REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE *(DD-MM-YYYY)*	2. REPORT TYPE	3. DATES COVERED *(From - To)*
15 July 2011	Final	January 2011 through July 2011

4. TITLE AND SUBTITLE

Facility-Wide Groundwater Monitoring Program
Report on the January 2011 Sampling Event
Ravenna Army Ammunition Plant
Ravenna, Ohio

5a. CONTRACT NUMBER
W912QR-04-D-0036

5b. GRANT NUMBER
NA

5c. PROGRAM ELEMENT NUMBER
NA

6. AUTHOR(S)
Miller, John, M. - Environmental Quality Management, Inc.

5d. PROJECT NUMBER
NA

5e. TASK NUMBER
0006

5f. WORK UNIT NUMBER
NA

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Environmental Quality Management, Inc
1800 Carillon Boulevard
Cincinnati, Ohio 45240

8. PERFORMING ORGANIZATION REPORT NUMBER
NA

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

US Army Corps of Engineers
600 Dr. Martin Luther King Jr. Place
Louisville, KY 40202-2232

10. SPONSOR/MONITOR'S ACRONYM(S)
USACE

11. SPONSOR/MONITOR'S REPORT NUMBER(S)
NA

12. DISTRIBUTION/AVAILABILITY STATEMENT
No Limitations

13. SUPPLEMENTARY NOTES
None

14. ABSTRACT

This document presents a summary of the facility-wide groundwater monitoring conducted in January 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.

15. SUBJECT TERMS
Facility-wide, groundwater wells, monitoring, RVAAP, January 2011

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			John M. Miller
None	None	None	SAR	2299	19b. TELEPHONE NUMBER *(Include area code)* 513-825-7500

FINAL
FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

REPORT ON THE JANUARY 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
600 Martin Luther King Jr. Place
Louisville, Kentucky 40202

Prepared by

Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati Ohio 45240

July 15, 2011

FWGWMP January 2011 Final Sampling Event Report
Distribution List

Organization	Number of Printed Copies	Number of Electronic Copies
RVAAP Facility Manager	2	2
USACE Project Manager	2	3
EQM	1	1
USAEC Program Manager	0	1
Ohio EPA	1	2
OHARNG - RTLS/ENV	0	1
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.

TABLE OF CONTENTS

Section Page

VOLUME 1

Table of Contents i
List of General Acronyms iv
List of Area of Concern Acronyms v

SECTION 1 INTRODUCTION 1
1.1 Facility Description 1
1.2 Project Description 1
1.2.1 Historical Monitoring 1
1.2.2 Current Monitoring 5
1.3 Scope of Work for the January 2011 Sampling Event 5
1.4 Report Presentation 5
SECTION 2 PROJECT ACTIVITIES 7
2.1 Groundwater Level Monitoring 7
2.2 Groundwater Sampling 8
2.3 Laboratory Analysis 9
2.4 Data Verification/Validation 10
2.5 Investigation Derived Waste 10
SECTION 3 RESULTS 13
3.1 Groundwater Elevations 13
3.2 Summary of Analytical Results 13
3.2.1 Explosives and Propellants 15
3.2.2 Inorganic Elements 26
3.2.3 Volatile Organic Compounds (VOCs) 29
3.2.4 Semivolatile Organic Compounds (SVOCs) 30
3.2.5 Pesticides and Polychlorinated Biphenyls (PCBs) 48
3.2.6 Perchlorates 48
3.3 Data Verification/Validation 74
SECTION 4 SUMMARY OF RESULTS 79
SECTION 5 REFERENCES 83

Table of Contents (cont.)

Section Page

List of Figures

1-1 RVAAP General Location Map....2
1-2 RVAAP Facility Map 3

List of Tables

Table 2-1 Analytical Methods 10
Table 2-2 QA Table for January 2011 RVAAP Sampling 12
Table 3-1 October 2010 FWGWMP Monitoring Well Measurements 14
Table 3-2 FWGWMP January 2011 Explosives and Propellants Analytical Results 18
Table 3-3 FWGWMP January 2011 Inorganics Analytical Results.... 31
Table 3-4 RVAAP Facility-wide Background Criteria, (SAIC, 2001b).... 39
Table 3-5 FWGWMP January 2011 VOCs Analytical Results.... 40
Table 3-6 FWGWMP January 2011 SVOCs Analytical Results.... 49
Table 3-7 FWGWMP January 2011 Pesticide and PCBs Analytical Results 64
Table 3-8 FWGWMP January2011 Perchlorate Analytical Results…….……72
Table 3-9 Percent of Acceptable Data 78
Table 4-1 Inorganic Elements Detected at Concnetrations Exceeding the MCLs or Region 9 PRGs 81

Appendices

A Correspondence Documenting the Current Monitoring Well Schedule
B List of Wells Sampled During the January 2011 Event
C Water Level Measurements/Field Log Book and Purge Records/Daily Quality Control Reports
D Data Verification Reports/Laboratory Data Sheets
Sample Delivery Group: A1A180415
Sample Delivery Group: A1A190406
Sample Delivery Group: A1A190407
Sample Delivery Group: A1A210540

VOLUME 2

Appendix

D Data Verification Reports/Laboratory Data Sheets
Sample Delivery Group: A1A200403
Sample Delivery Group: A1A180421
Sample Delivery Group: A1A200532
Sample Delivery Group: A1A190402

Table of Contents (cont.)

VOLUME 3

Appendices

D Data Verification Reports/Laboratory Data Sheets
Sample Delivery Group: A1A180417
Sample Delivery Group: A1A200534
Sample Delivery Group: A1A200401
Sample Delivery Group: A1A210536

E IDW Characterization and Disposal Plan

F Reporting Limits that Currently Do Not Meet the RVAAP QAPP PQLs and/or Region 9 PRGs

G Correspondence & Comment/Response Table

PLATES

Plate 1 Monitoring Wells at RVAAP
Plate 2 Potentiometric Map of Unconsolidated Aquifer (October 2010)
Plate 3 Potentiometric Surface of Bedrock – Homewood and Sharon Aquifer (October 2010)
Plate 4 Potentiometric Map of Sharon Conglomerate Wells (October 2010)

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	Octogen
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	Reasearch Department Explosive
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

