.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-018C-1710-GW

HPLC

Lot-Sample #...: A1D080404-001 Work Order #...: MGP0L1AA Matrix.....: WG
Date Sampled...: 04/07/11 09:01 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
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: FWGBKGmw-005C-1705-GW

HPLC

Lot-Sample #...: A1D080404-002 Work Order #...: MGP0T1AA Matrix.....: WG
Date Sampled...: 04/07/11 11:31 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
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	**0.073 J**	**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	96	(50 - 150)

NOTE(S):

J Estimated result Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBLmw-004C-1714-GW

HPLC

Lot-Sample #...: A1D080404-003 Work Order #...: MGP0X1AA Matrix.....: WG
Date Sampled...: 04/07/11 13:21 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
Dilution Factor: 1.13 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.034
1,3-Dinitrobenzene	ND	0.11	ug/L	0.056
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.056
2,4-Dinitrotoluene	ND	0.11	ug/L	0.056
2,6-Dinitrotoluene	ND	0.11	ug/L	0.056
2-Nitrotoluene	ND	0.56	ug/L	0.099
3-Nitrotoluene	ND	0.56	ug/L	0.064
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.056
4-Nitrotoluene	ND	0.56	ug/L	0.099
HMX	ND	0.11	ug/L	0.041
Nitrobenzene	ND	0.11	ug/L	0.056
Nitroglycerin	ND	0.73	ug/L	0.37
RDX	ND	0.11	ug/L	0.041
PETN	ND	0.73	ug/L	0.34
Tetryl	ND	0.11	ug/L	0.056

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GW

HPLC

Lot-Sample #...: A1D080404-004 Work Order #...: MGP011AA Matrix.....: WG
Date Sampled...: 04/07/11 08:52 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
Dilution Factor: 1.19 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	0.062 J	0.12	ug/L	0.036
1,3-Dinitrobenzene	ND	0.12	ug/L	0.060
2-Amino-4,6-dinitrotoluene	1.5	0.12	ug/L	0.12
2,4,6-Trinitrotoluene	0.49	0.12	ug/L	0.060
2,4-Dinitrotoluene	0.26	0.12	ug/L	0.060
2,6-Dinitrotoluene	ND	0.12	ug/L	0.060
2-Nitrotoluene	ND	0.60	ug/L	0.10
3-Nitrotoluene	ND	0.60	ug/L	0.068
4-Amino-2,6-dinitrotoluene	1.3	0.12	ug/L	0.060
4-Nitrotoluene	ND	0.60	ug/L	0.10
HMX	1.2	0.12	ug/L	0.043
Nitrobenzene	ND	0.12	ug/L	0.060
Nitroglycerin	ND	0.77	ug/L	0.39
RDX	1.3	0.12	ug/L	0.043
PETN	ND	0.77	ug/L	0.36
Tetryl	ND	0.12	ug/L	0.060

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: FWGLL2mw-DUP3-1748-GW

HPLC

Lot-Sample #...: A1D080404-005 Work Order #...: MGP021AA Matrix.....: WG
Date Sampled...: 04/07/11 10:10 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
Dilution Factor: 1.03 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	0.066 J	0.10	ug/L	0.031
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	1.4	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	0.47	0.10	ug/L	0.052
2,4-Dinitrotoluene	0.25	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	1.3	0.10	ug/L	0.052
4-Nitrotoluene	ND	0.52	ug/L	0.091
HMX	1.2	0.10	ug/L	0.037
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.67	ug/L	0.34
RDX	1.4	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	92	(50 - 150)

NOTE(S):

J Estimated result Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1721-GW

HPLC

Lot-Sample #...: A1D080404-006 Work Order #...: MGP041AA Matrix.....: WG
Date Sampled...: 04/07/11 11:04 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
Dilution Factor: 1.11 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.11	ug/L	0.033
1,3-Dinitrobenzene	ND	0.11	ug/L	0.056
2-Amino-4,6-dinitrotoluene	ND	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	ND	0.11	ug/L	0.056
2,4-Dinitrotoluene	ND	0.11	ug/L	0.056
2,6-Dinitrotoluene	ND	0.11	ug/L	0.056
2-Nitrotoluene	ND	0.56	ug/L	0.098
3-Nitrotoluene	ND	0.56	ug/L	0.063
4-Amino-2,6-dinitrotoluene	ND	0.11	ug/L	0.056
4-Nitrotoluene	ND	0.56	ug/L	0.098
HMX	ND	0.11	ug/L	0.040
Nitrobenzene	ND	0.11	ug/L	0.056
Nitroglycerin	ND	0.72	ug/L	0.37
RDX	ND	0.11	ug/L	0.040
PETN	ND	0.72	ug/L	0.33
Tetryl	ND	0.11	ug/L	0.056

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1725-GW

HPLC

Lot-Sample #...: A1D080404-007 Work Order #...: MGP051AA Matrix.....: WG
Date Sampled...: 04/07/11 12:32 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
Dilution Factor: 1.1 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	0.15	0.11	ug/L	0.033
1,3-Dinitrobenzene	ND	0.11	ug/L	0.055
2-Amino-4,6-dinitrotoluene	0.64	0.11	ug/L	0.11
2,4,6-Trinitrotoluene	0.20	0.11	ug/L	0.055
2,4-Dinitrotoluene	0.12	0.11	ug/L	0.055
2,6-Dinitrotoluene	ND	0.11	ug/L	0.055
2-Nitrotoluene	ND	0.55	ug/L	0.097
3-Nitrotoluene	ND	0.55	ug/L	0.063
4-Amino-2,6-dinitrotoluene	0.85	0.11	ug/L	0.055
4-Nitrotoluene	ND	0.55	ug/L	0.097
HMX	0.25 PG	0.11	ug/L	0.040
Nitrobenzene	ND	0.11	ug/L	0.055
Nitroglycerin	ND	0.72	ug/L	0.36
RDX	1.7	0.11	ug/L	0.040
PETN	ND	0.72	ug/L	0.33
Tetryl	ND	0.11	ug/L	0.055

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(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-269C-1723-GW

HPLC

Lot-Sample #...: A1D080404-008 Work Order #...: MGP071AA Matrix.....: WG
Date Sampled...: 04/07/11 08:59 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
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	0.078 J	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	95	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1724-GW

HPLC

Lot-Sample #...: A1D080404-009 Work Order #...: MGP081AA Matrix.....: WG
Date Sampled...: 04/07/11 11:59 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
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	**0.18**	**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	**0.18**	**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	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1704-GW

HPLC

Lot-Sample #...: A1D080404-010 Work Order #...: MGP091AA Matrix.....: WG
Date Sampled...: 04/07/11 13:33 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/24/11
Prep Batch #...: 1103202
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	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

HPLC

Lot-Sample #...: A1D080404-011 Work Order #...: MGP1A1AA Matrix.....: WQ
Date Sampled...: 04/07/11 14:33 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/24/11
Prep Batch #...: 1103202
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	0.092 J	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

METHOD BLANK REPORT

HPLC

Client Lot #...: A1D080404 Work Order #...: MGX0X1AA Matrix.....: WATER
MB Lot-Sample #: G1D130000-202

Prep Date.....: 04/13/11
Analysis Date..: 04/23/11 Prep Batch #...: 1103202
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 #...: A1D080404 Work Order #...: MGX0X1AD Matrix.....: WATER
MB Lot-Sample #: G1D130000-202

Prep Date.....: 04/13/11
Analysis Date..: 04/23/11 Prep Batch #...: 1103202
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	96	(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 #...: A1D080404 Work Order #...: MGX0X1AC Matrix.....: WATER
LCS Lot-Sample#: G1D130000-202
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	112	(53 - 135)	SW846 8330
1,3-Dinitrobenzene	111	(54 - 120)	SW846 8330
2-Amino-4,6-dinitrotoluene	108	(53 - 120)	SW846 8330
2,4,6-Trinitrotoluene	88	(37 - 120)	SW846 8330
2,4-Dinitrotoluene	108	(58 - 136)	SW846 8330
2,6-Dinitrotoluene	106	(52 - 144)	SW846 8330
2-Nitrotoluene	97	(52 - 120)	SW846 8330
3-Nitrotoluene	98	(48 - 136)	SW846 8330
4-Amino-2,6-dinitrotoluene	104	(58 - 159)	SW846 8330
4-Nitrotoluene	97	(46 - 136)	SW846 8330
HMX	109	(45 - 140)	SW846 8330
Nitrobenzene	106	(49 - 120)	SW846 8330
Nitroglycerin	103	(60 - 120)	SW846 8330
RDX	117	(39 - 120)	SW846 8330
PETN	104	(60 - 120)	SW846 8330
Tetryl	92	(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 #...: A1D080404 Work Order #...: MGP0L1AE-MS Matrix.....: WG
MS Lot-Sample #: A1D080404-001 MGP0L1AF-MSD
Date Sampled...: 04/07/11 09:01 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
Dilution Factor: 1.01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	102	(50 - 150)			SW846 8330
	103	(50 - 150)	2.2	(0-50)	SW846 8330
1,3-Dinitrobenzene	105	(50 - 150)			SW846 8330
	104	(50 - 150)	3.6	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	101	(50 - 150)			SW846 8330
	103	(50 - 150)	2.0	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	82	(50 - 150)			SW846 8330
	82	(50 - 150)	3.5	(0-50)	SW846 8330
2,4-Dinitrotoluene	101	(50 - 150)			SW846 8330
	104	(50 - 150)	1.3	(0-50)	SW846 8330
2,6-Dinitrotoluene	102	(50 - 150)			SW846 8330
	101	(50 - 150)	4.0	(0-50)	SW846 8330
2-Nitrotoluene	94	(50 - 150)			SW846 8330
	99	(50 - 150)	1.9	(0-50)	SW846 8330
3-Nitrotoluene	94	(50 - 150)			SW846 8330
	97	(50 - 150)	1.2	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	96	(50 - 150)			SW846 8330
	98	(50 - 150)	1.7	(0-50)	SW846 8330
4-Nitrotoluene	95	(50 - 150)			SW846 8330
	98	(50 - 150)	0.63	(0-50)	SW846 8330
HMX	98	(50 - 150)			SW846 8330
	99	(50 - 150)	3.1	(0-50)	SW846 8330
Nitrobenzene	101	(50 - 150)			SW846 8330
	101	(50 - 150)	3.8	(0-50)	SW846 8330
Nitroglycerin	97	(50 - 150)			SW846 8330
	99	(50 - 150)	1.1	(0-50)	SW846 8330
RDX	100	(50 - 150)			SW846 8330
	101	(50 - 150)	3.2	(0-50)	SW846 8330
PETN	101	(50 - 150)			SW846 8330
	106	(50 - 150)	1.4	(0-50)	SW846 8330
Tetryl	85	(50 - 150)			SW846 8330
	87	(50 - 150)	1.8	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1D080404 Work Order #...: MGP0L1AE-MS Matrix.....: WG
MS Lot-Sample #: A1D080404-001 MGP0L1AF-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(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

HPLC

Client Lot #...: A1D080404 Work Order #...: MGP071AC-MS Matrix.....: WG
MS Lot-Sample #: A1D080404-008 MGP071AD-MSD
Date Sampled...: 04/07/11 08:59 Date Received..: 04/08/11
Prep Date.....: 04/13/11 Analysis Date..: 04/23/11
Prep Batch #...: 1103202
Dilution Factor: 1.02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	101	(50 - 150)			SW846 8330
	99	(50 - 150)	1.3	(0-50)	SW846 8330
1,3-Dinitrobenzene	103	(50 - 150)			SW846 8330
	101	(50 - 150)	1.2	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	101	(50 - 150)			SW846 8330
	97	(50 - 150)	2.2	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	78	(50 - 150)			SW846 8330
	78	(50 - 150)	0.59	(0-50)	SW846 8330
2,4-Dinitrotoluene	100	(50 - 150)			SW846 8330
	98	(50 - 150)	1.1	(0-50)	SW846 8330
2,6-Dinitrotoluene	98	(50 - 150)			SW846 8330
	98	(50 - 150)	0.79	(0-50)	SW846 8330
2-Nitrotoluene	93	(50 - 150)			SW846 8330
	93	(50 - 150)	0.65	(0-50)	SW846 8330
3-Nitrotoluene	93	(50 - 150)			SW846 8330
	95	(50 - 150)	2.5	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	96	(50 - 150)			SW846 8330
	93	(50 - 150)	2.3	(0-50)	SW846 8330
4-Nitrotoluene	94	(50 - 150)			SW846 8330
	94	(50 - 150)	1.1	(0-50)	SW846 8330
HMX	93	(50 - 150)			SW846 8330
	95	(50 - 150)	3.2	(0-50)	SW846 8330
Nitrobenzene	98	(50 - 150)			SW846 8330
	99	(50 - 150)	1.7	(0-50)	SW846 8330
Nitroglycerin	98	(50 - 150)			SW846 8330
	98	(50 - 150)	0.45	(0-50)	SW846 8330
RDX	106	(50 - 150)			SW846 8330
	103	(50 - 150)	1.8	(0-50)	SW846 8330
PETN	101	(50 - 150)			SW846 8330
	103	(50 - 150)	2.5	(0-50)	SW846 8330
Tetryl	82	(50 - 150)			SW846 8330
	83	(50 - 150)	2.2	(0-50)	SW846 8330