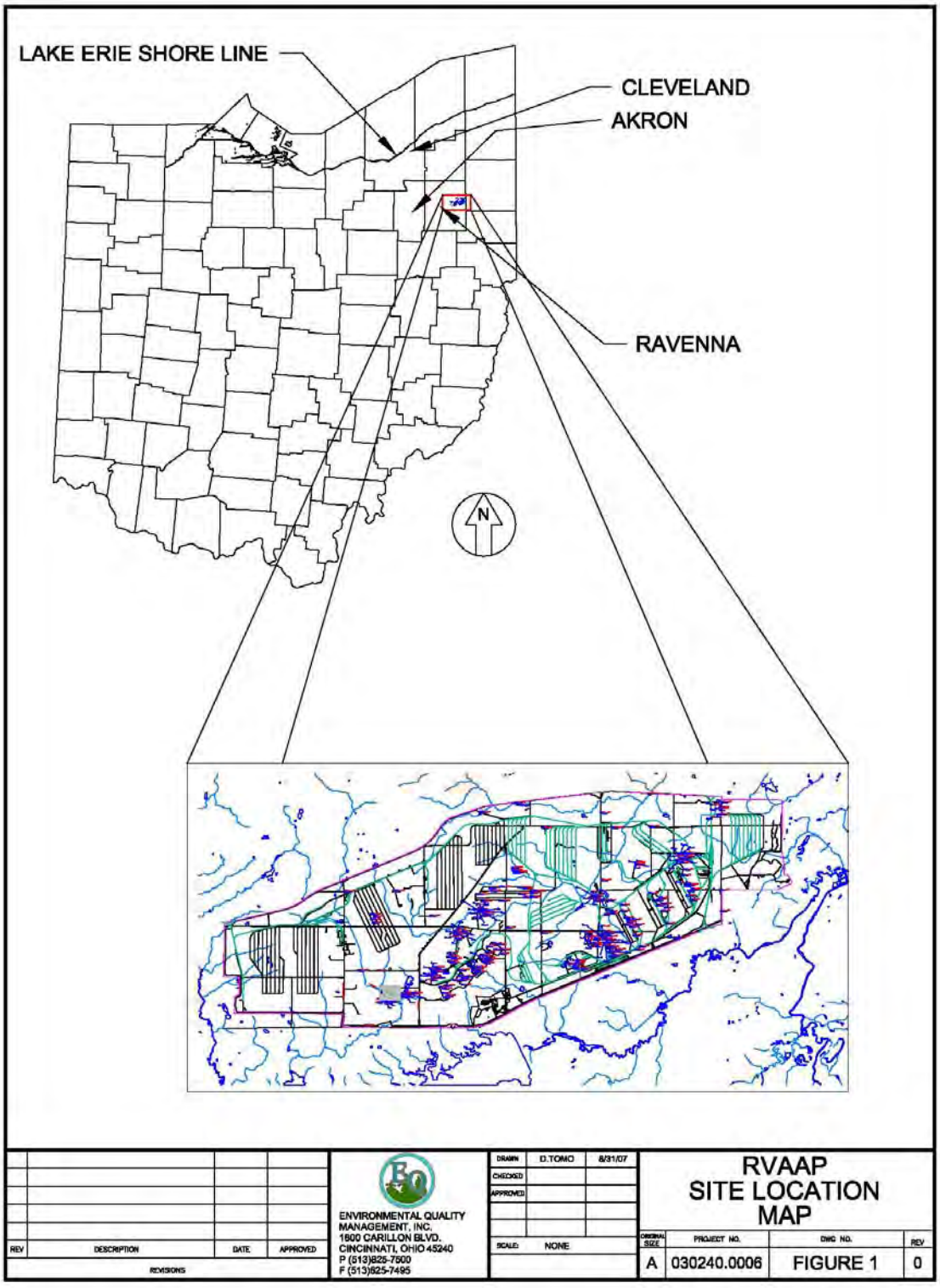


Figure 1-1. General Location Map

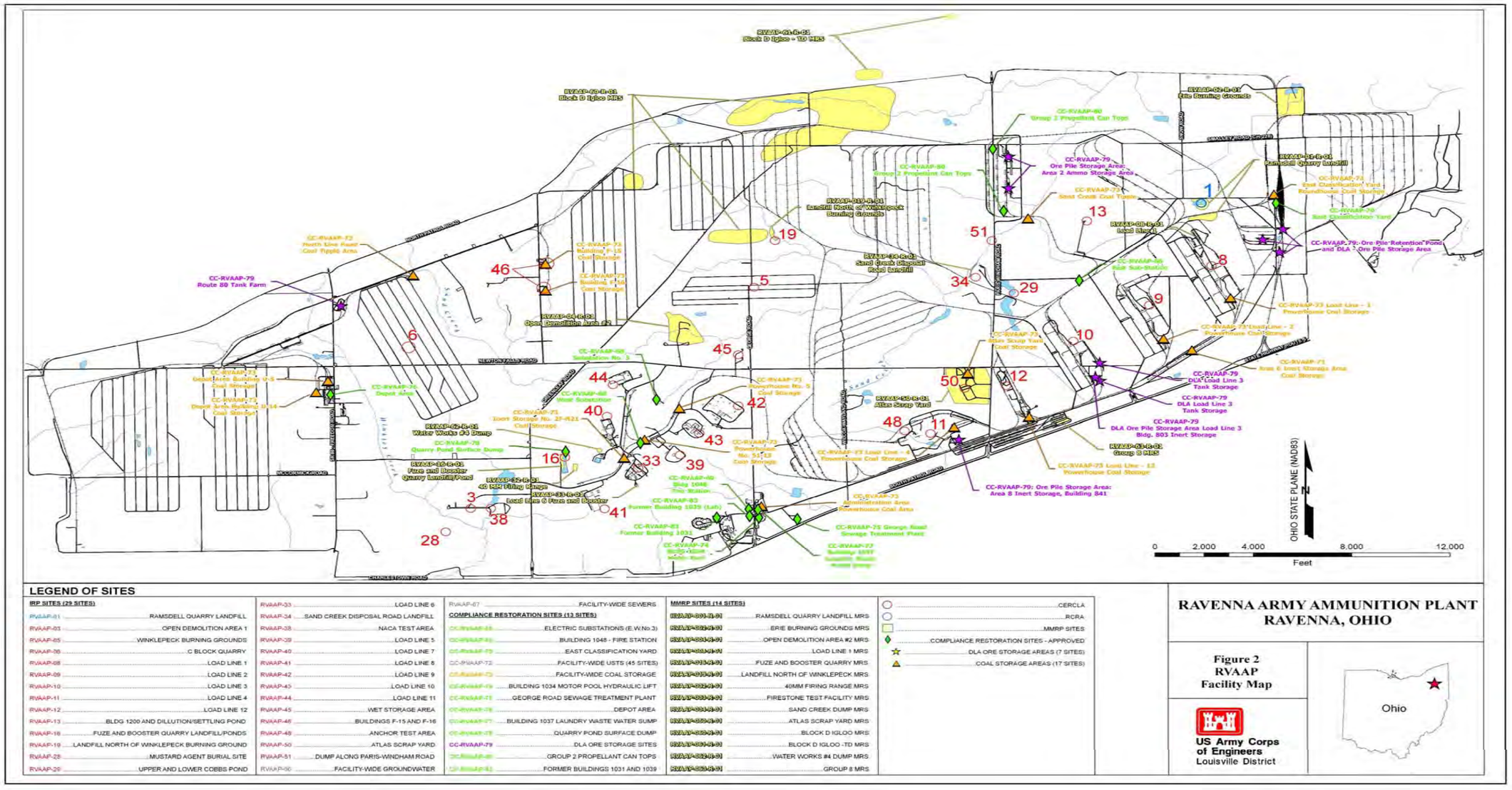


Figure 1-2. RVAAP Facility Map

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, DA2mw-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 January 2011 event is presented in Appendix B.

1.3 Scope of Work for the January 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 January 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 49 wells identified in Appendix B (this includes the 6 deep Sharon Conglomerate wells).
- 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 January 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 January 2011 Event.
- Appendix C – Water Level Measurements/Field Log Book and Purge Records/Daily Quality Control Reports.

Volumes 1-3

- Appendix D – Data Verification Reports/Laboratory Data Sheets.

Volume 3

- 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 Table
- Plates

SECTION 2

PROJECT ACTIVITIES

2.1 Groundwater Level Monitoring

Depth to water from the top of the inner casing was measured in 43 FWGWMP wells and the 6 deep Sharon Conglomerate wells during January 17-19 2011 (note that due to access restrictions the Demolition Area 2 wells were not measured until January 21, 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 sandstone. Therefore the groundwater elevations collected from these wells were used to determine the potentiometric contours for a separate map (Plate 4) as described below.

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

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

2.2 Groundwater Sampling

All identified quarterly monitoring wells were sampled between January 17-21, 2011. Wells were sampled using micropurge techniques in accordance with the specifications contained in the FWGWMPP and FWSAP. The wells were micropurged until certain groundwater parameters (i.e., temperature, specific conductivity, pH, and dissolved oxygen) had stabilized. The groundwater parameters were measured using a Horiba U-22 with flow cells or equivalent**.** Groundwater parameter measurements obtained during micropurging are presented in Appendix C.

High turbidity values (>550 ntu) were noted at 5 of the wells. These wells were:

LL1mw-067	EBGmw-124	NTAmw-113
CBPmw-004	CPmw-006	

None of these wells have exhibited elevated sediment levels during the sampling event. Three of the wells (FBQmw-174, NACAmw-113, and DA2mw-106) exhibited a differential of greater than 0.5-ft between the reported construction depth and the measured depth in January 2011. These wells were all redeveloped in October 2010 with no significant change in the well depth measurement, and with reported hard bottoms. Based on the lack of sediment removed, and the reported hard bottom of the wells, EQM believes there is no significant sediment accumulation in those 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 LL1mw-067 and LL1mw-085 which 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 feet 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. 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.

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
WBGmw-005 – Duplicate Sample	LNWmw-025 – MS/MSD
CPmw-006 – Duplicate Sample	CPmw-005 – MS/MSD

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 January 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.

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 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), Nine wells were sampled for perchlorates. The Sharon Conglomerate Formation wells were also analyzed for nitrate/nitrites.

2.4 Data Verification/Validation

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

2.5 Investigation Derived Waste

An Investigation Derived Waste 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.

Table 2-2 QA Table for January 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
CBPmw-001	FWGCBPmw-001C-1655-GW/GF	01/20/11	GW		EQUIPRinse4-1701	FWGTeam3-Trip				X	X	X	X			X
CBPmw-004	FWGCBPmw-004C-1656-GW/GF	01/20/11	GW		EQUIPRinse4-1701	FWGTeam2-Trip				X	X	X	X			X
CBPmw-005	FWGCBPmw-005C-1657-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam3-Trip				X	X	X	X			X
CBPmw-007	FWGCBPmw-007C-1658-GW/GF	01/20/11	GW		EQUIPRinse4-1701	FWGTeam3-Trip				X	X	X	X			X
CBPmw-008	FWGCBPmw-008C-1659-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam3-Trip				X	X	X	X			X
CPmw-002	FWGCPmw-002C-1660-GW/GF	01/20/11	GW		EQUIPRinse4-1701	FWGTeam2-Trip				X	X	X	X			X
CPmw-005	FWGCPmw-005C-1661-GW/GF	01/20/11	GW		EQUIPRinse4-1701	FWGTeam3-Trip	YES			X	X	X	X			X
CPmw-006	FWGCPmw-006C-1662-GW/GF	01/20/11	GW	DUP4-1695	EQUIPRinse4-1701	FWGTeam2-Trip		FWGCPmw-006C-1690S-GW/GF	TRIPBLANK	X	X	X	X			X
DA2mw-106	FWGDA2mw-106C-1663-GW/GF	01/21/11	GW		EQUIPRinse5-1702	FWGTeam1-Trip				X	X	X	X			X
DA2mw-107	FWGDA2mw-107C-1664-GW/GF	01/21/11	GW		EQUIPRinse5-1702	FWGTeam2-Trip				X	X	X	X			X
DA2mw-110	FWGDA2mw-110C-1665-GW/GF	01/21/11	GW		EQUIPRinse5-1702	FWGTeam3-Trip				X	X	X	X			X
EBGmw-123	FWGEBGmw-123C-1666-GW/GF	01/20/11	GW		EQUIPRinse4-1701	FWGTeam1-Trip				X	X	X	X			X
EBGmw-124	FWGEBGmw-124C-1667-GW/GF	01/20/11	GW		EQUIPRinse4-1701	FWGTeam1-Trip				X	X	X	X			X
EBGmw-126	FWGEBGmw-126C-1668-GW/GF	01/20/11	GW		EQUIPRinse4-1701	FWGTeam1-Trip				X	X	X	X			X
EBGmw-129	FWGEBGmw-129C-1669-GW/GF	01/20/11	GW		EQUIPRinse4-1701	FWGTeam1-Trip				X	X	X	X			X
FBQmw-169	FWGFBQmw-169C-1670-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam1-Trip				X	X	X	X			X
FBQmw-172	FWGFBQmw-172C-1671-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam1-Trip				X	X	X	X			X
FBQmw-173	FWGFBQmw-173C-1672-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam1-Trip				X	X	X	X			X
FBQmw-174	FWGFBQmw-174C-1673-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam1-Trip				X	X	X	X			X
LL1mw-067	FWGLL1mw-067C-1640-GW/GF	01/17/11	GW		EQUIPRinse1-1698	FWGTeam2-Trip				X	X	X	X	X		X
LL1mw-081	FWGLL1mw-081C-1641-GW/GF	01/17/11	GW		EQUIPRinse1-1698	FWGTeam3-Trip	YES			X	X	X	X	X		X
LL1mw-082	FWGLL1mw-082C-1642-GW/GF	01/17/11	GW		EQUIPRinse1-1698	FWGTeam2-Trip				X	X	X	X	X		X
LL1mw-084	FWGLL1mw-084C-1643-GW/GF	01/17/11	GW	DUP2-1693	EQUIPRinse1-1698	FWGTeam1-Trip		FWGLL1mw-084C-1692S-GW/GF	TRIPBLANK	X	X	X	X	X		X
LL1mw-085	FWGLL1mw-085C-1644-GW/GF	01/17/11	GW		EQUIPRinse1-1698	FWGTeam2-Trip				X	X	X	X	X		X
LL2mw-266	FWGLL2mw-266C-1645-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam3-Trip				X	X	X	X	X		X
LL2mw-267	FWGLL2mw-267C-1646-GW/GF	01/18/11	GW	DUP3-1694	EQUIPRinse2-1699	FWGTeam3-Trip		FWGLL2mw-267C-1691S-GW/GF	TRIPBLANK	X	X	X	X	X		X
LL2mw-269	FWGLL2mw-269C-1647-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam3-Trip	YES			X	X	X	X	X		X
LL3mw-236	FWGLL3mw-236C-1648-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam3-Trip				X	X	X	X	X		X
LL3mw-237	FWGLL3mw-237C-1649-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam2-Trip				X	X	X	X			X
LL3mw-238	FWGLL3mw-238C-1650-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam2-Trip				X	X	X	X			X
LL3mw-239	FWGLL3mw-239C-1651-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam3-Trip				X	X	X	X			X
LL3mw-242	FWGLL3mw-242C-1652-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam3-Trip				X	X	X	X			X
LL3mw-243	FWGLL3mw-243C-1703-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam3-Trip				X	X	X	X			X
LL4mw-196	FWGLL4mw-196C-1653-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam1-Trip				X	X	X	X			X
LL4mw-197	FWGLL4mw-197C-1654-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam1-Trip				X	X	X	X			X
LNWmw-025	FWGLNWmw-025C-1674-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam3-Trip	YES			X	X	X	X			X
MBSmw-001	FWGMBSmw-001C-1681-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam1-Trip				X	X	X	X			X
NTAmw-112	FWGNTAmw-112C-1679-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam1-Trip				X	X	X	X			X
NTAmw113	FWGNTAmw-113C-1680-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam1-Trip				X	X	X	X			X
SCFmw-001	FWGSCFmw-001-1682-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam2-Trip				X	X	X	X		X	X
SCFmw-002	FWGSCFmw-002-1683-GW/GF	01/18/11	GW		EQUIPRinse2-1699	FWGTeam2-Trip				X	X	X	X		X	X
SCFmw-003	FWGSCFmw-003-1684-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam2-Trip	YES			X	X	X	X		X	X
SCFmw-004	FWGSCFmw-004-1685-GW/GF	01/18/11	GW	DUP1-1697	EQUIPRinse2-1699	FWGTeam2-Trip		FWGSCFmw-004-1688S-GW/GF	TRIPBLANK	X	X	X	X		X	X
SCFmw-005	FWGSCFmw-005-1686-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam2-Trip				X	X	X	X		X	X
SCFmw-006	FWGSCFmw-006-1687-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam2-Trip				X	X	X	X		X	X
WBGmw-005	FWGWBGmw-005C-1675-GW/GF	01/19/11	GW	DUP5-1696	EQUIPRinse3-1700	FWGTeam3-Trip		FWGWBGmw-005C-1689S-GW/GF	TRIPBLANK	X	X	X	X			X
WBGmw-006	FWGWBGmw-006C-1676-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam3-Trip				X	X	X	X			X
WBGmw-007	FWGWBGmw-007C-1677-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam1-Trip				X	X	X	X			X
WBGmw-009	FWGWBGmw-009C-1678-GW/GF	01/19/11	GW		EQUIPRinse3-1700	FWGTeam3-Trip				X	X	X	X			X

SECTION 3

RESULTS

3.1 Groundwater Elevations

Groundwater elevations for the 49 FWGWMP quarterly wells were obtained between January 17-21, 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 3-5.