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MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1D080404 Work Order #...: MGP071AC-MS Matrix.....: WG
MS Lot-Sample #: A1D080404-008 MGP071AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(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: 04222011
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-APR-2011	18:10	NS	8330 PRIMER	A-000001.	0 g	0 mL	1	
22-APR-2011	18:42	NS	8330 PRIMER	A-000002.	0 g	0 mL	1	
22-APR-2011	19:14	NS	8330 PRIMER	A-000003.	0 g	0 mL	1	
22-APR-2011	19:46	NS	8330 PRIMER	A-000004.	0 g	0 mL	1	
22-APR-2011	20:18	NS	8330 PRIMER	A-000005.	0 g	0 mL	1	
22-APR-2011	20:50	NS	8330 PRIMER	A-000006.	0 g	0 mL	1	
22-APR-2011	21:22	NS	8330 PRIMER	A-000007.	0 g	0 mL	1	
22-APR-2011	22:17	NS	8330 PRIMER	A-000008.	0 g	0 mL	1	
22-APR-2011	23:00	NS	8330 PRIMER	A-000009.	0 g	0 mL	1	
22-APR-2011	23:42	NS	8330 PRIMER	A-000010.	0 g	0 mL	1	
23-APR-2011	00:25	NS	8330 PRIMER	A-000011.	0 g	0 mL	1	
23-APR-2011	01:07	NS	BLANK	A-000012.	0 g	0 mL	1	
23-APR-2011	01:49	NS	STD_01 11GCSV0200 8330 5ng/mL	A-000013.	0 g	0 mL	1	
23-APR-2011	02:32	NS	STD_02 11GCSV0199 8330 10ng/mL	A-000014.	0 g	0 mL	1	
23-APR-2011	03:15	NS	STD_03 11GCSV0198 8330 20ng/mL	A-000015.	0 g	0 mL	1	
23-APR-2011	03:57	NS	STD_04 11GCSV0197 8330 50ng/mL	A-000016.	0 g	0 mL	1	
23-APR-2011	04:40	NS	STD_05 11GCSV0196 8330 100ng/m	A-000017.	0 g	0 mL	1	
23-APR-2011	05:23	NS	STD_06 11GCSV0195 8330 200ng/m	A-000018.	0 g	0 mL	1	
23-APR-2011	06:05	NS	STD_07 11GCSV0194 8330 500ng/m	A-000019.	0 g	0 mL	1	
23-APR-2011	06:48	NS	STD_08 11GCSV0193 8330 1000ng/	A-000020.	0 g	0 mL	1	
23-APR-2011	07:30	NS	BLANK	A-000021.	0 g	0 mL	1	
23-APR-2011	08:13	NS	STD_MRL 11GCSV0201 8330 5-50ng	A-000022.	0 g	0 mL	1	
23-APR-2011	08:56	NS	STD_ICV 11GCSV0169 8330 200ng/	A-000023.	0 g	0 mL	1	
23-APR-2011	09:39	NS	8330 PRIMER	A-000024.	0 g	0 mL	1	
23-APR-2011	10:21	NS	STD_06 11GCSV0195 8330 200ng/m	A-000025.	0 g	0 mL	1	KDX, 2-NTP
23-APR-2011	11:04	NS	STD_MRL 11GCSV0201 8330 5-50ng	A-000026.	0 g	0 mL	1	
23-APR-2011	11:46	NS	MGX0X1AA 1103202 G1D130000-202	A-000027.	1000 mL	20 mL	1	
23-APR-2011	12:29	NS	MGX0X1AD 1103202 G1D130000-202	A-000028.	1000 mL	20 mL	1	
23-APR-2011	13:12	NS	MGX0X1AC 1103202 G1D130000-202	A-000029.	1000 mL	20 mL	1	
23-APR-2011	13:54	NS	MGP0L1AA 1103202 A1D080404-1 1	A-000030.	1012.12 mL	20 mL	1	
23-APR-2011	14:37	NS	MGP0L1AE 1103202 A1D080404-1 S	A-000031.	987.91 mL	20 mL	1	
23-APR-2011	15:19	NS	MGP0L1AF 1103202 A1D080404-1 D	A-000032.	1022.6 mL	20 mL	1	
23-APR-2011	16:02	NS	MGP0T1AA 1103202 A1D080404-2 1	A-000033.	985.75 mL	20 mL	1	
23-APR-2011	16:45	NS	MGP0X1AA 1103202 A1D080404-3 1	A-000034.	878.52 mL	20 mL	1	
23-APR-2011	17:27	NS	MGP011AA 1103202 A1D080404-4 1	A-000035.	837.26 mL	20 mL	1	
23-APR-2011	18:10	NS	STD_05 11GCSV0196 8330 100-250	A-000036.	0 g	0 mL	1	
23-APR-2011	18:52	NS	STD_MRL 11GCSV0201 8330 5-50ng	A-000037.	0 g	0 mL	1	
23-APR-2011	19:35	NS	MGP021AA 1103202 A1D080404-5 1	A-000038.	966.73 mL	20 mL	1	
23-APR-2011	20:18	NS	MGP041AA 1103202 A1D080404-6 1	A-000039.	896.86 mL	20 mL	1	
23-APR-2011	21:00	NS	MGP051AA 1103202 A1D080404-7 1	A-000040.	909.26 mL	20 mL	1	
23-APR-2011	21:43	NS	MGP071AA 1103202 A1D080404-8 1	A-000041.	995.99 mL	20 mL	1	
23-APR-2011	22:25	NS	MGP071AC 1103202 A1D080404-8 S	A-000042.	973.82 mL	20 mL	1	
23-APR-2011	23:08	NS	MGP071AD 1103202 A1D080404-8 D	A-000043.	964.47 mL	20 mL	1	
23-APR-2011	23:51	NS	MGP081AA 1103202 A1D080404-9 1	A-000044.	992.33 mL	20 mL	1	
24-APR-2011	00:33	NS	MGP091AA 1103202 A1D080404-10	A-000045.	933.23 mL	20 mL	1	
24-APR-2011	01:16	NS	MGP1A1AA 1103202 A1D080404-11	A-000046.	966.03 mL	20 mL	1	
24-APR-2011	01:58	NS	STD_05 11GCSV0196 8330 100-250	A-000047.	0 g	0 mL	1	
24-APR-2011	02:41	NS	STD_MRL 11GCSV0201 8330 5-50ng	A-000048.	0 g	0 mL	1	

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC12 Batch ID: 04122011
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
12-APR-2011	11:30	NS	8330 PRIMER	C-000001.	0 g	0 mL	1	
12-APR-2011	12:36	NS	8330 PRIMER	C-000002.	0 g	0 mL	1	
12-APR-2011	13:41	NS	BLANK	C-000003.	0 g	0 mL	1	
12-APR-2011	14:46	NS	STD_01 11GCSV0085 8330 5ng/mL	C-000004.	0 g	0 mL	1	
12-APR-2011	15:51	NS	STD_02 10GCSV0527 8330 10ng/mL	C-000005.	0 g	0 mL	1	
12-APR-2011	16:57	NS	STD_03 10GCSV0526 8330 20ng/mL	C-000006.	0 g	0 mL	1	
12-APR-2011	18:02	NS	STD_04 10GCSV0525 8330 50ng/mL	C-000007.	0 g	0 mL	1	
12-APR-2011	19:08	NS	STD_05 10GCSV0524 8330 100ng/m	C-000008.	0 g	0 mL	1	
12-APR-2011	20:13	NS	STD_06 11GCSV0170 8330 200ng/m	C-000009.	0 g	0 mL	1	
12-APR-2011	21:18	NS	STD_07 10GCSV0522 8330 500ng/m	C-000010.	0 g	0 mL	1	
12-APR-2011	22:24	NS	STD_08 10GCSV0521 8330 1000ng/	C-000011.	0 g	0 mL	1	
12-APR-2011	23:29	NS	BLANK	C-000012.	0 g	0 mL	1	
13-APR-2011	00:34	NS	STD_ICV 11GCSV0169 8330 200ng/	C-000013.	0 g	0 mL	1	
13-APR-2011	01:40	NS	STD_MRL 11GCSV0086 8330 5ng/mL	C-000014.	0 g	0 mL	1	2x MDL Check

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 15

Inst ID: LC12 Batch ID: 04182011
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
18-APR-2011	21:46	NS	PRIMER	C-000001.	0 g	0 mL	1	
18-APR-2011	22:51	NS	PRIMER	C-000002.	0 g	0 mL	1	
18-APR-2011	23:56	NS	STD_06 11GCSV0170 8330 200-500	C-000003.	0 g	0 mL	1	CCV fail for 2,4,6
19-APR-2011	01:01	NS	STD_MRL 11GCSV0086 8330 5-20ng	C-000004.	0 g	0 mL	1	
19-APR-2011	02:07	NS	MGX0X1AA 1103202 G1D130000-202	C-000005.	1000 mL	20 mL	1	RT
19-APR-2011	03:12	NS	MGP011AA 1103202 A1D080404-4 1	C-000006.	837.26 mL	20 mL	1	
19-APR-2011	04:18	NS	MGP021AA 1103202 A1D080404-5 1	C-000007.	966.73 mL	20 mL	1	
19-APR-2011	05:23	NS	MGP051AA 1103202 A1D080404-7 1	C-000008.	909.26 mL	20 mL	1	
19-APR-2011	06:29	NS	MGP081AA 1103202 A1D080404-9 1	C-000009.	992.33 mL	20 mL	1	↓ MP 4/21/11
19-APR-2011	07:34	NS	STD_05 10GCSV0524 8330 100-200	C-000010.	0 g	0 mL	1	
19-APR-2011	08:40	NS	STD_MRL 11GCSV0086 8330 5-20ng	C-000011.	0 g	0 mL	1	
19-APR-2011	09:46	NS	MGXKL1AA 1103098 G1D130000-98	C-000012.	1000 mL	20 mL	1	
19-APR-2011	10:51	NS	MGP5R2AF 1103098 A1D080416-7 2	C-000013.	936.66 mL	20 mL	2	
19-APR-2011	11:57	NS	MGV4M1AA 1102095 G1D120000-95	C-000014.	1000 mL	20 mL	1	
19-APR-2011	13:02	NS	MGNDC1AC 1102095 A1D070414-9 1	C-000015.	942.8 mL	20 mL	1	
19-APR-2011	14:07	NS	MGNDG1AA 1102095 A1D070414-11	C-000016.	1018.2 mL	20 mL	1	
19-APR-2011	15:12	NS	STD_05 10GCSV0524 8330 100-200	C-000017.	0 g	0 mL	1	
19-APR-2011	16:18	NS	STD_MRL 11GCSV0086 8330 5-20ng	C-000018.	0 g	0 mL	1	
19-APR-2011	17:23	NS	MGX0X1AA 1103202 G1D130000-202	C-000019.	1000 mL	20 mL	1	
19-APR-2011	18:29	NS	MGP011AA 1103202 A1D080404-4 1	C-000020.	837.26 mL	20 mL	1	
19-APR-2011	19:35	NS	MGP021AA 1103202 A1D080404-5 1	C-000021.	966.73 mL	20 mL	1	
19-APR-2011	20:40	NS	MGP051AA 1103202 A1D080404-7 1	C-000022.	909.26 mL	20 mL	1	
19-APR-2011	21:45	NS	QC CHECK	C-000023.	1000 mL	20 mL	1	
19-APR-2011	22:51	NS	MGP081AA 1103202 A1D080404-9 1	C-000024.	992.33 mL	20 mL	1	
19-APR-2011	23:57	NS	MGLJC1AA 1101074 A1D060428-3 1	C-000025.	909.33 mL	20 mL	1	
20-APR-2011	01:02	NS	MGLJD1AA 1101074 A1D060428-4 1	C-000026.	863.58 mL	20 mL	1	
20-APR-2011	02:07	NS	STD_05 10GCSV0524 8330 100-200	C-000027.	0 g	0 mL	1	
20-APR-2011	03:13	NS	STD_MRL 11GCSV0086 8330 5-20ng	C-000028.	0 g	0 mL	1	
20-APR-2011	04:18	NS	MGP5R1AF 1103098 A1D080416-7 1	C-000029.	936.66 mL	20 mL	1	
20-APR-2011	05:24	NS	MG4TL1AA 1105341 G1D150000-341	C-000030.	1000 mL	20 mL	1	
20-APR-2011	06:29	NS	MG3W21AA 1105341 G1D140599-1 1	C-000031.	981.56 mL	20 mL	1	
20-APR-2011	07:34	NS	STD_05 10GCSV0524 8330 100-200	C-000032.	0 g	0 mL	1	
20-APR-2011	08:40	NS	STD_MRL 11GCSV0086 8330 5-20ng	C-000033.	0 g	0 mL	1	

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC12 Batch ID: 04252011
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
25-APR-2011	12:27	NS	PRIMER	C-000001.	0 g	0 mL	1	
25-APR-2011	13:32	NS	PRIMER	C-000002.	0 g	0 mL	1	
25-APR-2011	14:37	NS	STD_06 11GCSV0195 8330 200-500	C-000003.	0 g	0 mL	1	
25-APR-2011	15:42	NS	STD_MRL 11GCSV0201 8330 5-20ng	C-000004.	0 g	0 mL	1	
25-APR-2011	16:47	NS	MGP091AA 1103202 A1D080404-10	C-000005.	933.23 mL	20 mL	1	
25-APR-2011	17:53	NS	STD_05 11GCSV0196 8330 100-200	C-000006.	0 g	0 mL	1	
25-APR-2011	18:58	NS	STD_MRL 11GCSV0201 8330 5-20ng	C-000007.	0 g	0 mL	1	

TestAmerica West Sacramento

C-000018.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 4/19/2011 16:18 **Operator:** NS
DataFile: LC12.I\04182011.B\C-000018.D **Vial Num:** 5
Instrument ID: LC12

Sample : **STD_MRL 11GCSV0086 8330 5-20ng/mL**

Method File: LC12.I\04182011 B\8330CNAB.M
Start Cal Date: 3/1/2011 15:01 **End Cal Date:** 4/12/2011 22.24

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE **SubList:** 1_CAL.SUB **SpikeList:** 0
Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;
Misc. Info: MRL;5;;;,3;1_CAL.SUB;0,1;

	LC12							Column2								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	37.75	1034	20.5900<	20	3%	Acceptable					20	-100%	Fails		(±15)	45
HMX	41.88	362	5.5820<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
RDX	**31.35**	**370**	**6.9840<**	**5**	**40%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
Picric ACID				0		#VALUE!					0		#VALUE!		(±15)	
1,3,5-Trinitrobenzene	27.58	449	5.3700<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	24.74	589	5.4020<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	46.08	585	4.7540<	5	-5%	Acceptable					5	-100%	Fails		(±15)	45
Nitrobenzene	21.75	290	5.5290<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	40.03	436	5.1710<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	36.02	387	5.7190<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	35.37	444	5.5590<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	**33.34**	**372**	**6.2200<**	**5**	**24%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
2,4-Dinitrotoluene	**32.40**	**566**	**5.7640<**	**5**	**15%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
2-Nitrotoluene	28.63	358	10.9500<	10	9%	Acceptable					10	-100%	Fails		(±15)	45
4-Nitrotoluene				0		#VALUE!					0		#VALUE!		(±15)	
3-Nitrotoluene	**29.24**	**246**	**6.1230<**	**5**	**22%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
Nitroglycerin				**20**	**-100%**	**Fails**		44.38	1805	20.2200	20	1%	Acceptable		(±15)	45
PETN				**20**	**-100%**	**Fails**		52.73	3081	20.3000<	20	2%	Acceptable		(±15)	45
3,5-Dinitroaniline	**30.77**	**535**	**6.2230<**	**5**	**24%**	**Fails**					**5**	**-100%**	**Fails**		(±15)	45
EGDN				**20**	**-100%**	**Fails**					**20**	**-100%**	**Fails**		(±15)	

MT 4/20/11

>OK@30%

OK@30%

NA

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: 4/20/2011 7:44 PM

TestAmerica West Sacramento

C-000028.D

Chromatography Summary

Injection Date: 4/20/2011 3:13 Operator: NS

DataFile: LC12.I\04182011.B\C-000028.D Vial Num: 5

Instrument ID: LC12

Method 8330 Target Analyte Results

Sample : **STD_MRL 11GCSV0086 8330 5-20ng/mL**

Method File: LC12.I\04182011.B\8330CNAB.M

Start Cal Date: 3/1/2011 15:01 End Cal Date: 4/12/2011 22:24

Matrix: NONE SubList: 1_CAL.SUB SpikeList: 0

Samp. Info: STD_MRL 11GCSV0086 8330 5-20ng/mL;2;

Misc. Info: MRL;5;;;;3;1_CAL.SUB;0;1;