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

Table 3-1. January 2011 FWGMP Monitoring Well Measurements

Well	Monitoring Zone	Top of Casing (TOC) Elevation[a] (ft)	Annual Groundwater Elevation (Jan/2010) (ft)	Quarterly Groundwater Elevation (Jul/2010) (ft)	Annual Groundwater Elevation (Oct/2010) (ft)	Quarterly Groundwater Elevation (Jan/2011) (ft)	Depth to Water (ft below TOC) Jan/2011	Reported Construction Depth from TOC[a] (ft)	Measured Depth from TOC (ft) Jan/2011	Differential - Reported Construction Depth/Measured Depth (ft) Jan/2011	Description of Bottom Jan/2011
CBPmw-001	Unconsolidated	975.84	961.81	NM	960.74	961.36	14.48	34.9	34.64	0.26	Hard
CBPmw-004	Unconsolidated	971.13	959.79	NM	958.38	959.52	11.61	29.5	29.62	-0.12	Hard
CBPmw-006	Unconsolidated	967.64	959.16	NM	957.84	954.85	12.79	25.1	27.32	-2.22	Hard
CBPmw-007	Unconsolidated	976.37	959.92	NM	957.89	959.26	17.11	32.4	31.85	0.55	Hard
CBPmw-008	Unconsolidated	973.19	956.90	NM	955.16	956.28	16.91	27.6	27.90	-0.30	Hard
CPmw-002	Unconsolidated	972.31	972.16	NM	967.73	971.80	0.51	15.1	15.00	0.10	Hard
CPmw-005	Unconsolidated	973.58	961.50	NM	960.24	961.30	12.28	42.4	43.19	-0.79	Hard
CPmw-006	Unconsolidated	965.13	957.38	NM	956.27	956.85	8.28	20.2	20.62	-0.42	Hard
DA2mw-106	Unconsolidated	1,043.79	1,036.04	NM	1,036.60	1,040.12	3.67	18.1	16.79	1.31	Hard
DA2mw-107	Unconsolidated	1,041.63	1,035.12	NM	1,033.60	1,033.68	7.95	16.5	16.88	-0.38	Medium
DA2mw-110	Unconsolidated	1,063.78	1,056.17	NM	1,051.91	1,054.49	9.29	21.9	22.32	-0.42	Medium
EBGmw-123	Unconsolidated	947.82	938.54	NM	937.14	937.97	9.85	33.7	34.75	-1.05	Hard
EBGmw-124	Unconsolidated	941.39	938.49	NM	937.09	937.90	3.49	32.9	32.65	0.25	Medium
EBGmw-126	Unconsolidated	940.61	938.70	NM	937.17	938.22	2.39	27.9	27.77	0.13	Hard
EBGmw-129	Unconsolidated	944.36	939.07	NM	936.64	938.65	5.71	28.4	30.94	-2.54	Hard
FBQmw-169	Homewood	1,120.58	1,115.64	NM	1,112.24	1,113.98	6.60	18.2	18.08	0.12	Hard
FBQmw-172	Homewood	1,150.09	1,119.78	NM	1,120.48	1,120.28	29.81	34.4	34.40	0.00	Medium
FBQmw-173	Homewood	1,165.94	1,118.98	NM	1,120.24	1,119.83	46.11	53.0	53.19	-0.19	Medium
FBQmw-174	Homewood	1,139.97	1,119.08	NM	1,119.80	1,120.37	19.60	26.2	23.09	3.11	Hard
LL1mw-067	Sharon	980.36	958.01	960.66	959.01	957.95	22.41	25.6	25.68	-0.08	Hard
LL1mw-081	Sharon	998.92	965.26	968.48	965.06	966.24	32.68	41.9	41.98	-0.08	Soft
LL1mw-082	Sharon	1,006.45	969.68	977.76	970.11	972.16	34.29	41.5	41.51	-0.01	Hard
LL1mw-084	Sharon	998.73	966.17	969.30	965.58	967.20	31.53	39.3	39.04	0.26	Soft
LL1mw-085	Sharon	996.84	958.44	960.51	958.76	958.43	38.41	44.7	45.15	-0.45	Hard
LL2mw-266	Sharon	1,016.28	1003.84	1,003.89	1,001.40	1,003.83	12.45	22.2	22.70	-0.50	Hard
LL2mw-267	Sharon	1,014.81	1005.22	1,004.43	1,002.60	1,005.13	9.68	22.0	22.00	0.00	Hard
LL2mw-269	Sharon	1,011.62	994.73	994.07	992.31	994.27	17.35	29.4	30.24	-0.84	Hard
LL3mw-236	Sharon	1,011.17	992.45	994.73	991.32	995.49	15.68	26.2	26.58	-0.38	Hard
LL3mw-237	Sharon	1,005.57	988.48	NM	984.65	988.34	17.23	24.9	25.51	-0.61	Hard
LL3mw-238	Sharon	1,006.91	991.57	NM	989.00	990.86	16.05	22.9	23.38	-0.48	Hard
LL3mw-239	Sharon	1,003.50	976.89	978.28	975.63	977.60	25.90	36.8	36.90	-0.10	Medium
LL3mw-242	Sharon	999.32	981.79	NM	980.28	982.22	17.10	21.9	22.50	-0.60	Hard
LL3mw-243	Sharon	991.16	974.33	NM	972.46	976.51	14.65	25.8	26.32	-0.52	Hard
LL4mw-196	Unconsolidated	984.55	970.98	970.77	970.00	970.47	14.08	21.4	21.71	-0.31	Medium
LL4mw-197	Unconsolidated	985.46	970.60	970.72	970.03	970.21	15.25	22.7	23.58	-0.88	Hard
LNWmw-025	Unconsolidated	1,029.13	1,024.15	NM	1,023.17	1,023.71	5.42	19.9	20.31	-0.41	Hard
MBSmw-001	Unconsolidated	1,082.20	1,064.69	NM	1,064.01	1,064.55	17.65	31.5	31.05	0.45	Hard
NTAmw-112	Unconsolidated	1,078.33	1,069.25	NM	1,068.41	1,069.09	9.24	26.9	26.62	0.28	Soft
NTAmw-113	Unconsolidated	1,075.68	1,068.66	NM	1,067.68	1,068.46	7.22	30.6	29.82	0.78	Hard
SCFmw-001	Sharon Conglomerate	1,120.71	1,030.94	1,031.65	1,029.43	1,031.02	89.69	213.61	214.52	-0.91	Hard
SCFmw-002	Sharon Conglomerate	984.56	964.17	965.39	963.50	964.71	19.85	149.65	149.79	-0.14	Hard
SCFmw-003	Sharon Conglomerate	958.47	948.98	949.68	948.53	948.91	9.56	139.65	139.60	0.05	Hard
SCFmw-004	Sharon Conglomerate	944.17	943.47	943.46	942.22	943.28	0.89	112.47	113.15	-0.68	Hard
SCFmw-005	Sharon Conglomerate	960.80	947.85	949.32	947.32	948.67	12.13	156.41	158.50	-2.09	Hard
SCFmw-006	Sharon Conglomerate	965.92	947.43	947.92	946.95	947.34	18.58	88.32	88.35	-0.03	Hard
WBGmw-005	Unconsolidated	1,054.70	1,049.28	NM	1,046.45	1,048.61	6.09	21.1	21.13	-0.03	Hard
WBGmw-006	Unconsolidated	1,014.66	1,008.22	NM	1,004.47	1,006.96	7.70	20.4	20.15	0.25	Hard
WBGmw-007	Unconsolidated	1,000.59	982.76	NM	981.74	982.69	17.90	26.3	26.39	-0.09	Hard
WBGmw-009	Unconsolidated	1,047.53	1,034.33	NM	1,031.56	1,033.24	14.29	24.0	24.28	-0.28	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 (5.8 µg/L J), LL2mw-267 (0.066 µg/L J), LL3mw-237 (0.21 µg/L), LL3mw-238 (26 µg/L), LL3mw-239 (0.13 µg/L). There is no MCL for 1,3,5-Trinitrobenzene. The Region 9 PRG is 1,100 µg/L.