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

	LC12							Column2								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	37.71	1032	20.5500<	20	3%	Acceptable					20	-100%	Fails		(±15)	45
HMX	41.88	348	5.3660<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
RDX	31.36	348	6.5680<	5	31%	Fails					5	-100%	Fails		(±15)	45
Picric ACID				0		#VALUE!					0		#VALUE!		(±15)	
1,3,5-Trinitrobenzene	27.55	456	5.4530<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	24.75	587	5.3830<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	46.08	590	4.7940<	5	-4%	Acceptable					5	-100%	Fails		(±15)	45
Nitrobenzene	21.74	267	5.0900<	5	2%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	40.02	410	4.8620<	5	-3%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	36.05	390	5.7630<	5	15%	Fails					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	35.42	439	5.4970<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	33.36	346	5.7850<	5	16%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	32.35	547	5.5700<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	28.60	329	10.0600<	10	1%	Acceptable					10	-100%	Fails		(±15)	45
4-Nitrotoluene				0		#VALUE!					0		#VALUE!		(±15)	
3-Nitrotoluene	29.25	242	6.0240<	5	20%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		44.37	1846	20.6800	20	3%	Acceptable		(±15)	45
PETN				20	-100%	Fails		52.77	3088	20.3500<	20	2%	Acceptable		(±15)	45
3,5-Dinitroaniline	30.73	511	5.9440<	5	19%	Fails					5	-100%	Fails		(±15)	45
EGDN				20	-100%	Fails					20	-100%	Fails		(±15)	

mc 4/20/11

OK @ 30%

OK @ 30%

OK @ 30%

NA

Notes: M = Manually Integrated — Signals Differ by More Than 40%

D = Operator Disabled Result — Signals Differ by More Than 50%

O = Over Calibration Range

TestAmerica West Sacramento

A-000026.D

Chromatography Summary

Injection Date: 4/23/2011 11:04 Operator: NS

DataFile: LC10.B\04222011.B\A-000026.D Vial Num: 4

Method 8330 Target Analyte Results

Instrument ID: LC10

Sample : **STD_MRL 11GCSV0201 8330 5-50ng/mL**

Method File: LC10.B\04222011.B\8330AB.M

Start Cal Date: 4/23/2011 1:49 End Cal Date: 4/23/2011 6:48

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
IX	0 mL	0 mL	0 g

Matrix: NONE SubList: I_CAL.sub SpikeList:

Samp. Info: STD_MRL 11GCSV0201 8330 5-50ng/mL,2

Misc. Info: MRL;1,,,,,3;I_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	15.88	1243	20.2100<	20	1%	Acceptable		15.89	2204	18.8800	20	-6%	Acceptable		(±15)	
HMX	5.27	774	5.4610<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.38	710	7.0800<	5	42%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.38	4804	52.0200	50	4%	Acceptable		8.38	7111	51.9000<	50	4%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.59	943	5.3880<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	11.99	979	5.5480<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.05	582	5.7090<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
Nitrobenzene	13.49	481	5.8180<	5	16%	Fails					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.99	559	5.3920<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.38	521	5.9920<	5	20%	Fails					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.30	573	6.0250<	5	21%	Fails					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.70	417	6.2030<	5	24%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.38	613	5.6810<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.18	333	6.7560<	5	35%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	22.87	363	6.1010<	5	22%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.46	367	6.2280<	5	25%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		14.04	1518	21.1000<	20	6%	Acceptable		(±15)	45
PETN				20	-100%	Fails		26.51	935	25.1900<	20	26%	Fails		(±15)	45
3,5-Dinitroaniline	12.71	672	5.9030<	5	18%	Fails					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%

Printed: 4/25/2011 10:31 AM

WATER, Nitroguanidine

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 5, 2011

SDG: A1D080404 R0
Analysis: SW846 8330M Nitroguanidine

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 cooler temperatures were documented as being received from 1.1°C – 2.9°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?	✓				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: 1/24/11 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%?	✓			1/24/11 @ 1328	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
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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 5, 2011

SDG: A1D080404 R0
Analysis: SW846 8330M Nitroguanidine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
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%?			✓	No detections above the reporting limit.	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.

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: FWGBKGmw-018C-1710-GW

Dissolved HPLC

Lot-Sample #...:	A1D080404-001	Work Order #...:	MGP0L1AD
Date Sampled...:	04/07/11 09:01	Date Received..:	04/08/11
Prep Date.....:	04/12/11	Analysis Date..:	04/19/11
Prep Batch #...:	1102416		
Dilution Factor:	1	Method.....:	SW846 8330 (Modif

Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-005C-1705-GW

Dissolved HPLC

Lot-Sample #...:	A1D080404-002	Work Order #...:	MGP0T1AD	Matrix.....:	WG
Date Sampled...:	04/07/11 11:31	Date Received..:	04/08/11		
Prep Date.....:	04/12/11	Analysis Date..:	04/19/11		
Prep Batch #...:	1102416				
Dilution Factor:	1	Method.....:	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBLmw-004C-1714-GW

Dissolved HPLC

Lot-Sample #...: A1D080404-003 Work Order #...: MGP0X1AD Matrix.....: WG
Date Sampled...: 04/07/11 13:21 Date Received..: 04/08/11
Prep Date.....: 04/12/11 Analysis Date..: 04/19/11
Prep Batch #...: 1102416
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GW

Dissolved HPLC

Lot-Sample #...:	A1D080404-004	Work Order #...:	MGP011AD	Matrix.....:	WG
Date Sampled...:	04/07/11 08:52	Date Received..:	04/08/11		
Prep Date.....:	04/12/11	Analysis Date..:	04/19/11		
Prep Batch #...:	1102416				
Dilution Factor:	1	Method.....:	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1748-GW

Dissolved HPLC

Lot-Sample #...: A1D080404-005 Work Order #...: MGP021AD Matrix.....: WG
Date Sampled...: 04/07/11 10:10 Date Received..: 04/08/11
Prep Date.....: 04/12/11 Analysis Date..: 04/19/11
Prep Batch #...: 1102416
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1721-GW

Dissolved HPLC

Lot-Sample #...:	A1D080404-006	Work Order #...:	MGP041AD	Matrix.....:	WG
Date Sampled...:	04/07/11 11:04	Date Received..:	04/08/11		
Prep Date.....:	04/12/11	Analysis Date..:	04/19/11		
Prep Batch #...:	1102416				
Dilution Factor:	1	Method.....:	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1725-GW

Dissolved HPLC

Lot-Sample #...:	A1D080404-007	Work Order #...:	MGP051AD	Matrix.....:	WG
Date Sampled...:	04/07/11 12:32	Date Received..:	04/08/11		
Prep Date.....:	04/12/11	Analysis Date..:	04/19/11		
Prep Batch #...:	1102416				
Dilution Factor:	1	Method.....:	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1723-GW

Dissolved HPLC

Lot-Sample #...: A1D080404-008 Work Order #...: MGP071AH Matrix.....: WG
Date Sampled...: 04/07/11 08:59 Date Received..: 04/08/11
Prep Date.....: 04/12/11 Analysis Date..: 04/19/11
Prep Batch #...: 1102416
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1724-GW

Dissolved HPLC

Lot-Sample #...: A1D080404-009 Work Order #...: MGP081AD Matrix.....: WG
Date Sampled...: 04/07/11 11:59 Date Received..: 04/08/11
Prep Date.....: 04/12/11 Analysis Date..: 04/19/11
Prep Batch #...: 1102416
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	13 J	20	ug/L	2.4

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1704-GW

Dissolved HPLC

Lot-Sample #...: A1D080404-010 Work Order #...: MGP091AD Matrix.....: WG
Date Sampled...: 04/07/11 13:33 Date Received..: 04/08/11
Prep Date.....: 04/12/11 Analysis Date..: 04/19/11
Prep Batch #...: 1102416
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

Dissolved HPLC

Lot-Sample #...: A1D080404-011 Work Order #...: MGP1A1AD Matrix.....: WQ
Date Sampled...: 04/07/11 14:33 Date Received..: 04/08/11
Prep Date.....: 04/12/11 Analysis Date..: 04/19/11
Prep Batch #...: 1102416
Dilution Factor: 1 Method.....: SW846 8330 (Modif

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	ND	20	ug/L	2.4

METHOD BLANK REPORT

HPLC

Client Lot #...: A1D080404 Work Order #...: MGXET1AA Matrix.....: WATER
MB Lot-Sample #: G1D120000-416

Prep Date.....: 04/12/11
Analysis Date..: 04/19/11 Prep Batch #...: 1102416
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 #...: A1D080404 Work Order #...: MGXET1AC Matrix.....: WATER
LCS Lot-Sample#: G1D120000-416
Prep Date.....: 04/12/11 Analysis Date..: 04/19/11
Prep Batch #...: 1102416
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	103	(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 #...: A1D080404 Work Order #...: MGP0L1AJ-MS Matrix.....: WG
MS Lot-Sample #: A1D080404-001 MGP0L1AK-MSD
Date Sampled...: 04/07/11 09:01 Date Received..: 04/08/11
Prep Date.....: 04/12/11 Analysis Date..: 04/19/11
Prep Batch #...: 1102416
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	104	(73 - 117)			SW846 8330 (Modified
	105	(73 - 117)	1.2	(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 #...: A1D080404 Work Order #...: MGP071AJ-MS Matrix.....: WG
MS Lot-Sample #: A1D080404-008 MGP071AK-MSD
Date Sampled...: 04/07/11 08:59 Date Received..: 04/08/11
Prep Date.....: 04/12/11 Analysis Date..: 04/19/11
Prep Batch #...: 1102416
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	104	(73 - 117)			SW846 8330 (Modified
	106	(73 - 117)	1.8	(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

WATER, Nitrocellulose

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 5, 2011

SDG: A1D080404 Rev 0
Analysis: TAL SOP WS-WC-0050

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 cooler temperatures were documented as being received from 1.1°C – 2.9°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 4/18/11 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
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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: April 2011
Data Reviewer/Date: Angye Dragotta/ May 5, 2011

SDG: A1D080404 Rev 0
Analysis: TAL SOP WS-WC-0050

Review Questions:	Yes	No	N/A	Comments	Qualifier
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?	✓				
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

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-018C-1710-GW

General Chemistry

Lot-Sample #...: A1D080404-001 Work Order #...: MGP0L Matrix.....: WG
Date Sampled...: 04/07/11 09:01 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGBKGmw-005C-1705-GW

General Chemistry

Lot-Sample #...: A1D080404-002 Work Order #...: MGP0T Matrix.....: WG
Date Sampled...: 04/07/11 11:31 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBLmw-004C-1714-GW

General Chemistry

Lot-Sample #...: A1D080404-003 Work Order #...: MGP0X Matrix.....: WG
Date Sampled...: 04/07/11 13:21 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1722-GW

General Chemistry

Lot-Sample #...: A1D080404-004 Work Order #...: MGP01 Matrix.....: WG
Date Sampled...: 04/07/11 08:52 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1748-GW

General Chemistry

Lot-Sample #...: A1D080404-005 Work Order #...: MGP02 Matrix.....: WG
Date Sampled...: 04/07/11 10:10 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1721-GW

General Chemistry

Lot-Sample #...: A1D080404-006 Work Order #...: MGP04 Matrix.....: WG
Date Sampled...: 04/07/11 11:04 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1725-GW

General Chemistry

Lot-Sample #...: A1D080404-007 Work Order #...: MGP05 Matrix.....: WG
Date Sampled...: 04/07/11 12:32 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1723-GW

General Chemistry

Lot-Sample #...: A1D080404-008 Work Order #...: MGP07 Matrix.....: WG
Date Sampled...: 04/07/11 08:59 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1724-GW

General Chemistry

Lot-Sample #...: A1D080404-009 Work Order #...: MGP08 Matrix.....: WG
Date Sampled...: 04/07/11 11:59 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGASYmw-003C-1704-GW

General Chemistry

Lot-Sample #...: A1D080404-010 Work Order #...: MGP09 Matrix.....: WG
Date Sampled...: 04/07/11 13:33 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1760-GW

General Chemistry

Lot-Sample #...: A1D080404-011 Work Order #...: MGP1A Matrix.....: WQ
Date Sampled...: 04/07/11 14:33 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077

Dilution Factor: 1 MDL.....: 0.48

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1D080404 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MG22V1AA		MB Lot-Sample #:	G1D150000-077	
	ND	2.0	mg/L	TAL-SOP WS-WC-005	04/15-04/18/11	1105077
		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 #...: A1D080404 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MG22V1AC	LCS Lot-Sample#: G1D150000-077		
	68	(26 - 144)	TAL-SOP WS-WC-005	04/15-04/18/11	1105077
		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 #...: A1D080404 Matrix.....: WG
Date Sampled...: 04/07/11 08:59 Date Received..: 04/08/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: MGP0L1AG-MS/MGP0L1AH-MSD MS Lot-Sample #: A1D080404-001					
	90	(26 - 144)			TAL-SOP WS-WC-005	04/15-04/18/11	1105077
	92	(26 - 144)	1.5	(0-45)	TAL-SOP WS-WC-005	04/15-04/18/11	1105077
		Dilution Factor: 1					
Nitrocellulose		WO#: MGP071AF-MS/MGP071AG-MSD MS Lot-Sample #: A1D080404-008					
	83	(26 - 144)			TAL-SOP WS-WC-005	04/15-04/18/11	1105077
	83	(26 - 144)	0.0	(0-45)	TAL-SOP WS-WC-005	04/15-04/18/11	1105077
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix 1

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1D080404										
8330	FWGBKGmw-005C-1705-GW	AQ	N							
				HMX	0.10	0.073J		J	ug/L	RI
8330	FWGEQUIPRINSE4-1760-GW	AQ	EB							
				TETRYL	0.10	0.092J		J	ug/L	RI
8330	FWGLL2mw-267C-1722-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.12	0.062J		J	ug/L	RI
				RDX	0.12	1.3		J	ug/L	ProfJudg
8330	FWGLL2mw-269C-1723-GW	AQ	N							
				HMX	0.10	0.078J		J	ug/L	RI
8330	FWGLL2mw-DUP3-1748-GW	AQ	FD							
				1,3,5-Trinitrobenzene	0.10	0.066J		J	ug/L	RI
8330	FWGLL3mw-239C-1725-GW	AQ	N							
				HMX	0.11	0.25PG		J	ug/L	ProfJudg
SW8330 Modified	FWGLL3mw-236C-1724-GW	AQ	N							
				Nitroguanidine	20	13J		J	ug/L	RI

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Data Qualifier Summary

Lab Reporting Batch ID: A1D080404 **Laboratory: TALCAN**

EDD Filename: A1D080404 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: 8330 *Matrix:* AQ

Sample ID: FWGBKGmw-005C-1705-GW *Collected:* 4/7/2011 11:31:00 *Analysis Type:* DL *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	0.073	J	0.036	MDL	0.10	PQL	ug/L	J	RI

Sample ID: FWGEQUIPRINSE4-1760-GW *Collected:* 4/7/2011 2:33:00 PM *Analysis Type:* DL *Dilution:* 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRYL	0.092	J	0.052	MDL	0.10	PQL	ug/L	J	RI

Sample ID: FWGLL2mw-267C-1722-GW *Collected:* 4/7/2011 8:52:00 AM *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 1.19

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	0.062	J	0.036	MDL	0.12	PQL	ug/L	J	RI
RDX	1.3		0.043	MDL	0.12	PQL	ug/L	J	ProfJudg

Sample ID: FWGLL2mw-269C-1723-GW *Collected:* 4/7/2011 8:59:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	0.078	J	0.036	MDL	0.10	PQL	ug/L	J	RI

Sample ID: FWGLL2mw-DUP3-1748-GW *Collected:* 4/7/2011 10:10:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	0.066	J	0.031	MDL	0.10	PQL	ug/L	J	RI

Sample ID: FWGLL3mw-239C-1725-GW *Collected:* 4/7/2011 12:32:00 *Analysis Type:* DL *Dilution:* 1.1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	0.25	PG	0.040	MDL	0.11	PQL	ug/L	J	ProfJudg

Data Qualifier Summary

Lab Reporting Batch ID: A1D080404 **Laboratory: TALCAN**

EDD Filename: A1D080404 **eQAPP Name: Ravenna 111810**

Method Category: SVOA

Method: SW8330 Modified *Matrix:* AQ

Sample ID: FWGLL3mw-236C-1724-GW *Collected:* 4/7/2011 11:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
Nitroguanidine	13	J	2.4	MDL	20	PQL	ug/L	J	RI

Data Qualifier Summary

Lab Reporting Batch ID: A1D080404 **Laboratory: TALCAN**

EDD Filename: A1D080404 **eQAPP Name: Ravenna 111810**

Reason Code Legend

Reason Code	*Description*
Cb	Calibration Blank Contamination
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
Ccv	Continuing Calibration Verification Percent Difference Lower Rejection
Ccv	Continuing Calibration Verification Percent Difference Upper Estimation
Ccv	Continuing Calibration Verification Percent Difference Upper Rejection
Ccv	Continuing Calibration Verification Percent Recovery Lower Estimation
Ccv	Continuing Calibration Verification Percent Recovery Lower Rejection
Ccv	Continuing Calibration Verification Percent Recovery Upper Estimation
Ccv	Continuing Calibration Verification Percent Recovery Upper Rejection
CcvCC	Continuing Calibration Verification Correlation Coefficient
CcvRrf	Continuing Calibration Verification Relative Response Factor
ContTune	Continuing Tune
Dup=0	Duplicate Sample Count = 0
Dup>1	Duplicate Sample Count > 1
Eb	Equipment Blank Contamination
EtoA	Extraction to Analysis Estimation
EtoA	Extraction to Analysis Rejection
Fb	Field Blank Contamination
Fd	Field Duplicate Precision
IcCC	Initial Calibration Correlation Coefficient
IcRrf	Initial Calibration Relative Response Factor
IcRsd	Initial Calibration Percent Relative Standard Deviation
Icv	Initial Calibration Verification Percent Difference Lower Estimation
Icv	Initial Calibration Verification Percent Difference Lower Rejection
Icv	Initial Calibration Verification Percent Difference Upper Estimation
Icv	Initial Calibration Verification Percent Difference Upper Rejection
Icv	Initial Calibration Verification Percent Recovery Lower Estimation
Icv	Initial Calibration Verification Percent Recovery Lower Rejection
Icv	Initial Calibration Verification Percent Recovery Upper Estimation

Data Qualifier Summary

Lab Reporting Batch ID: A1D080404 **Laboratory: TALCAN**

EDD Filename: A1D080404 **eQAPP Name: Ravenna 111810**

Icv	Initial Calibration Verification Percent Recovery Upper Rejection
IcvCC	Initial Calibration Verification Correlation Coefficient
IcvRrf	Initial Calibration Verification Relative Response Factor
IllogicalFraction	Illogical Fraction
InitTune	Initial Tune
Is	Internal Standard Estimation
Is	Internal Standard Rejection
Lcs	Laboratory Control Precision
Lcs	Laboratory Control Spike Lower Estimation
Lcs	Laboratory Control Spike Lower Rejection
Lcs	Laboratory Control Spike Upper Estimation
Lcs	Laboratory Control Spike Upper Rejection
Lcs=0	Laboratory Control Sample Count = 0
Lcs>1	Laboratory Control Sample Count > 1
Ld	Laboratory Duplicate Precision
Mb	Method Blank Contamination
Mb=0	Method Blank Sample Count = 0
Mb>1	Method Blank Sample Count > 1
Moist	Percent Moisture
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Lower Rejection
Ms	Matrix Spike Precision
Ms	Matrix Spike Upper Estimation
Ms	Matrix Spike Upper Rejection
Ms=0	Matrix Spike Sample Count = 0
Ms>1	Matrix Spike Sample Count > 1
PEM	Performance Evaluation Mixture
Preservation	Preservation
ProfJudg	Professional Judgment
REM	Resolution Check Mixture
RI	Reporting Limit

Data Qualifier Summary

Lab Reporting Batch ID: A1D080404 **Laboratory: TALCAN**

EDD Filename: A1D080404 **eQAPP Name: Ravenna 111810**

RI	Reporting Limit > Project Maximum Contamination Limit
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoA	Sampling to Analysis Rejection
StoE	Sampling to Extraction Estimation
StoE	Sampling to Extraction Rejection
StoL	Sampling to Leaching Estimation
StoL	Sampling to Leaching Rejection
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Lower Rejection
Surr	Surrogate/Tracer Recovery Upper Estimation
Surr	Surrogate/Tracer Recovery Upper Rejection
Tb	Trip Blank Contamination
TempEst	Temperature Estimation
TempRej	Temperature Rejection

Reporting Limit Outliers

Lab Reporting Batch ID: A1D080404 **Laboratory: TALCAN**

EDD Filename: A1D080404 **eQAPP Name: Ravenna 111810**

Method: 8330
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGBKGmw-005C-1705-GW	HMX	J	0.073	0.10	PQL	ug/L	J (all detects)
FWGEQUIPRINSE4-1760-GW	TETRYL	J	0.092	0.10	PQL	ug/L	J (all detects)
FWGLL2mw-267C-1722-GW	1,3,5-TRINITROBENZENE	J	0.062	0.12	PQL	ug/L	J (all detects)
FWGLL2mw-269C-1723-GW	HMX	J	0.078	0.10	PQL	ug/L	J (all detects)
FWGLL2mw-DUP3-1748-GW	1,3,5-TRINITROBENZENE	J	0.066	0.10	PQL	ug/L	J (all detects)

Method: SW8330 Modified
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FWGLL3mw-236C-1724-GW	Nitroguanidine	J	13	20	PQL	ug/L	J (all detects)

APPENDIX E

INVESTIGATIVE DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLANS

DRAFT

FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

INVESTIGATION-DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLAN APRIL 2011 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

May 2, 2011

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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 April 2011 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 field activities at 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 April 2011 sampling event (42 wells). 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 2011-5	55 Gal. Steel	Purge Water	~30-gallons	Equipment Rinse/Decontamination
EQM 2011-6	55 Gal. Steel	Decontamination/Rinse Water	~50-gallons	*
EQM 2011-7	55 Gal. Steel	Purge water	~50-gallons	*

* = Load Lines1, 2, 3, 4, Atlas Scrap Yard, Ramsdell Quarry Landfill, Open Demolition Area 2, Backgound wells, C-Block, Building 1200, and the 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 April 2011 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 as well as redevelopment activities for selected wells (IDW was also generated during the water level measurements associated with the annual well inspections). 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 they 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".

5.2 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.

Table 5.1 Detected Analytical Results

Sample ID	Detected Contaminant	Detected Result	Regulatory Level[1]	Above Regulatory Yes/No
FWG-IDW-MWPURGEAPRIL2011	Barium	0.088 mg/L J	100 mg/L	No
	Flashpoint	>180°F	<140°F	No
	pH	7.2	<2 or >12.5	No
FWG-IDW-MWDECONAPRIL2011	Arsenic	0.008 mg/L J	5.0 mg/L	No
	Barium	0.12 mg/L J	100 mg/L	No
	Cadmium	0.0012 mg/L	1.0 mg/L	No
	Chromium	0.0085 mg/L J	5.0 mg/L	No
	Lead	0.014 mg/L J	5.0 mg/L	No
	Flashpoint	>180°F	<140°F	No
	pH	9.5	<2 or >12.5	No
TRIP BLANK (totals analysis)	Chloroform	0.24 µg/L	NA	NA

J = Estimated result. Result is less than reporting limit.
B = Method Blank Contamination
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).

5.3 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 2011-5	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2011-6	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2011-7	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 #: A1D080402

Erik Corbin

Environmental Quality Mgt., I
1800 Carillon Blvd
Cincinnati, OH 45240

TESTAMERICA LABORATORIES, INC.

Approved for release.
Mark J. Loeb
Project Manager II
4/27/2011 1:52 PM

Mark J. Loeb
Project Manager
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April 27, 2011

ACCREDITED IN ACCORDANCE WITH nelac

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CASE NARRATIVE

A1D080402

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 April 08, 2011, according to documented sample acceptance procedures.

The 7.3.3 Reactive Cyanide and 7.3.4 Reactive Sulfide analyses were performed at the TestAmerica Buffalo laboratory.

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 April 22, 2011. 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. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

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 2.4°C.

GC/MS VOLATILES

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.

Sample(s) FWG-IDW-MWDECONAPRIL2011 had elevated reporting limits due to foaming.

GC/MS SEMIVOLATILES

3-Methylphenol (m-Cresol) and 4-Methylphenol (p-Cresol) co-elute and cannot be reported as separate analytes. When these analytes are requested, the reported result represents a probable combination of the two analytes.

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, a Matrix Spike/Matrix Spike Duplicate (MS/MSD) pair or a Matrix Spike/Sample Duplicate (MS/DU) pair.
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. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch, with the exception of poor performing analytes. A list of these analytes is listed below. No corrective action is taken if these analytes do not meet criteria.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.

Poor performers

Method 8270 Water and Solid:	
4-Nitrophenol	3,3' – Dichlorobenzidine
Benzoic Acid	2,4,6 - Tribromophenol
Phenol	2,4-Dinitrophenol
Phenol-d5	Pentachlorophenol
4,6-Dinitro-2-methylphenol	Hexachlorocyclopentadiene (LCG only)
Benzyl Alcohol	4-Chloroaniline
Method 8151 Solid	
Dinoseb	
Method 8260 Water and Solid	
Dichlorodifluoromethane	Hexachlorobutadiene
Trichlorofluoromethane	Naphthalene
Chloroethane	1,2,3-Trichlorobenzene
Acetone	1,2,4-Trichlorobenzene
Bromomethane	2,2-Dichloropropane
Bromoform	Chloromethane

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 ten fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

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 do 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 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 or Matrix Spike/Sample Duplicate.

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, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, or Metbod 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), DoD ELAP (ADE-1437) USDA Soil Permit (P33-08-00123)

EXECUTIVE SUMMARY - Detection Highlights

A1D080402

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWG-IDW-TRIP 04/07/11 08:00 001				
Chloroform	0.24 J	5.0	ug/L	SW846 8260B
FWG-IDW-MWDECONAPRIL2011 04/07/11 15:30 002				
Arsenic - TCLP	0.0080 B	0.50	mg/L	SW846 6010B
Barium - TCLP	0.12 B	10.0	mg/L	SW846 6010B
Cadmium - TCLP	0.0012 B	0.10	mg/L	SW846 6010B
Chromium - TCLP	0.0085 B	0.50	mg/L	SW846 6010B
Lead - TCLP	0.014 B	0.50	mg/L	SW846 6010B
Flashpoint	>180		deg F	SW846 1010
pH (liquid)	9.5		No Units	SW846 9040B
FWG-IDW-MWPURGEAPRIL2011 04/07/11 15:45 003				
Barium - TCLP	0.088 B	10.0	mg/L	SW846 6010B
Flashpoint	>180		deg F	SW846 1010
pH (liquid)	7.2		No Units	SW846 9040B

ANALYTICAL METHODS SUMMARY

A1D080402

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

A1D080402

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MGPXR	001	FWG-IDW-TRIP	04/07/11	08:00
MGPXV	002	FWG-IDW-MWDECONAPRIL2011	04/07/11	15:30
MGPX3	003	FWG-IDW-MWPURGEAPRIL2011	04/07/11	15:45

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: FWG-IDW-TRIP

GC/MS Volatiles

Lot-Sample #...: A1D080402-001 **Work Order #...:** MGPXR1AA **Matrix.....:** WQ
Date Sampled...: 04/07/11 08:00 **Date Received..:** 04/08/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1108117
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	**0.24 J**	**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	94	(75 - 121)
Toluene-d8	84	(74 - 115)
4-Bromofluorobenzene	92	(66 - 117)
1,2-Dichloroethane-d4	90	(63 - 129)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONAPRIL2011

TCLP GC/MS Volatiles

Lot-Sample #...: A1D080402-002 **Work Order #...:** MGPXV1AA **Matrix.....:** WG
Date Sampled...: 04/07/11 15:30 **Date Received..:** 04/08/11
Leach Date.....: 04/11/11 **Prep Date.....:** 04/14/11 **Analysis Date..:** 04/15/11
Leach Batch #..: P110102 **Prep Batch #...:** 1104384
Dilution Factor: 2
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	0.050	mg/L	0.00026
2-Butanone (MEK)	ND	0.50	mg/L	0.0011
Carbon tetrachloride	ND	0.050	mg/L	0.00026
Chlorobenzene	ND	0.050	mg/L	0.00030
Chloroform	ND	0.050	mg/L	0.00032
1,2-Dichloroethane	ND	0.050	mg/L	0.00044
1,1-Dichloroethylene	ND	0.050	mg/L	0.00038
Tetrachloroethylene	ND	0.050	mg/L	0.00058
Trichloroethylene	ND	0.050	mg/L	0.00034
Vinyl chloride	ND	0.050	mg/L	0.00044

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(84 - 128)
1,2-Dichloroethane-d4	92	(80 - 121)
Toluene-d8	96	(90 - 115)
4-Bromofluorobenzene	83	(70 - 124)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONAPRIL2011

TCLP GC/MS Semivolatiles

Lot-Sample #...: A1D080402-002 **Work Order #...:** MGPXV1AD **Matrix.....:** WG
Date Sampled...: 04/07/11 15:30 **Date Received..:** 04/08/11
Leach Date.....: 04/11/11 **Prep Date.....:** 04/12/11 **Analysis Date..:** 04/13/11
Leach Batch #..: P110114 **Prep Batch #...:** 1102051
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	34	(27 - 110)
2-Fluorobiphenyl	38	(20 - 110)
Terphenyl-d14	48	(44 - 110)
Phenol-d5	23	(10 - 110)
2-Fluorophenol	23	(10 - 110)
2,4,6-Tribromophenol	34	(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-MWDECONAPRIL2011

TCLP Metals

Lot-Sample #...: A1D080402-002 Matrix.....: WG
Date Sampled...: 04/07/11 15:30 Date Received..: 04/08/11
Leach Date.....: 04/11/11 Leach Batch #..: P110114