- 1,3-Dinitrobenzene – FBQmw-174 (0.085 µg/L J), LL1mw-084 (1.1 µg/L J). There is no MCL for 1,3-Dinitrobenezene. The Region 3 PRG is 3.6 µg/L.

- 2,4,6-Trinitotoluene – CBPmw-004 (0.062 µg/L J), FWBmw-174 (44 µg/L), LL1mw-084 (13 µg/L J), LL2mw-267 (0.67 µg/L), LL3mw-236 (0.084 µg/L J), LL3mw-237 (2.0 µg/L), LL3mw-238 (69 µg/L), LL3mw-239 (0.15 µg/L), LL4mw-0.075 µg/L J) and WBGmw-005 (0.062 µg/L J). There is no MCL for 2,4,6-Trinitrotoluene. The Region 9 PRG is 2.2 µg/L.

- 2,4-Dinitotoluene – FBQmw-174 (0.30 µg/L), LL1mw-084 (4.0 µg/L J), LL2mw-267 (0.36µg/L), LL3mw-237 (0.068 µg/L J), LL3mw-238 (0.057 µg/L J) and LL3mw-239 (0.096 µg/L J). There is no MCL for 2,4-Dinitrotoluene. The Region 9 PRG is 73 µg/L.

- 2-Amino-4,6-dintirotoluene – FBQmw-173 (0.19 µg/L), FBQmw-174 (24 µg/L), LL1mw-081 (1.1 µg/L), LL1mw-084 (17 µg/L J), LL2mw-267 (2.1 µg/L), LL3mw-237 (5.7 µg/L), LL3mw-238 (9.3 µg/L)and LL3mw-239 (0.56 µg/L). There is no MCL or Region 9 PRG for 2-Amino-4,6-dintirotoluene.

- 4-Amino-2,6-dintirotoluene – FBQmw-173 (0.15 µg/L), FBQmw-174 (39 µg/L), LL1mw-081 (1.4 µg/L), LL1mw-084 (29 µg/L), LL2mw-267 (2.0 µg/L), LL3mw-236 (0.060 µg/L J), LL3mw-237 (10 µg/L), LL3mw-238 (032 µg/L) and LL3mw-239 (0.74 µg/L). There is no MCL or Region 9 PRG for 4-Amino-2,6-dintirotoluene.

- 2,6-Dinitotoluene – FBQmw-174 (0.14 µg/L), LL1mw-084 (1.3 µg/L J) and LL3mw-243 (0.077 µg/L J). There is no MCL for 2,6-Dinitrotoluene. The Region 9 PRG is 36 µg/L.

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

- 3-Nitrotoluene – LL3mw-238 (0.36 µg/L J). There is no MCL for 2-Nitrotoluene. The Region 9 PRG is 120 µg/L.

- HMX – CBPmw-005 (0.049 µg/L J), LL1mw-081 (0.52 µg/L), LL1mw-084 (1.0 µg/L J), LL2mw-267 (1.7 µg/L), LL3mw-239 (0.23 µg/L), WBGmw-006 (7.5 µg/L), and WBGmw-009 (1.0 µg/L). There is no MCL for HMX. The Region 9 PRG is 1,800 µg/L.

- Nitroglycerin – SCFmw-004 (0.54 µg/L J). There is no MCL for nitroglycerin. The Region 9 PRG is 4.8 µg/L.

- Nitroguanidine – LL3mw-236 (8.5 µg/L J). There is no MCL or Region 9 PRG for nitroguanidine.

- PETN – SCFmw-002 (0.42 µg/L J). There is no MCL or Region 9 PRG for PETN.

- RDX – FBQmw-174 (0.44 µg/L), LL1mw-081 (1.1 µg/L J), LL1mw-084 (0.69 µg/L J), LL2mw-267 (1.7 µg/L J), LL3mw-237 (0.32 µg/L J), LL3mw-238 (11 µg/L J), LL3mw-239 (1.6 µg/L J), WBGmw-006 (29 µg/L J) and WBGmw-009 (3.5 µg/L J). There is no MCL for RDX. The Region 9 PRG is 0.61 µg/L.

- Tetryl – WBGmw-005 (0.057 µg/L J). There is no MCL for Tetryl. The Region 9 PRG is 360 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 January 2011 sampling:

- 2,4,6-Trinitotoluene at a concentration exceeding the Region 9 PRG of 2.2 µg/L at FWBmw-174 (44 µg/L), LL1mw-084 (13 µg/L J), and LL3mw-238 (69 µg/L).

- RDX at a concentration exceeding the Region 9 PRG of 0.61 µg/L at LL1mw-081 (1.1 µg/L J), LL1mw-084 (0.69 µg/L J), LL2mw-267 (1.7 µg/L J), LL3mw-238 (11 µg/L J), LL3mw-239 (1.6 µg/L J), WBGmw-006 (29 µg/L J) and WBGmw-009 (3.5 µg/L J).

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

Station ID					CBPmw-001	CBPmw-004	CBPmw-005	CBPmw-007	CBPmw-008	CPmw-002	CPmw-005
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCBPmw-001C-1655-GW	FWGCBPmw-004C-1656-GW	FWGCBPmw-005C-1657-GW	FWGCBPmw-007C-1658-GW	FWGCBPmw-008C-1659-GW	FWGCPmw-002C-1660-GW	FWGCPmw-005C-1661-GW
Date Collected					1/20/2011	1/20/2011	1/19/2011	1/20/2011	1/19/2011	1/20/2011	1/20/2011
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	0.096 U	0.10 U	0.096 U	0.10 U	0.11 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.11 U	0.11 U	0.096 U	0.10 U	0.096 U	0.10 U	0.11 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.11 U	**0.062 J**	0.096 U	0.10 U	0.096 U	0.10 U	0.11 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.11 U	0.11 U	0.096 U	0.10 U	0.096 U	0.10 U	0.11 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.11 U	0.11 U	0.096 U	0.10 U	0.096 U	0.10 U	0.11 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.11 U	0.11 U	0.096 U	0.10 U	0.096 U	0.10 U	0.11 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.55 U	0.56 U	0.48 U	0.50 U	0.48 U	0.52 U	0.56 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.55 U	0.56 U	0.48 U	0.50 U	0.48 U	0.52 U	0.56 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.11 U	0.11 U	0.096 U	0.10 U	0.096 U	0.10 U	0.11 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.55 U	0.56 U	0.48 U	0.50 U	0.48 U	0.52 U	0.56 U
HMX	µg/L	NS	1800	1800	0.11 U	0.11 U	**0.049 J**	0.10 U	0.096 U	0.10 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	0.11 U	0.11 U	0.096 U	0.10 U	0.096 U	0.10 U	0.11 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.72 U	0.73 U	0.62 U	0.65 U	0.62 U	0.68 U	0.72 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	0.72 U	0.73 U	0.62 U	0.65 U	0.62 U	0.68 U	0.72 U
RDX	µg/L	NS	0.61	0.61	0.11 U	0.11 U	0.096 U	0.10 U	0.096 U	0.10 U	0.11 U
Tetryl	µg/L	NS	360	150	0.11 U	0.11 U	0.096 U	0.10 U	0.096 U	0.10 U	0.11 U

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

Due to excessive particulates, samples FWGNTAmw-112c-1679-GW, FWGNTAmw-113c-1680-GW, FWGLL2mw-266c-1645-GW, FWGLL2mw-267c-1646-GW, FWGLNWmw-025c-1674-GW, FWGLL4mw-197c-1654-GW, FWGLL3mw-238c-1650-GW, FWGCBPmw-004c-1656-GW, FWGCBPmw-005c-1657-GW, FWGCPmw-DUP4-1695-GW (FWGCPmw-006C-1662-GW), FWGWBGmw-005c-1675-GW, and FWGDA2mw-106c-1663-GW required filtration in the laboratory.