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1103021						
Mercury	ND	0.0020	mg/L	SW846 7470A	04/13-04/14/11	MGPXV1AN
		Dilution Factor: 1		MDL.....: 0.00012		
Arsenic	0.0080 B	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGPXV1AF
		Dilution Factor: 1		MDL.....: 0.0032		
Barium	0.12 B	10.0	mg/L	SW846 6010B	04/13-04/14/11	MGPXV1AG
		Dilution Factor: 1		MDL.....: 0.00067		
Cadmium	0.0012 B	0.10	mg/L	SW846 6010B	04/13-04/14/11	MGPXV1AH
		Dilution Factor: 1		MDL.....: 0.00066		
Chromium	0.0085 B	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGPXV1AJ
		Dilution Factor: 1		MDL.....: 0.0022		
Lead	0.014 B	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGPXV1AK
		Dilution Factor: 1		MDL.....: 0.0019		
Selenium	ND	0.25	mg/L	SW846 6010B	04/13-04/14/11	MGPXV1AL
		Dilution Factor: 1		MDL.....: 0.0041		
Silver	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGPXV1AM
		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-MWDECONAPRIL2011

General Chemistry

Lot-Sample #...: A1D080402-002 **Work Order #...:** MGPXV **Matrix.....:** WG
Date Sampled...: 04/07/11 15:30 **Date Received..:** 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)	**9.5**		**No Units**	**SW846 9040B**	**04/08/11**	**1101379**
	Dilution Factor: 1			MDL.....:		
Flashpoint	**>180**		**deg F**	**SW846 1010**	**04/21/11**	**1111199**
	Dilution Factor: 1			MDL.....:		

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEAPRIL2011

TCLP GC/MS Volatiles

Lot-Sample #...: A1D080402-003 **Work Order #...:** MGPX31AA **Matrix.....:** WG
Date Sampled...: 04/07/11 15:45 **Date Received..:** 04/08/11
Leach Date.....: 04/11/11 **Prep Date.....:** 04/14/11 **Analysis Date..:** 04/15/11
Leach Batch #..: P110102 **Prep Batch #...:** 1104384
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	92	(84 - 128)
1,2-Dichloroethane-d4	92	(80 - 121)
Toluene-d8	99	(90 - 115)
4-Bromofluorobenzene	82	(70 - 124)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEAPRIL2011

TCLP GC/MS Semivolatiles

Lot-Sample #...: A1D080402-003 **Work Order #...:** MGPX31AD **Matrix.....:** WG
Date Sampled...: 04/07/11 15:45 **Date Received..:** 04/08/11
Leach Date.....: 04/11/11 **Prep Date.....:** 04/12/11 **Analysis Date..:** 04/13/11
Leach Batch #..: P110114 **Prep Batch #...:** 1102051
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	39	(27 - 110)
2-Fluorobiphenyl	44	(20 - 110)
Terphenyl-d14	69	(44 - 110)
Phenol-d5	34	(10 - 110)
2-Fluorophenol	38	(10 - 110)
2,4,6-Tribromophenol	47	(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-MWPURGEAPRIL2011

TCLP Metals

Lot-Sample #...: A1D080402-003 **Matrix.....:** WG
Date Sampled...: 04/07/11 15:45 **Date Received..:** 04/08/11
Leach Date.....: 04/11/11 **Leach Batch #..:** P110114

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1103021						
Mercury	ND	0.0020	mg/L	SW846 7470A	04/13-04/14/11	MGPX31AN
		Dilution Factor: 1		MDL.....: 0.00012		
Arsenic	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGPX31AF
		Dilution Factor: 1		MDL.....: 0.0032		
Barium	**0.088 B**	**10.0**	**mg/L**	**SW846 6010B**	**04/13-04/14/11**	**MGPX31AG**
		Dilution Factor: 1		MDL.....: 0.00067		
Cadmium	ND	0.10	mg/L	SW846 6010B	04/13-04/14/11	MGPX31AH
		Dilution Factor: 1		MDL.....: 0.00066		
Chromium	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGPX31AJ
		Dilution Factor: 1		MDL.....: 0.0022		
Lead	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGPX31AK
		Dilution Factor: 1		MDL.....: 0.0019		
Selenium	ND	0.25	mg/L	SW846 6010B	04/13-04/14/11	MGPX31AL
		Dilution Factor: 1		MDL.....: 0.0041		
Silver	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGPX31AM
		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-MWPURGEAPRIL2011

General Chemistry

Lot-Sample #...: A1D080402-003 Work Order #...: MGPX3 Matrix.....: WG
Date Sampled...: 04/07/11 15:45 Date Received..: 04/08/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)	7.2		No Units	SW846 9040B	04/08/11	1101379
	Dilution Factor: 1			MDL.....:		
Flashpoint	>180		deg F	SW846 1010	04/21/11	1111199
	Dilution Factor: 1			MDL.....:		

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QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1D080402 **Work Order #...:** MG5E31AA **Matrix.....:** WATER
MB Lot-Sample #: A1D180000-117

Prep Date.....: 04/15/11
Analysis Date..: 04/15/11 **Prep Batch #...:** 1108117
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	5.0	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
2-Butanone (MEK)	ND	20	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(75 - 121)
Toluene-d8	84	(74 - 115)
4-Bromofluorobenzene	95	(66 - 117)
1,2-Dichloroethane-d4	87	(63 - 129)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP GC/MS Volatiles

Client Lot #...: A1D080402 **Work Order #...:** MGTW81AA **Matrix.....:** SOLID
MB Lot-Sample #: A1D110000-084
Leach Date.....: 04/11/11 **Prep Date.....:** 04/14/11 **Analysis Date..:** 04/14/11
Leach Batch #..: P110102 **Prep Batch #...:** 1104384
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	0.025	mg/L	SW846 8260B
Tetrachloroethylene	ND	0.025	mg/L	SW846 8260B
Trichloroethylene	ND	0.025	mg/L	SW846 8260B
Vinyl chloride	ND	0.025	mg/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	90	(86 - 125)
1,2-Dichloroethane-d4	92	(80 - 121)
Toluene-d8	96	(90 - 115)
4-Bromofluorobenzene	85	(70 - 124)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP GC/MS Semivolatiles

Client Lot #...: A1D080402 **Work Order #...:** MGV031AA **Matrix.....:** WATER
MB Lot-Sample #: A1D120000-051
Leach Date.....: 04/11/11 **Prep Date.....:** 04/12/11 **Analysis Date..:** 04/13/11
Leach Batch #..: P110114 **Prep Batch #...:** 1102051
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-Trichlorophenol	ND	0.020	mg/L	SW846 8270C
2,4,6-Trichlorophenol	ND	0.020	mg/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(27 - 110)
2-Fluorobiphenyl	67	(20 - 110)
Terphenyl-d14	89	(44 - 110)
Phenol-d5	53	(10 - 110)
2-Fluorophenol	58	(10 - 110)
2,4,6-Tribromophenol	75	(28 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A1D080402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1D110000-343 **Prep Batch #...:** 1103021						
Leach Date.....: 04/11/11 **Leach Batch #..:** P110114						
Mercury	ND	0.0020	mg/L	SW846 7470A	04/13-04/14/11	MGVQP1AK
		Dilution Factor: 1				
Arsenic	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGVQP1AC
		Dilution Factor: 1				
Barium	**0.0038 B**	**10.0**	**mg/L**	**SW846 6010B**	**04/13-04/14/11**	**MGVQP1AD**
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	04/13-04/14/11	MGVQP1AE
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGVQP1AF
		Dilution Factor: 1				
Lead	**0.0020 B**	**0.50**	**mg/L**	**SW846 6010B**	**04/13-04/14/11**	**MGVQP1AG**
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	04/13-04/14/11	MGVQP1AH
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGVQP1AJ
		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 #...: A1D080402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1D130000-021 **Prep Batch #...:** 1103021						
Mercury	ND	0.0020	mg/L	SW846 7470A	04/13-04/14/11	MGXGT1AJ
		Dilution Factor: 1				
Arsenic	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGXGT1AA
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	04/13-04/14/11	MGXGT1AC
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	04/13-04/14/11	MGXGT1AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGXGT1AE
		Dilution Factor: 1				
Lead	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGXGT1AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	04/13-04/14/11	MGXGT1AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	04/13-04/14/11	MGXGT1AH
		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 #...: A1D080402 **Work Order #...:** MG5E31AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D180000-117
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1108117
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Vinyl chloride	**89**	**(53 - 127)**	**SW846 8260B**
1,1-Dichloroethylene	**102**	**(78 - 131)**	**SW846 8260B**
Chloroform	**96**	**(79 - 117)**	**SW846 8260B**
1,2-Dichloroethane	**92**	**(71 - 127)**	**SW846 8260B**
2-Butanone (MEK)	**88**	**(60 - 126)**	**SW846 8260B**
Carbon tetrachloride	**105**	**(66 - 128)**	**SW846 8260B**
Trichloroethylene	**94**	**(76 - 117)**	**SW846 8260B**
Benzene	**95**	**(83 - 112)**	**SW846 8260B**
Tetrachloroethylene	**95**	**(79 - 114)**	**SW846 8260B**
Chlorobenzene	**92**	**(85 - 110)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	88	(75 - 121)
Toluene-d8	87	(74 - 115)
4-Bromofluorobenzene	101	(66 - 117)
1,2-Dichloroethane-d4	87	(63 - 129)

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 #...: A1D080402 **Work Order #...:** MG2VA1AA **Matrix.....:** SOLID
LCS Lot-Sample#: A1D140000-384
Prep Date.....: 04/14/11 **Analysis Date..:** 04/14/11
Prep Batch #...: 1104384
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**93**	**(84 - 120)**	**SW846 8260B**
2-Butanone (MEK)	**104**	**(49 - 120)**	**SW846 8260B**
Carbon tetrachloride	**69**	**(54 - 122)**	**SW846 8260B**
Chlorobenzene	**94**	**(86 - 111)**	**SW846 8260B**
Chloroform	**89**	**(87 - 123)**	**SW846 8260B**
1,2-Dichloroethane	**96**	**(81 - 114)**	**SW846 8260B**
1,1-Dichloroethylene	**102**	**(71 - 133)**	**SW846 8260B**
Tetrachloroethylene	**98**	**(79 - 134)**	**SW846 8260B**
Trichloroethylene	**94**	**(78 - 130)**	**SW846 8260B**
Vinyl chloride	**79**	**(56 - 111)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(84 - 128)
1,2-Dichloroethane-d4	97	(80 - 121)
Toluene-d8	100	(90 - 115)
4-Bromofluorobenzene	92	(70 - 124)

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 #...: A1D080402 **Work Order #...:** MGV031AC **Matrix.....:** WATER
LCS Lot-Sample#: A1D120000-051
Prep Date.....: 04/12/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1102051
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
o-Cresol	**67**	**(23 - 110)**	**SW846 8270C**
m-Cresol & p-Cresol	**67**	**(28 - 110)**	**SW846 8270C**
1,4-Dichlorobenzene	**56**	**(13 - 110)**	**SW846 8270C**
2,4-Dinitrotoluene	**79**	**(45 - 119)**	**SW846 8270C**
Hexachlorobenzene	**74**	**(46 - 112)**	**SW846 8270C**
Hexachlorobutadiene	**58**	**(10 - 110)**	**SW846 8270C**
Hexachloroethane	**56**	**(10 - 110)**	**SW846 8270C**
Nitrobenzene	**62**	**(29 - 118)**	**SW846 8270C**
Pentachlorophenol	**67**	**(10 - 116)**	**SW846 8270C**
Pyridine	**43**	**(15 - 110)**	**SW846 8270C**
2,4,5-Trichloro-phenol	**74**	**(36 - 110)**	**SW846 8270C**
2,4,6-Trichloro-phenol	**72**	**(32 - 110)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(27 - 110)
2-Fluorobiphenyl	69	(20 - 110)
Terphenyl-d14	87	(44 - 110)
Phenol-d5	64	(10 - 110)
2-Fluorophenol	63	(10 - 110)
2,4,6-Tribromophenol	82	(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 #...: A1D080402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A1D130000-021 **Prep Batch #...:** 1103021					
Mercury	96	(50 - 150)	SW846 7470A	04/13-04/14/11	MGXGT1AT
		Dilution Factor: 1			
Arsenic	94	(50 - 150)	SW846 6010B	04/13-04/14/11	MGXGT1AK
		Dilution Factor: 1			
Barium	105	(50 - 150)	SW846 6010B	04/13-04/14/11	MGXGT1AL
		Dilution Factor: 1			
Cadmium	101	(50 - 150)	SW846 6010B	04/13-04/14/11	MGXGT1AM
		Dilution Factor: 1			
Chromium	96	(50 - 150)	SW846 6010B	04/13-04/14/11	MGXGT1AN
		Dilution Factor: 1			
Lead	103	(50 - 150)	SW846 6010B	04/13-04/14/11	MGXGT1AP
		Dilution Factor: 1			
Selenium	105	(50 - 150)	SW846 6010B	04/13-04/14/11	MGXGT1AQ
		Dilution Factor: 1			
Silver	96	(50 - 150)	SW846 6010B	04/13-04/14/11	MGXGT1AR
		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 #...: A1D080402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)		Work Order #: MGVT51AA	LCS Lot-Sample#: A1D110000-379		
	100	(97 - 103)	SW846 9040B	04/08/11	1101379
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1D080402 **Work Order #...:** MGR2R1AE-MS **Matrix.....:** WATER
MS Lot-Sample #: A1D080641-003 MGR2R1AF-MSD
Date Sampled...: 04/07/11 10:05 **Date Received..:** 04/08/11
Prep Date.....: 04/15/11 **Analysis Date..:** 04/15/11
Prep Batch #...: 1108117
Dilution Factor: 16.67

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethylene	**94**	**(74 - 135)**			**SW846 8260B**
	94	**(74 - 135)**	**0.14**	**(0-30)**	**SW846 8260B**
Vinyl chloride	**84**	**(49 - 130)**			**SW846 8260B**
	85	**(49 - 130)**	**1.5**	**(0-30)**	**SW846 8260B**
Chloroform	**92**	**(76 - 118)**			**SW846 8260B**
	99	**(76 - 118)**	**7.1**	**(0-30)**	**SW846 8260B**
1,2-Dichloroethane	**90**	**(68 - 129)**			**SW846 8260B**
	98	**(68 - 129)**	**8.7**	**(0-30)**	**SW846 8260B**
2-Butanone (MEK)	**93**	**(54 - 129)**			**SW846 8260B**
	92	**(54 - 129)**	**0.33**	**(0-30)**	**SW846 8260B**
Carbon tetrachloride	**93**	**(59 - 129)**			**SW846 8260B**
	94	**(59 - 129)**	**1.1**	**(0-30)**	**SW846 8260B**
Trichloroethylene	**85**	**(66 - 120)**			**SW846 8260B**
	90	**(66 - 120)**	**5.4**	**(0-30)**	**SW846 8260B**
Benzene	**87**	**(72 - 121)**			**SW846 8260B**
	94	**(72 - 121)**	**5.7**	**(0-30)**	**SW846 8260B**
Tetrachloroethylene	**82**	**(70 - 117)**			**SW846 8260B**
	83	**(70 - 117)**	**1.3**	**(0-30)**	**SW846 8260B**
Chlorobenzene	**85**	**(80 - 110)**			**SW846 8260B**
	90	**(80 - 110)**	**5.4**	**(0-30)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	89	(75 - 121)
	89	(75 - 121)
Toluene-d8	85	(74 - 115)
	85	(74 - 115)
4-Bromofluorobenzene	105	(66 - 117)
	103	(66 - 117)
1,2-Dichloroethane-d4	88	(63 - 129)
	88	(63 - 129)