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

Station ID					CPmw-006	DA2mw-106	DA2mw-107	DA2mw-110	EBGmw-123	EBGmw-124	EBGmw-126
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCPmw-006C-1662-GW	FWGDA2mw-106C-1663-GW	FWGDA2mw-107C-1664-GW	FWGDA2mw-110C-1665-GW	FWGEBGmw-123C-1666-GW	FWGEBGmw-124C-1667-GW	FWGEBGmw-126C-1668-GW
Date Collected					1/20/2011	1/21/2011	1/21/2011	1/21/2011	1/20/2011	1/20/2011	1/20/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.10 U	0.099 U	0.10 U	0.096 U	0.098 U	0.098 U	0.096 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.10 U	0.099 U	0.10 U	0.096 U	0.098 U	0.098 U	0.096 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.10 U	0.099 U	0.10 U	0.096 U	0.098 U	0.098 U	0.096 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.10 U	0.099 U	0.10 U	0.096 U	0.098 U	0.098 U	0.096 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.10 U	0.099 U	0.10 U	0.096 U	0.098 U	0.098 U	0.096 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.10 U	0.099 U	0.10 U	0.096 U	0.098 U	0.098 U	0.096 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.50 U	0.50 U	0.52 U	0.48 U	0.49 U	0.49 U	0.48 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.50 U	0.50 U	0.52 U	0.48 U	0.49 U	0.49 U	0.48 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.10 U	0.099 U	0.10 U	0.096 U	0.098 U	0.098 U	0.096 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.50 U	0.50 U	0.52 U	0.48 U	0.49 U	0.49 U	0.48 U
HMX	µg/L	NS	1800	1800	0.10 U	0.099 U	0.10 U	0.096 U	0.098 U	0.098 U	0.096 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	0.099 U	0.10 U	0.096 U	0.098 U	0.098 U	0.096 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.65 U	0.64 U	0.67 U	0.62 U	0.64 U	0.64 U	0.62 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	0.65 U	0.64 U	0.67 U	0.62 U	0.64 U	0.64 U	0.62 U
RDX	µg/L	NS	0.61	0.61	0.10 U	0.099 U	0.10 U	0.096 U	0.098 U	0.098 U	0.096 U
Tetryl	µg/L	NS	360	150	0.10 U	0.099 U	0.10 U	0.096 U	0.098 U	0.098 U	0.096 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed
Due to excessive particulates, samples FWGNTAmw-112c-1679-G\
FWGLNWmw-025c-1674-GW, FWGLL4mw-197c-1654-GW, FWGLI
FWGCPmw-DUP4-1695-GW (FWGCPmw-006C-1662-GW), FWGW

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

Station ID					EBGmw-129	FBQmw-169	FBQmw-172	FBQmw-173	FBQmw-174	LL1mw-067	LL1mw-081
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGEBGmw-129C-1669-GW	FWGFBQmw-169C-1670-GW	FWGFBQmw-172C-1671-GW	FWGFBQmw-173C-1672-GW	FWGFBQmw-174C-1673-GW	FWGLL1mw-067C-1640-GW	FWGLL1mw-081C-1641-GW
Date Collected					1/20/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011	1/17/2011	1/17/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.098 U	0.096 U	0.097 U	0.096 U	0.096 U	0.099 U	**0.11 J**
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.098 U	0.096 U	0.097 U	0.096 U	**0.085 J**	0.099 U	0.11 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.098 U	0.096 U	0.097 U	0.048 J	**44**	0.099 U	0.11 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.098 U	0.096 U	0.097 U	0.096 U	**0.30**	0.099 U	0.11 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.098 U	0.096 U	0.097 U	0.096 U	**0.14**	0.099 U	0.11 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.098 U	0.096 U	0.097 U	**0.19**	**24**	0.099 U	**1.1**
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.49 U	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U	0.53 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.49 U	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U	0.53 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.098 U	0.096 U	0.097 U	**0.15**	**39**	0.099 U	**1.4**
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.49 U	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U	0.53 U
HMX	µg/L	NS	1800	1800	0.098 U	0.096 U	0.097 U	0.096 U	0.096 U	0.099 U	**0.52**
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	0.096 U	0.097 U	0.096 U	0.096 U	0.099 U	0.11 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.64 U	0.62 U	0.63 U	0.62 U	0.62 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	0.62 U	0.63 U	0.62 U	0.62 U	0.64 U	0.69 U
RDX	µg/L	NS	0.61	0.61	0.098 U	0.096 U	0.097 U	0.096 U	**0.44**	0.099 U	**1.1 J**
Tetryl	µg/L	NS	360	150	0.098 U	0.096 U	0.097 U	0.096 U	0.096 U	0.099 U	0.11 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed
Due to excessive particulates, samples FWGNTAmw-112c-1679-G\
FWGLNWmw-025c-1674-GW, FWGLL4mw-197c-1654-GW, FWGLI
FWGCPmw-DUP4-1695-GW (FWGCPmw-006C-1662-GW), FWGW

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

Station ID					LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269	LL3mw-236
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-082C-1642-GW	FWGLL1mw-084C-1643-GW	FWGLL1mw-085C-1644-GW	FWGLL2mw-266C-1645-GW	FWGLL2mw-267C-1646-GW	FWGLL2mw-269C-1647-GW	FWGLL3mw-236C-1648-GW
Date Collected					1/17/2011	1/17/2011	1/17/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.10 U	**5.8 J**	0.11 U	0.11 U	**0.066 J**	0.10 U	0.10 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.10 U	**1.1 J**	0.11 U	0.11 U	0.097 U	0.10 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.10 U	**13 J**	0.11 U	0.11 U	**0.67**	0.10 U	**0.084 J**
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.10 U	**4.0 J**	0.11 U	0.11 U	**0.36**	0.10 U	0.10 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.10 U	**1.3 J**	0.11 U	0.11 U	0.097 U	0.10 U	0.10 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.10 U	**17 J**	0.11 U	0.11 U	**2.1**	0.10 U	0.10 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.51 U	0.50 U	0.54 U	0.54 U	0.48 U	0.51 U	0.52 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.51 U	0.50 U	0.54 U	0.54 U	0.48 U	0.51 U	0.52 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.10 U	**29**	0.11 U	0.11 U	**2.0**	0.10 U	**0.060 J**
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.51 U	0.50 U	0.54 U	0.54 U	0.48 U	0.51 U	0.52 U
HMX	µg/L	NS	1800	1800	0.10 U	**1.0 J**	0.11 U	0.11 U	**1.7**	0.10 U	0.10 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	0.10 U	0.11 U	0.11 U	0.097 U	0.10 U	0.10 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.66 U	0.65 U	0.70 U	0.70 U	0.63 U	0.66 U	0.68 U
Nitroguanidine	µg/L	NS	NS	3700	20 U	20 U	20 U	20 U	20 U	20 U	**8.5 J**
PETN	µg/L	NS	NS	NS	0.66 U	0.65 U	0.70 U	0.70 U	0.63 U	0.66 U	0.68 U
RDX	µg/L	NS	0.61	0.61	0.10 U	**0.69 J**	0.11 U	0.11 U	**1.7 J**	0.10 U	0.10 U
Tetryl	µg/L	NS	360	150	0.10 U	0.10 U	0.11 U	0.11 U	0.097 U	0.10 U	0.10 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed
Due to excessive particulates, samples FWGNTAmw-112c-1679-G\
FWGLNWmw-025c-1674-GW, FWGLL4mw-197c-1654-GW, FWGLI
FWGCPmw-DUP4-1695-GW (FWGCPmw-006C-1662-GW), FWGW