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 Volatiles

Client Lot #...: A1D080402 **Work Order #...:** MGMAT1AR-MS **Matrix.....:** SOLID
MS Lot-Sample #: A1D060541-001 MGMAT1AT-MSD
Date Sampled...: 04/04/11 04:00 **Date Received..:** 04/06/11
Leach Date.....: 04/11/11 **Prep Date.....:** 04/14/11 **Analysis Date..:** 04/15/11
Leach Batch #..: P110102 **Prep Batch #...:** 1104384
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**93**	**(85 - 119)**			**SW846 8260B**
	90	**(85 - 119)**	**3.5**	**(0-30)**	**SW846 8260B**
2-Butanone (MEK)	**96**	**(49 - 117)**			**SW846 8260B**
	94	**(49 - 117)**	**2.9**	**(0-30)**	**SW846 8260B**
Carbon tetrachloride	**73**	**(60 - 110)**			**SW846 8260B**
	77	**(60 - 110)**	**5.3**	**(0-30)**	**SW846 8260B**
Chlorobenzene	**92**	**(85 - 113)**			**SW846 8260B**
	93	**(85 - 113)**	**0.86**	**(0-30)**	**SW846 8260B**
Chloroform	**90**	**(86 - 124)**			**SW846 8260B**
	88	**(86 - 124)**	**2.7**	**(0-30)**	**SW846 8260B**
1,2-Dichloroethane	**95**	**(80 - 115)**			**SW846 8260B**
	92	**(80 - 115)**	**2.8**	**(0-30)**	**SW846 8260B**
1,1-Dichloroethylene	**106**	**(67 - 139)**			**SW846 8260B**
	103	**(67 - 139)**	**3.4**	**(0-30)**	**SW846 8260B**
Tetrachloroethylene	**104**	**(74 - 138)**			**SW846 8260B**
	103	**(74 - 138)**	**0.20**	**(0-30)**	**SW846 8260B**
Trichloroethylene	**99**	**(75 - 134)**			**SW846 8260B**
	99	**(75 - 134)**	**0.34**	**(0-30)**	**SW846 8260B**
Vinyl chloride	**80**	**(51 - 118)**			**SW846 8260B**
	79	**(51 - 118)**	**0.97**	**(0-30)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(86 - 125)
	95	(86 - 125)
1,2-Dichloroethane-d4	97	(80 - 121)
	91	(80 - 121)
Toluene-d8	96	(90 - 115)
	99	(90 - 115)
4-Bromofluorobenzene	90	(70 - 124)
	89	(70 - 124)

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 Semivolatiles

Lot-Sample #...: A1D080402 **Work Order #...:** MGML11AQ **Matrix.....:** SOLID
MS Lot-Sample #: A1D060587-019
Date Sampled...: 04/05/11 09:25 **Date Received..:** 04/06/11
Prep Date.....: 04/12/11 **Analysis Date..:** 04/13/11
Prep Batch #...: 1102050
Dilution Factor: 1 **Percnt Moisture:** 100

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
o-Cresol	**63**	**(33 - 115)**	**SW846 8270C**
2-Methylphenol	**63**	**(33 - 115)**	**SW846 8270C**
m-Cresol & p-Cresol	**63**	**(46 - 109)**	**SW846 8270C**
1,4-Dichlorobenzene	**52**	**(18 - 110)**	**SW846 8270C**
2,4-Dinitrotoluene	**62**	**(31 - 131)**	**SW846 8270C**
Hexachlorobenzene	**64**	**(36 - 132)**	**SW846 8270C**
Hexachlorobutadiene	**50**	**(18 - 116)**	**SW846 8270C**
Hexachloroethane	**50**	**(18 - 110)**	**SW846 8270C**
Nitrobenzene	**56**	**(19 - 211)**	**SW846 8270C**
Pentachlorophenol	**78**	**(10 - 140)**	**SW846 8270C**
Pyridine	**45**	**(10 - 148)**	**SW846 8270C**
2,4,5-Trichloro-phenol	**60**	**(24 - 143)**	**SW846 8270C**
2,4,6-Trichloro-phenol	**64**	**(36 - 135)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(29 - 111)
2-Fluorobiphenyl	59	(22 - 110)
Terphenyl-d14	76	(40 - 119)
Phenol-d5	52	(10 - 110)
2-Fluorophenol	54	(10 - 110)
2,4,6-Tribromophenol	70	(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 #...: A1D080402 **Matrix.....:** WG
Date Sampled...: 04/07/11 15:45 **Date Received..:** 04/08/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1D080402-003 **Prep Batch #...:** 1103021							
Leach Date.....: 04/11/11 **Leach Batch #..:** P110114							
Mercury	104	(50 - 150)			SW846 7470A	04/13-04/14/11	MGPX31CA
	89	(50 - 150)	15	(0-20)	SW846 7470A	04/13-04/14/11	MGPX31CC
		Dilution Factor: 1					
Arsenic	105	(50 - 150)			SW846 6010B	04/13-04/14/11	MGPX31AU
	99	(50 - 150)	5.8	(0-20)	SW846 6010B	04/13-04/14/11	MGPX31AV
		Dilution Factor: 5					
Barium	108	(50 - 150)			SW846 6010B	04/13-04/14/11	MGPX31AW
	103	(50 - 150)	5.5	(0-20)	SW846 6010B	04/13-04/14/11	MGPX31AX
		Dilution Factor: 5					
Cadmium	115	(50 - 150)			SW846 6010B	04/13-04/14/11	MGPX31A0
	109	(50 - 150)	5.7	(0-20)	SW846 6010B	04/13-04/14/11	MGPX31A1
		Dilution Factor: 5					
Chromium	108	(50 - 150)			SW846 6010B	04/13-04/14/11	MGPX31A2
	102	(50 - 150)	5.9	(0-20)	SW846 6010B	04/13-04/14/11	MGPX31A3
		Dilution Factor: 5					
Lead	117	(50 - 150)			SW846 6010B	04/13-04/14/11	MGPX31A4
	111	(50 - 150)	5.4	(0-20)	SW846 6010B	04/13-04/14/11	MGPX31A5
		Dilution Factor: 5					
Selenium	114	(50 - 150)			SW846 6010B	04/13-04/14/11	MGPX31A6
	107	(50 - 150)	5.7	(0-20)	SW846 6010B	04/13-04/14/11	MGPX31A7
		Dilution Factor: 5					
Silver	103	(50 - 150)			SW846 6010B	04/13-04/14/11	MGPX31A8
	97	(50 - 150)	6.0	(0-20)	SW846 6010B	04/13-04/14/11	MGPX31A9
		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 #...: A1D080402 **Work Order #...:** MGQ68-SMP MGQ68-DUP **Matrix.....:** WATER

Date Sampled...: 04/07/11 08:46 **Date Received..:** 04/08/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)						SD Lot-Sample #: A1D080551-004		
	7.1	7.1	No Units	0.28	(0-20)	SW846 9040B	04/08/11	1101379

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A1D080402 **Work Order #...:** MGQ7W-SMP MGQ7W-DUP **Matrix.....:** WATER

Date Sampled...: 04/07/11 12:01 **Date Received..:** 04/08/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)						SD Lot-Sample #: A1D080551-008		
	6.6	6.6	No Units	0.0	(0-20)	SW846 9040B	04/08/11	1101379

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A1D080402 **Work Order #...:** MGQ75-SMP MGQ75-DUP **Matrix.....:** WATER

Date Sampled...: 04/06/11 17:15 **Date Received..:** 04/08/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)						SD Lot-Sample #: A1D080551-010		
	6.6	6.6	No Units	0.0	(0-20)	SW846 9040B	04/08/11	1101379

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A1D080402 **Work Order #...:** MGPXV-SMP MGPXV-DUP **Matrix.....:** WG

Date Sampled...: 04/07/11 15:30 **Date Received..:** 04/08/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Flashpoint						SD Lot-Sample #: A1D080402-002		
	>180	>180	deg F	0.0	(0-20)	SW846 1010	04/21/11	1111199
		Dilution Factor: 1						
pH (liquid)						SD Lot-Sample #: A1D080402-002		
	9.5	9.4	No Units	1.6	(0-20)	SW846 9040B	04/08/11	1101379
		Dilution Factor: 1						

Chain of Custody Record

TestAmerica Laboratory location: North Canton, Ohio

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 Loeb
Address: 1800 CARILLON BLVD	Telephone: 5138257500	Telephone: Same	Telephone: 330 497 9396
City/State/Zip: Cincinnati Ohio	Email: ecorbin@eqm.com		
Phone: 5138257500			
Project Name: RVAAP	Method of Shipment/Carrier: Lab Pick up		
Project Number: 30240.0006	Shipping/Tracking No: N/A		
PO# 16726 IDW			

COC No: 019331

1 of 1 COCs

Analysis Turnaround Time (in BUS days)

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:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite (C) Grab (G)	TCLP SVOCs, VOCs	Metals, Mercury	Reactive Cyanide/Sulfide	pH 1 grab/liquid	VOC	Sample Specific Notes / Special Instructions:
FWG-IDW-Trip	4-7-11	0800		X											N	G					X	
FWG-IDW-MWDSCON April 2011	↓	1530		X									5		N	C	X	X	X	X		
FWG-IDW-MWPurge April 2011	↓	1545		X									5		N	C	X	X	X	X		

ADD 4/7/11

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:	Date/Time:	Received by:	Company:	Date/Time:
S. Stinger		4-7-11	RC [signature]	TAL-NC	4/7/11 1700
RC [signature]	TAL-NC	4/7/11 - F022			
			Received in Laboratory by: [signature]	TA NC	4/8/11 0700

TAL 0018-1 (04/10)

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TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 410080402
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 4/8/11 Opened on 4/8/11
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # A566 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 2.4 °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#* 100110-HNO_3; *Sulfuric Acid Lot#* 110410-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)?

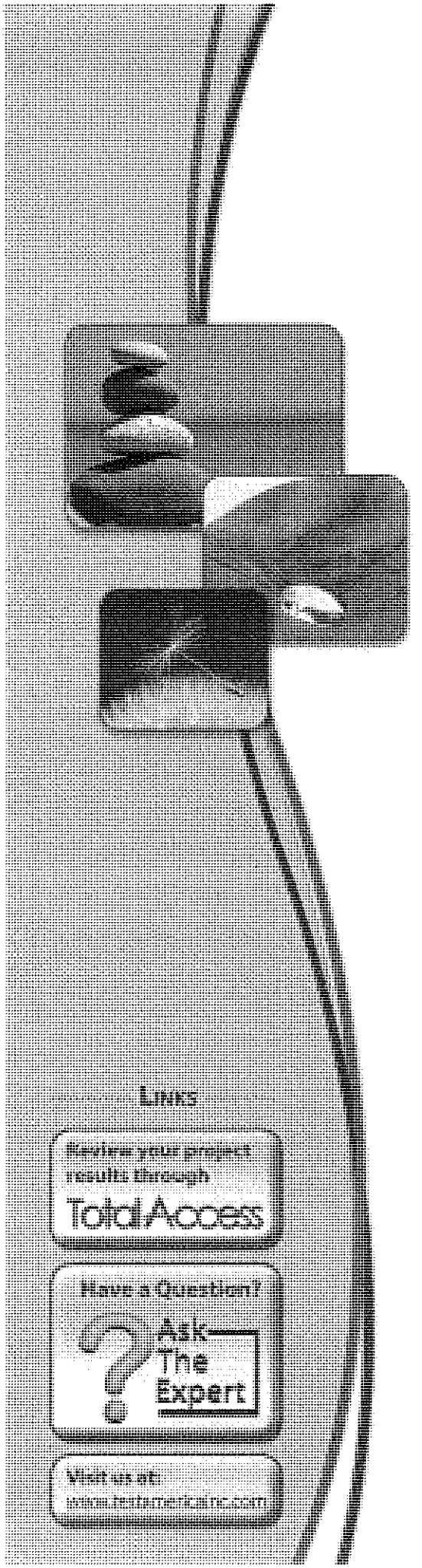
Client ID	pH	Date	Initials

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

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-3568-1
Client Project/Site: A1D080402

For:
TestAmerica Laboratories, Inc.
4101 Shuffel Street NW
North Canton, Ohio 44720

Attn: Mark J. Loeb

Sally J Hoffman

Authorized for release by:
04/18/2011 10:17:58 AM

Sally Hoffman
Project Manager II
sally.hoffman@testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC requirements for accredited parameters, exceptions are noted in this report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Job ID: 480-3568-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-3568-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

General Chemistry
No analytical or quality issues were noted.

Detection Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: A1D080402

TestAmerica Job ID: 480-3568-1

Client Sample ID: FWG-IDW-MWDECONAPRIL2011 — **Lab Sample ID: 480-3568-1**

No Detections.

Client Sample ID: FWG-IDW-MWPURGEAPRIL2011 — **Lab Sample ID: 480-3568-2**

No Detections.