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

Station ID					LL3mw-237	LL3mw-238	LL3mw-239	LL3mw-242	LL3mw-243	LL4mw-196	LL4mw-197
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-237C-1649-GW	FWGLL3mw-238C-1650-GW	FWGLL3mw-239C-1651-GW	FWGLL3mw-242C-1652-GW	FWGLL3mw-243C-1703-GW	FWGLL4mw-196C-1653-GW	FWGLL4mw-197C-1654-GW
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/18/2011	1/18/2011	1/19/2011	1/19/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	**0.21**	**26**	**0.13**	0.11 U	0.11 U	0.096 U	0.098 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.10 U	0.10 U	0.099 U	0.11 U	0.11 U	0.096 U	0.098 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	**2.0**	**69**	**0.15**	0.11 U	0.11 U	0.096 U	**0.075 J**
2,4-Dinitrotoluene	µg/L	NS	73	0.22	**0.068 J**	**0.057 J**	**0.096 J**	0.11 U	0.11 U	0.096 U	0.098 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.10 U	0.10 U	0.099 U	0.11 U	**0.077 J**	0.096 U	0.098 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	**5.7**	**9.3**	**0.56**	0.11 U	0.11 U	0.096 U	0.098 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.52 U	0.52 U	0.50 U	0.56 U	0.53 U	0.48 U	0.49 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.52 U	**0.36 J**	0.50 U	0.56 U	0.53 U	0.48 U	0.49 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	**10**	**32**	**0.74**	0.11 U	0.11 U	0.096 U	0.098 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.52 U	0.52 U	0.50 U	0.56 U	0.53 U	0.48 U	0.49 U
HMX	µg/L	NS	1800	1800	0.10 U	1.8	**0.23**	0.11 U	0.11 U	0.096 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	**0.25 J**	0.099 U	0.11 U	0.11 U	0.096 U	0.098 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.67 U	0.68 U	0.64 U	0.72 U	0.69 U	0.62 U	0.64 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	0.67 U	0.68 U	0.64 U	0.72 U	0.69 U	0.62 U	0.64 U
RDX	µg/L	NS	0.61	0.61	**0.32 J**	**11 J**	**1.6 J**	0.11 U	0.11 U	0.096 U	0.098 U
Tetryl	µg/L	NS	360	150	0.10 U	0.10 U	0.099 U	0.11 U	0.11 U	0.096 U	0.098 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed
Due to excessive particulates, samples FWGNTAmw-112c-1679-G\
FWGLNWmw-025c-1674-GW, FWGLL4mw-197c-1654-GW, FWGLI
FWGCPmw-DUP4-1695-GW (FWGCPmw-006C-1662-GW), FWGW

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

Station ID					LNWmw-025	MBSmw-001	NTAmw-112	NTAmw-113	SCFmw-001	SCFmw-002	SCFmw-003
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLNWmw-025C-1674-GW	FWGMBSmw-001C-1681-GW	FWGNTAmw-112C-1679-GW	FWGNTAmw-113C-1680-GW	FWGSCFmw-001-1682-GW	FWGSCFmw-002-1683-GW	FWGSCFmw-003-1684-GW
Date Collected					1/19/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.096 U	0.096 U	0.097 U	0.098 U	0.099 U	0.11 U	0.10 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.096 U	0.096 U	0.097 U	0.098 U	0.099 U	0.11 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.096 U	0.096 U	0.097 U	0.098 U	0.099 U	0.11 U	0.10 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.096 U	0.096 U	0.097 U	0.098 U	0.099 U	0.11 U	0.10 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.096 U	0.096 U	0.097 U	0.098 U	0.099 U	0.11 U	0.10 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.096 U	0.096 U	0.097 U	0.098 U	0.099 U	0.11 U	0.10 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.48 U	0.48 U	0.48 U	0.49 U	0.50 U	0.54 U	0.52 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.48 U	0.48 U	0.48 U	0.49 U	0.50 U	0.54 U	0.52 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.096 U	0.096 U	0.097 U	0.098 U	0.099 U	0.11 U	0.10 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.48 U	0.48 U	0.48 U	0.49 U	0.50 U	0.54 U	0.52 U
HMX	µg/L	NS	1800	1800	0.096 U	0.096 U	0.097 U	0.098 U	0.099 U	0.11 U	0.10 U
Nitrate-Nitrite	mg/L	1	1	3	N/A	N/A	N/A	N/A	0.1 U	0.1 U	0.1 U
Nitrobenzene	µg/L	NS	3.4	0.12	0.096 U	0.096 U	0.097 U	0.098 U	0.099 U	0.11 U	0.10 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.62 U	0.62 U	0.63 U	0.64 U	**0.54 J**	0.70 U	0.67 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	0.62 U	0.62 U	0.63 U	0.64 U	0.64 U	**0.42 J**	0.67 U
RDX	µg/L	NS	0.61	0.61	0.096 U	0.096 U	0.097 U	0.098 U	0.099 U	0.11 U	0.10 U
Tetryl	µg/L	NS	360	150	0.096 U	0.096 U	0.097 U	0.098 U	0.099 U	0.11 U	0.10 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed
Due to excessive particulates, samples FWGNTAmw-112c-1679-G\
FWGLNWmw-025c-1674-GW, FWGLL4mw-197c-1654-GW, FWGLI
FWGCPmw-DUP4-1695-GW (FWGCPmw-006C-1662-GW), FWGW

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

Station ID					SCFmw-004	SCFmw-005	SCFmw-006	WBGmw-005	WBGmw-006	WBGmw-007	WBGmw-009
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-004-1685-GW	FWGSCFmw-005-1686-GW	FWGSCFmw-006-1687-GW	FWGWBGmw-005C-1675-GW	FWGWBGmw-006C-1676-GW	FWGWBGmw-007C-1677-GW	FWGWBGmw-009C-1678-GW
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
1,3,5-Trinitrobenzene	µg/L	NS	1100	1100	0.12 U	0.10 U	0.11 U	0.10 U	0.11 U	0.099 U	0.10 U
1,3-Dinitrobenzene	µg/L	NS	3.6	3.7	0.12 U	0.10 U	0.11 U	0.10 U	0.11 U	0.099 U	0.10 U
2,4,6-Trinitrolouene	µg/L	NS	2.2	2.2	0.12 U	0.10 U	0.11 U	**0.062 J**	0.11 U	0.099 U	0.10 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	0.12 U	0.10 U	0.11 U	0.10 U	0.11 U	0.099 U	0.10 U
2,6-Dinitrotoluene	µg/L	NS	36	37	0.12 U	0.10 U	0.11 U	0.10 U	0.11 U	0.099 U	0.10 U
2-Amino-4,6-dinitrotoluene	µg/L	NS	NS	73	0.12 U	0.10 U	0.11 U	0.10 U	0.11 U	0.099 U	0.10 U
2-Nitrotoluene	µg/L	NS	0.049	0.31	0.59 U	0.51 U	0.54 U	0.50 U	0.54 U	0.50 U	0.52 U
3-Nitrotoluene	µg/L	NS	120	3.7	0.59 U	0.51 U	0.54 U	0.50 U	0.54 U	0.50 U	0.52 U
4-Amino-2,6-Dinitrotoluene	µg/L	NS	NS	73	0.12 U	0.10 U	0.11 U	0.10 U	0.11 U	0.099 U	0.10 U
4-Nitrotoluene	µg/L	NS	0.66	4.2	0.59 U	0.51 U	0.54 U	0.50 U	0.54 U	0.50 U	0.52 U
HMX	µg/L	NS	1800	1800	0.12 U	0.10 U	0.11 U	0.10 U	**7.5**	0.099 U	**1.0**
Nitrate-Nitrite	mg/L	1	1	3	0.1 U	0.1 U	0.1 U	N/A	N/A	N/A	N/A
Nitrobenzene	µg/L	NS	3.4	0.12	0.12 U	0.10 U	0.11 U	0.10 U	0.11 U	0.099 U	0.10 U
Nitrocellulose	mg/L	NS	NS	110000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Nitroglycerin	µg/L	NS	4.8	3.7	0.77 U	0.66 U	0.70 U	0.65 U	0.70 U	0.64 U	0.68 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	0.77 U	0.66 U	0.70 U	0.65 U	0.70 U	0.64 U	0.68 U
RDX	µg/L	NS	0.61	0.61	0.12 U	0.10 U	0.11 U	0.10 U	**29 J**	0.099 U	**3.5 J**
Tetryl	µg/L	NS	360	150	0.12 U	0.10 U	0.11 U	**0.057 J**	0.11 U	0.099 U	0.10 U