5

Client Sample ID: FWG-IDW-MWDECONAPRIL2011 — **Lab Sample ID: 480-3568-1**

Date Collected: 04/07/11 15:30 — **Matrix: Water**

Date Received: 04/09/11 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10.0		mg/L		04/14/11 19:26	04/14/11 18:45	1
Sulfide, Reactive	ND		10.0		mg/L		04/14/11 19:32	04/14/11 19:00	1

Client Sample ID: FWG-IDW-MWPURGEAPRIL2011 — **Lab Sample ID: 480-3568-2**

Date Collected: 04/07/11 15:45 — **Matrix: Water**

Date Received: 04/09/11 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10.0		mg/L		04/14/11 19:26	04/14/11 18:45	1
Sulfide, Reactive	ND		10.0		mg/L		04/14/11 19:32	04/14/11 19:00	1

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 480-12142/1-A
Matrix: Water
Analysis Batch: 12143

Client Sample ID: MB 480-12142/1-A
Prep Type: Total/NA
Prep Batch: 12142

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10.0		mg/L		04/14/11 19:26	04/14/11 18:45	1

Lab Sample ID: LCS 480-12142/2-A
Matrix: Water
Analysis Batch: 12143

Client Sample ID: LCS 480-12142/2-A
Prep Type: Total/NA
Prep Batch: 12142

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Cyanide, Reactive	1000	182.8		mg/L		18	10 - 100

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 480-12144/1-A
Matrix: Water
Analysis Batch: 12146

Client Sample ID: MB 480-12144/1-A
Prep Type: Total/NA
Prep Batch: 12144

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		10.0		mg/L		04/14/11 19:32	04/14/11 19:00	1

Lab Sample ID: LCS 480-12144/2-A
Matrix: Water
Analysis Batch: 12146

Client Sample ID: LCS 480-12144/2-A
Prep Type: Total/NA
Prep Batch: 12144

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Sulfide, Reactive	1000	300.8		mg/L		30	10 - 100

QC Association Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: A1D080402

TestAmerica Job ID: 480-3568-1

General Chemistry

Prep Batch: 12142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-12142/1-A	MB 480-12142/1-A	Total/NA	Water	7.3.3	
LCS 480-12142/2-A	LCS 480-12142/2-A	Total/NA	Water	7.3.3	
480-3568-1	FWG-IDW-MWDECONAPRIL2011	Total/NA	Water	7.3.3	
480-3568-2	FWG-IDW-MWPURGEAPRIL2011	Total/NA	Water	7.3.3	

Analysis Batch: 12143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-12142/1-A	MB 480-12142/1-A	Total/NA	Water	9012	12142
LCS 480-12142/2-A	LCS 480-12142/2-A	Total/NA	Water	9012	12142
480-3568-1	FWG-IDW-MWDECONAPRIL2011	Total/NA	Water	9012	12142
480-3568-2	FWG-IDW-MWPURGEAPRIL2011	Total/NA	Water	9012	12142

Prep Batch: 12144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-12144/1-A	MB 480-12144/1-A	Total/NA	Water	7.3.4	
LCS 480-12144/2-A	LCS 480-12144/2-A	Total/NA	Water	7.3.4	
480-3568-1	FWG-IDW-MWDECONAPRIL2011	Total/NA	Water	7.3.4	
480-3568-2	FWG-IDW-MWPURGEAPRIL2011	Total/NA	Water	7.3.4	

Analysis Batch: 12146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-12144/1-A	MB 480-12144/1-A	Total/NA	Water	9034	12144
LCS 480-12144/2-A	LCS 480-12144/2-A	Total/NA	Water	9034	12144
480-3568-1	FWG-IDW-MWDECONAPRIL2011	Total/NA	Water	9034	12144
480-3568-2	FWG-IDW-MWPURGEAPRIL2011	Total/NA	Water	9034	12144

Lab Chronicle

Client: TestAmerica Laboratories, Inc.
Project/Site: A1D080402

TestAmerica Job ID: 480-3568-1

Client Sample ID: FWG-IDW-MWDECONAPRIL2011

Lab Sample ID: 480-3568-1

Date Collected: 04/07/11 15:30
Matrix: Water
Date Received: 04/09/11 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	9012		1	12143	04/14/11 18:45	RL	TestAmerica Buffalo
Total/NA	Prep	7.3.3			12142	04/14/11 19:26	RL	TestAmerica Buffalo
Total/NA	Analysis	9034		1	12146	04/14/11 19:00	RL	TestAmerica Buffalo
Total/NA	Prep	7.3.4			12144	04/14/11 19:32	RL	TestAmerica Buffalo

Client Sample ID: FWG-IDW-MWPURGEAPRIL2011

Lab Sample ID: 480-3568-2

Date Collected: 04/07/11 15:45
Matrix: Water
Date Received: 04/09/11 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	9012		1	12143	04/14/11 18:45	RL	TestAmerica Buffalo
Total/NA	Prep	7.3.3			12142	04/14/11 19:26	RL	TestAmerica Buffalo
Total/NA	Analysis	9034		1	12146	04/14/11 19:00	RL	TestAmerica Buffalo
Total/NA	Prep	7.3.4			12144	04/14/11 19:32	RL	TestAmerica Buffalo

Certification Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: A1D080402

TestAmerica Job ID: 480-3568-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo		USDA		P330-08-00242
TestAmerica Buffalo	Arkansas	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	Georgia EPD	4	N/A
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	Kentucky UST	4	30
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	West Virginia	West Virginia DEP	3	252
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: A1D080402

TestAmerica Job ID: 480-3568-1

Method	Method Description	Protocol	Laboratory
9012	Cyanide, Reactive	SW846	TAL BUF
9034	Sulfide, Reactive	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: A1D080402

TestAmerica Job ID: 480-3568-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-3568-1	FWG-IDW-MWDECONAPRIL2011	Water	04/07/11 15:30	04/09/11 09:15
480-3568-2	FWG-IDW-MWPURGEAPRIL2011	Water	04/07/11 15:45	04/09/11 09:15

Laboratory: TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION

Lab Request: SR126388

Report Package: Report
Need Analytical Report 2011-04-22

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A1D080402-2	MGPXV	FWG-IDW-MWDECONAPRIL2011	2011-04-07 15:30	WATER, 7.3.3, Reactive Cyanide (Buffalo)
A1D080402-2	MGPXV	FWG-IDW-MWDECONAPRIL2011	2011-04-07 15:30	WATER, 7.3.4, Reactive Sulfide (Buffalo)
A1D080402-3	MGPX3	FWG-IDW-MWPURGEAPRIL2011	2011-04-07 15:45	WATER, 7.3.3, Reactive Cyanide (Buffalo)
A1D080402-3	MGPX3	FWG-IDW-MWPURGEAPRIL2011	2011-04-07 15:45	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: 4/8/11 1000

Relinquished by: _____ Date/Time: _____

Received for lab by: _____ Date/Time: 4/9/11 0905

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

Login Sample Receipt Checklist

Client: TestAmerica Laboratories, Inc.

Job Number: 480-3568-1

Login Number: 3568

List Number: 1

Creator: Rabb, Mike

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	False	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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 TABLES

Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

September 8, 2011

RE: RAVENNA ARMY AMMUNITION PLANT
PORTAGE/TRUMBULL COUNTIES,
FINAL, FWGWMP, APRIL 2011
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 9253

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA), has received and reviewed, the "Final, Facility Wide Groundwater Monitoring Program (FWGWMP) April 2011 Sampling Event" document. The document was received at Ohio EPA, Northeast District Office (NEDO), Division of Environmental Response and Revitalization (DERR) on September 8, 2011. The document was prepared for the U.S. Army Corps of Engineers (USACE) – Louisville District, by Environmental Quality Management, Inc. (EQM), under contract number: W912QR-04-D-0036.

The document is approved. If you have any questions, please call me at (330) 963-1207.

Sincerely,

VD:cln

Victoria Deppisch
Hydrogeologist/Project Coordinator
Division of Environmental Response and Revitalization

cc: Eileen Mohr, Ohio EPA, DERR, NEDO

ec: Katie Tait, OHARNG RTLS
Maj. Ed Meade, OHARNG RTLS
Glen Beckham, USACE Louisville
Mark Nichter, USACE Louisville
Mark Krivansky, AEC
John Miller, EQM
Conni McCambridge, Ohio EPA, DDAGW, NEDO
Mike Eberle, Ohio EPA, DERR, NEDO
Todd Fisher, Ohio EPA, DERR, NEDO

Ohio | Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

August 24, 2011

RE: RAVENNA ARMY AMMUNITION PLANT
PORTAGE/TRUMBULL COUNTIES
FWGWMP, DRAFT, APRIL 2011
SAMPLING EVENT REPORT
FACILITY ID#267000859036

CERTIFIED MAIL

Mr. Mark Patterson
Environmental Program Manager
Ravenna Army Ammunition Plant
Building 1037
8451 State Route 5
Ravenna, OH 44266-9297

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Draft, Facility-Wide Ground Water Monitoring Program (FWGWMP) April 2011 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 received at Ohio EPA, Northeast District Office (NEDO), Division of Environmental Response and Revitalization (DERR), on August 1, 2011, and is dated July 29, 2011. 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. A revised 2010-2011 monitoring well sampling list was submitted to Ohio EPA in early 2010. The list of wells to be sampled, as well as scheduling issues, were discussed and agreed upon with Ohio EPA in a telephone conference on May 26, 2010. This discussion was verified in the May 26, 2010 email from Mr. Mark Nichter, U.S. Army Corps of Engineers (April 2011 Report, Appendix A).

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087-1924

330 | 963 1200
330 | 487 0769 (fax)
www.epa.ohio.gov

April 2011 Ground Water Sampling Event

Quarterly ground water elevation data were collected from the selected group of 31 monitoring wells during a four-day sampling event on April 4 through 7, 2011 (Section 2.2, page 8). This sampling event included background wells (BKG series), along with wells from Atlas Scrap yard,(ASY), Building 12 (B12), C Block Quarry (CBL), and Load Lines 1 through 4 (LL1 through LL4). The six Sharon Conglomerate wells (SCF series), along with the five RCRA wells (i.e. Ramsdell Quarry RQL series and Open Detonation Area #2 DET series) wells were also included in the sampling event. Potentiometric surface maps were not generated from the April 2011 quarterly data.

Ohio EPA noted that only seven pieces of data out of 10,930 pieces were rejected, indicating the QA/QC methods are working.

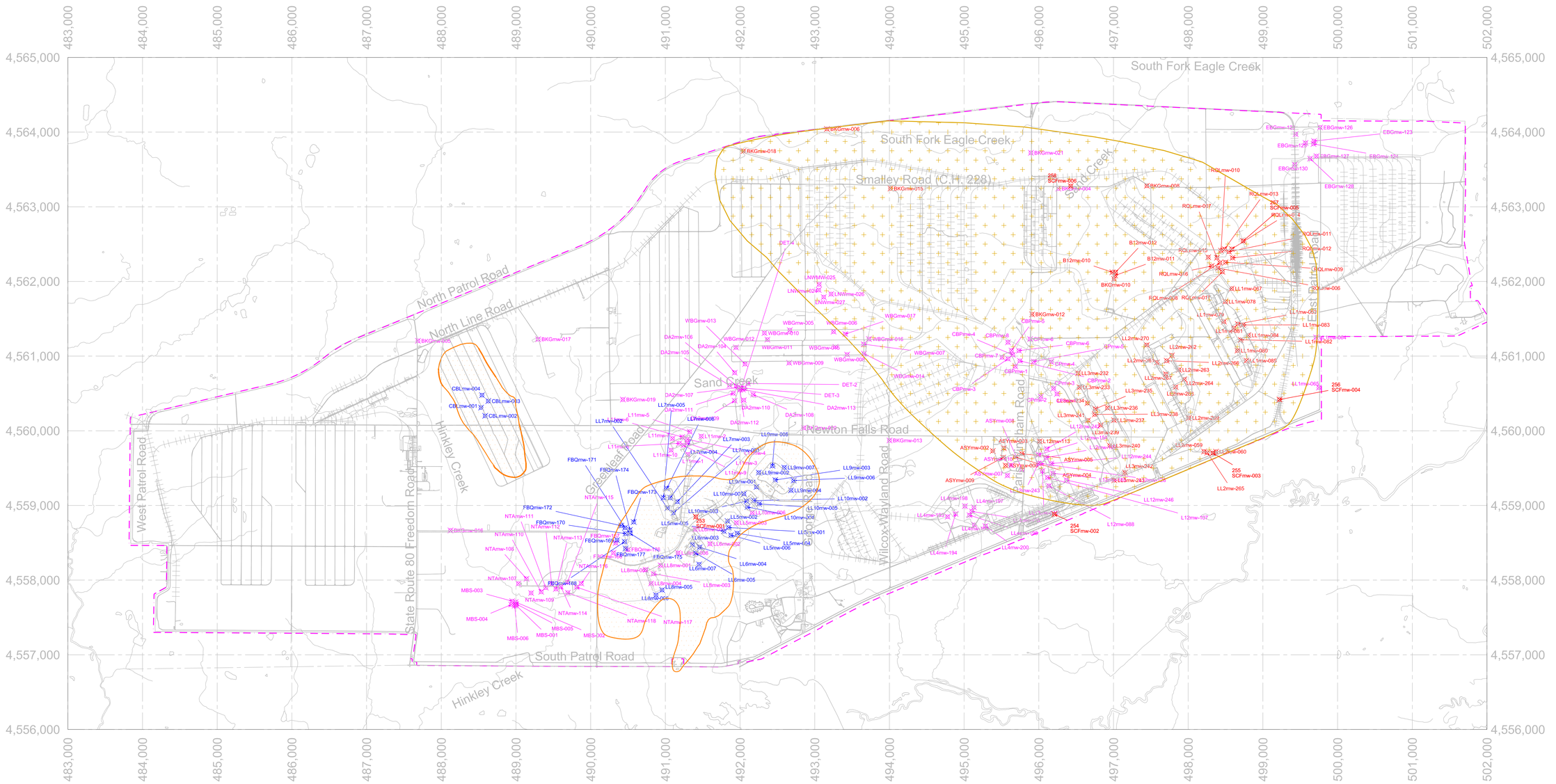
Ohio EPA does not have any comments. Please forward the final replacement pages, binder covers, etc. If you have any questions, please call me at (330) 963-1207.

Sincerely,

Vicki Deppisch
Project Coordinator
Division of Environmental Response and Revitalization

cc: Eileen Mohr, Ohio EPA, DERR, NEDO

ec: Katie Tait, OHARNG RTLS
Maj. Ed Meade, OHARNG RTLS
Glen Beckham, USACE Louisville
Mark Nichter, USACE Louisville
Mark Krivansky, AEC
Conni McCambridge, Ohio EPA, DERR, NEDO
John Miller, EQM
Justin Burke, Ohio EPA, DERR, CO
Rod Beals, Ohio EPA, DERR, NEDO
Mike Eberle, Ohio EPA, DERR, NEDO
Todd Fisher, Ohio EPA, DERR, NEDO



LEGEND

- UNCONSOLIDATED WELL
- HOMEWOOD MEMBER WELL
- SHARON MEMBER WELL
- PROPERTY LINE
- HOMEWOOD MEMBER
- SHARON MEMBER

NOTE: THE UNCONSOLIDATED AQUIFER OVERLAYS THE HOMEWOOD AND SHARON MEMBERS, EXCEPT AS INDICATED ON PLATE 2

0 50 1000

SCALE (METERS)

N

COORDINATE SYSTEM UTM NAD 83 ZONE 17

REV	DESCRIPTION	DATE	APPROVED
1	ADDED NOTE	12-04-08	BT
2	ADDED SFCmw-001 THRU 006	9-10-09	JM

REVISIONS

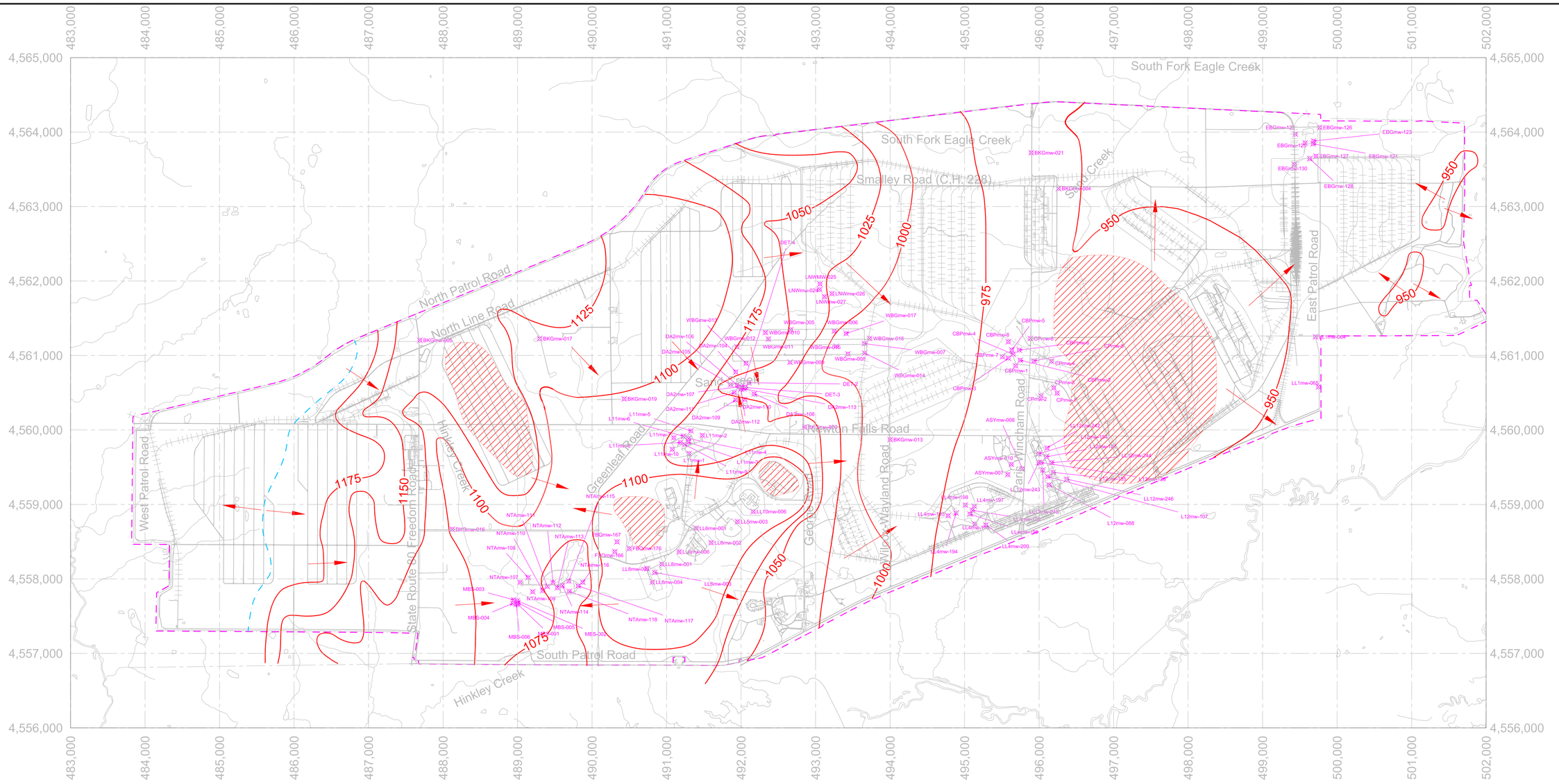
DRAWN	D.TOMO	10/22/07
CHECKED		
APPROVED		

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	952.97
BKGmw-005	1137.10
BKGmw-013	975.86
BKGmw-016	1093.13
BKGmw-017	1114.02
BKGmw-019	1089.12
BKGmw-020	1054.94
BKGmw-021	955.06
CBPmw-001	960.74
CBPmw-002	958.27
CBPmw-003	959.38
CBPmw-004	958.38
CBPmw-005	957.77
CBPmw-006	957.84
CBPmw-007	957.89
CBPmw-008	955.16
CPmw-001	967.89
CPmw-002	967.73
CPmw-003	970.54
CPmw-004	968.35
CPmw-005	960.24
CPmw-006	956.27

Well ID	Elevation (ft, amsl)
DA2mw-104	1051.17
DA2mw-105	1041.91
DA2mw-106	1036.60
DA2mw-107	1033.60
DA2mw-108	1025.69
DA2mw-109	1054.40
DA2mw-110	1051.90
DA2mw-111	1037.47
DA2mw-112	1029.69
DA2mw-113	1028.42
DETmw-001B	1040.44
DETmw-002	1028.19
DETmw-003	1026.98
DETmw-004	1026.99
EBGmw-123	937.14
EBGmw-124	937.09
EBGmw-125	936.99
EBGmw-126	937.17
EBGmw-127	937.01
EBGmw-128	936.79
EBGmw-129	936.64
EBGmw-130	936.55

Well ID	Elevation (ft, amsl)
FBQmw-166	1103.47
FBQmw-167	1109.58
FBQmw-176	1120.49
L L11mw-002	1074.51
LL10mw-006	1108.88
LL11mw-001	1086.82
LL11mw-003	1083.89
LL11mw-004	1083.40
LL11mw-005	1068.26
LL11mw-006	1078.27
LL11mw-007	1065.86
LL11mw-008	1082.17
LL11mw-009	1085.20
LL11mw-010	1075.42
LL12mw-088	972.98
LL12mw-107	972.55
LL12mw-128	966.90
LL12mw-153	969.50
LL12mw-154	967.94
LL12mw-182	971.20
LL12mw-184	968.79
LL12mw-185	970.62

Well ID	Elevation (ft, amsl)
FBQmw-166	1103.47
LL12mw-187	967.35
LL12mw-188	972.28
LL12mw-242	968.57
LL12mw-243	970.26
LL12mw-244	967.60
LL12mw-245	970.87
LL12mw-246	966.14
LL1mw-064	931.15
LL1mw-065	929.41
LL4mw-193	974.67
LL4mw-194	972.24
LL4mw-195	970.08
LL4mw-196	970.00
LL4mw-197	970.03
LL4mw-198	972.04
LL4mw-199	968.54
LL4mw-200	968.88
LL5mw-003	1106.15
LL6mw-001	1107.37
LL6mw-002	1106.38
LL6mw-006	1107.95

Well ID	Elevation (ft, amsl)
LL8mw-001	1107.26
LL8mw-002	1102.99
LL8mw-003	1103.23
LL8mw-004	1101.36
LNWmw-024	1023.22
LNWmw-025	1023.17
LNWmw-026	1014.92
LNWmw-027	1017.16
MBS-001	1064.01
MBS-002	1064.41
MBS-003	1065.01
MBS-004	1064.37
MBS-005	1063.97
MBS-006	1063.90
NTAmw-107	1066.96
NTAmw-108	1067.23
NTAmw-109	1066.99
NTAmw-110	1067.37
NTAmw-111	1074.89
NTAmw-112	1068.41
NTAmw-113	1067.68
NTAmw-114	1071.02

Well ID	Elevation (ft, amsl)
NTAmw-115	1073.90
NTAmw-116	1086.19
NTAmw-117	1078.41
NTAmw-118	1071.06
WBGmw-005	1046.45
WBGmw-006	1004.47
WBGmw-007	981.740
WBGmw-008	991.870
WBGmw-009	1031.56
WBGmw-010	1060.42
WBGmw-011	1060.34
WBGmw-012	1053.26
WBGmw-013	1059.06
WBGmw-014	978.94
WBGmw-015	996.62
WBGmw-016	978.34
WBGmw-017	995.62

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

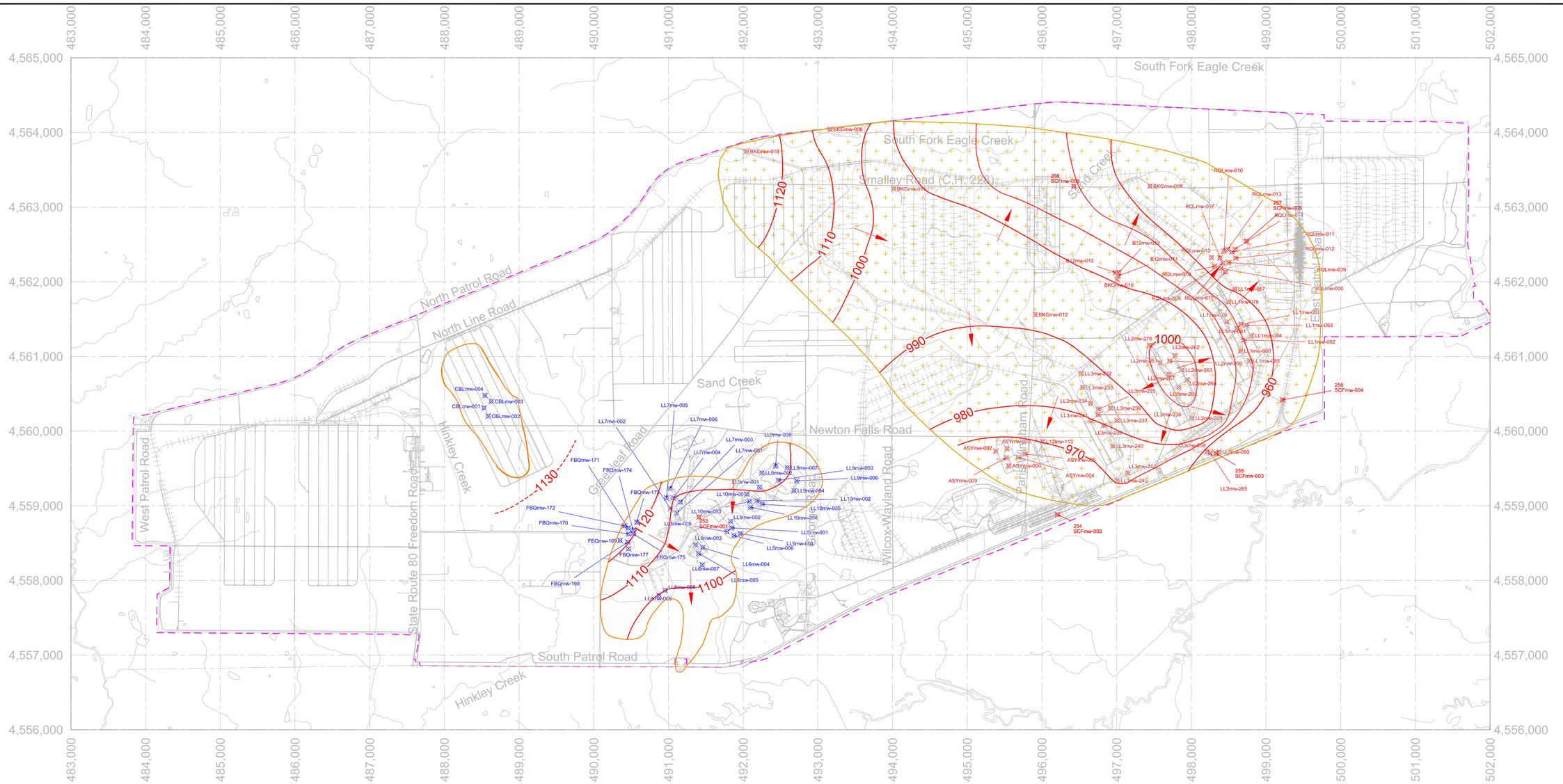
REVISIONS

DRAWN	D.TOMO	3-30-09
CHECKED	W.THOMPSON	3-30-09
APPROVED		

SCALE: NONE

POTENTIOMETRIC SURFACE OF UNCONSOLIDATED AQUIFER (OCT. 2010)

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
E	030240.0006	PLATE 2	1



HOMEWOOD MEMBER WELLS

Well ID	Elevation (ft, amsl)
CBLmw-001	1135.58
CBLmw-002	1135.13
CBLmw-003	1136.56
CBLmw-004	1136.69
FBQmw-168	1120.14
FBQmw-169	1112.24
FBQmw-170	1120.86
FBQmw-171	1121.02
FBQmw-172	1120.48
FBQmw-173	1120.24
FBQmw-174	1119.80
FBQmw-175	1120.06
FBQmw-177	1112.72
LL10mw-001	1106.71
LL10mw-002	1107.82
LL10mw-003	1108.56
LL10mw-004	1107.16
LL10mw-005	1108.14
LL5mw-001	1105.90
LL5mw-002	1105.87
LL5mw-004	1105.85
LL5mw-005	1105.90

Well ID	Elevation (ft, amsl)
LL5mw-006	1105.86
LL6mw-003	1107.22
LL6mw-004	1106.51
LL6mw-005	1106.82
LL6mw-007	1106.03
LL7mw-001	1106.98
LL7mw-002	1110.02
LL7mw-003	1107.14
LL7mw-004	1109.14
LL7mw-005	1111.78
LL7mw-006	1109.83
LL8mw-005	1099.78
LL8mw-006	1095.70
LL9mw-001	1117.34
LL9mw-002	1110.71
LL9mw-003	1120.31
LL9mw-004	1109.20
LL9mw-005	1112.52
LL9mw-006	1108.56
LL9mw-007	1108.43

SHARON MEMBER WELLS

Well ID	Elevation (ft, amsl)
ASYmw-001	967.09
ASYmw-002	968.91
ASYmw-003	967.31
ASYmw-004	967.55
ASYmw-005	969.30
ASYmw-006	967.38
ASYmw-009	968.17
B12mw-010	985.80
B12mw-011	984.71
B12mw-012	984.50
BKGmw-006	1005.27
BKGmw-008	952.71
BKGmw-010	985.44
BKGmw-012	987.09
BKGmw-015	989.82
BKGmw-018	1028.95
LL1mw-063	965.06
LL1mw-067	959.01
LL1mw-078	961.04
LL1mw-079	962.46
LL1mw-080	979.92
LL1mw-081	965.06

Well ID	Elevation (ft, amsl)
LL1mw-082	970.11
LL1mw-083	959.04
LL1mw-084	965.58
LL1mw-085	958.76
LL2mw-059	951.30
LL2mw-060	949.39
LL2mw-261	1003.40
LL2mw-262	1000.91
LL2mw-263	999.75
LL2mw-264	1000.79
LL2mw-265	949.37
LL2mw-266	1001.40
LL2mw-267	1002.60
LL2mw-268	1000.59
LL2mw-269	992.31
LL2mw-270	998.65
LL3mw-232	976.67
LL3mw-233	975.43
LL3mw-234	994.33
LL3mw-235	987.70
LL3mw-236	991.32
LL3mw-237	984.65

Well ID	Elevation (ft, amsl)
LL3mw-238	989.00
LL3mw-239	975.63
LL3mw-240	978.60
LL3mw-241	978.98
LL3mw-242	980.28
LL3mw-243	972.46
RQLmw-006	957.57
RQLmw-007	955.01
RQLmw-008	955.39
RQLmw-009	954.93
RQLmw-010	952.79
RQLmw-011	951.11
RQLmw-012	952.66
RQLmw-013	951.70
RQLmw-014	950.30
RQLmw-015	956.48
RQLmw-016	958.40
RQLmw-017	958.68

SHARON SHALE WELLS

Well ID	Elevation (ft, amsl)
LL12mw-113	970.85
LL12mw-183	968.22
LL12mw-186	969.47
LL12mw-189	968.43

*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 (OCT. 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.H. 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

1020 1010 1000 990 980 970 960 950

N

SHARON CONGLOMERATE WELLS

Well ID	Elevation (ft, amsl)
SCFmw-001	1029.43
SCFmw-002	963.50
SCFmw-003	948.53
SCFmw-004	942.22
SCFmw-005	947.32
SCFmw-006	946.95

0 500 1000

LEGEND

PROPERTY LINE

980 LINE OF EQUAL GROUNDWATER ELEVATION (ft,amsl)

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	12-06-10
CHECKED		
APPROVED		

SCALE: NONE

POTENTIOMETRIC SURFACE OF SHARON CONGLOMERATE (OCT.2010)

ORIGINAL SIZE	PROJECT NO.	DWG NO.	REV
B	030240.0006	PLATE 4	0