Notes:
NS = no standard
Bold = detected compound above the MDL
N/A = Not Analyzed
Due to excessive particulates, samples FWGNTAmw-112c-1679-G\
FWGLNWmw-025c-1674-GW, FWGLL4mw-197c-1654-GW, FWGLI
FWGCPmw-DUP4-1695-GW (FWGCPmw-006C-1662-GW), FWGW

Table 3-2. FWGWMP January 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. The inorganics detected in the samples included: aluminum, antimony, arsenic, barium, cadmium, calcium, cobalt, copper, cyanide, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, vanadium, and zinc. The inorganic elements that were detected were compared to facility-wide background levels, and against elements that are considered as essential nutrients to determine if they are to be considered as Site Related Contaminants (SRCs). Calcium, magnesium, iron, potassium, and sodium were eliminated as potential SRCs because they are considered as essential nutrients. Site-specific background levels for inorganic elements are presented in Table 3-4. 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: – LL1mw-084 (337 µg/L), LL2mw-267 (318 µg/L), LL3mw-239 (394 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: – CBPmw-005 (19.7 µg/L J), CBPmw-007 (147 µg/L), CPmw-006 (22.8 µg/L J), DA2mw-106 (109 µg/L), DA2mw-110 (212 µg/L), EBGmw-124 (277 µg/L), EBGmw-126 (138 µg/L), LL4mw-196 (19.9 µg/L J), LL4mw-197 (26.8 µg/L J), LNWmw-025 (70 µg/L), NTAmw-112 (157 µg/L), NTAmw-113 (107 µg/L**),** WBGmw-007 (21.9 µg/L J). 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: – LL3mw-237 (0.13 µg/L J), LL3mw-242 (0.46 µg/L J), SCFmw-001 (1.5 µg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: – CBPmw-001 (0.28 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: – SCFmw-002 (11.4 µg/L), SCFmw-006 (9.3 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: – CBPmw-001 (34.7 µg/L), CBPmw-004 (30.1 µg/L), CBPmw-005 (22.3µg/L), CPmw-005 (47.5 µg/L), EBGmw-123 (46.5 µg/L), EBGmw-124 (22.8 µg/L), EBGmw-126 (15.5 µg/L), NTAmw-112 (17.0 µg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 11.7 µg/L. The MCL for arsenic is 10 µg /L. The Region 9 PRG is 0.045 µg/L.

Barium

- Bedrock Zone: – None. The Groundwater Bedrock Zone Background Criteria (filtered) is 256 µg/L.
- Unconsolidated Zone – Cpmw-005 (155 µg/L), EBGmw-123 (184 µg/L), EBGmw-124 (162 µg/L), EBGmw-126 (198 µg/L), MBSmw-001 (126 µg/L). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 82.1 µg/L.
  The MCL for barium is 2000 µg /L. The Region 9 PRG is 2600 µg/L.

Cadmium

- Bedrock Zone: - FBQmw-169 (0.75 µg/L), LL1mw-082 (0.20 µg/L J), LL1mw-084 (21.8 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: - FBQmw-169 (9.3 µg/L), LL1mw-081 (4.6 µg/L J), LL1mw-082 (16.4 µg/L), LL1mw-084 (20.6 µg/L J), LL2mw-266 (13 µg/L), LL2mw-267 (2.2 µg/L J), LL3mw-239 (2.5 µg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: - CBPmw-001 (2.8 µg/L J), CBPmw-008 (1.6 µg/L J), CPmw-005 (3.1 µg/L J), DA2mw-106 (8.6 µg/L), LNWmw-025 (2.1 µg/L J), WBGmw-005 (5.0 µg/L). 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 (9.4 µg/L). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
  The Groundwater Bedrock Zone Background Criteria is 0 µg/L.
- Unconsolidated Zone: - 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 µg/L J), LL2mw-269 (0.0084 µg/L J), LL3mw0242 (0.0056 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 is 0.2 mg/L. The Region 9 PRG is 0.73 mg/L.

Lead

- Bedrock Zone: - LL1mw-084 (2.7 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 is 15 µg/L. The Region 9 PRG is 880 µg/L.

Manganese

- Bedrock Zone: - FBQmw-169 (4,790 µg/L), SCFmw-005 (1870 µg/L), LL1mw-081 (2030 µg/L), LL1mw-082 (2,660 µg/L), LL2mw-269 (1,570 µg/L. The Groundwater Bedrock Zone Background Criteria (filtered) is 1,340 µg/L.
- Unconsolidated Zone: - DA2mw-106 (4,850 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.

Mercury

- Bedrock Zone – LL3mw-238 µg/L J), SCFmw-006 (0.22 µg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L
- Unconsolidated Zone – CPmw-006 (0.33 µg/L), EBGmw-126 (0.25 µg/L), WBGmw-007 (0.23 µg/L J). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L. The Region 9 PRG is 11 µg/L.

Nickel

- Bedrock Zone: - None. The Groundwater Bedrock Zone Background Criteria (filtered) is 83.4 µg/L.
- Unconsolidated Zone: - CBPmw-001 (3.6 µg/L J), CPmw-005 (3.8 µg/L J), DA2mw-106 (7.9 µg/L J), WBGmw-005 (2.6 µg/L J). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L.
  There is no MCL for Nickel. The Region 9 PRG is 730 µg/L.

Selenium

- Bedrock Zone: – LL3mw-238 (5.8 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 Selenium is 50 µg/L. The Region 9 PRG s 180 µg/L.

Silver

- Bedrock Zone: – None. The Groundwater Bedrock Zone Background Criteria (filtered) is 0 µg/L.
- Unconsolidated Zone: – CPmw-005 (3.8 µg/L J). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 µg/L.
  The MCL for Silver is 100 µg/L. The Region 9 PRG is 180 µg/L.

Vanadium

- Bedrock Zone: - None. The Groundwater Bedrock Zone Background Criteria (filtered) is 83.4 μg/L.). The Groundwater Bedrock Zone Background Criteria (filtered) is 0 μg/L.
- Unconsolidated Zone: - CPmw-005 (2.5 μg/L J B). The Groundwater Unconsolidated Zone Background Criteria (filtered) is 0 μg/L. There is no MCL for Vanadium. The Region 9 PRG is 36 μg/L.

Zinc

- Bedrock Zone: - LL1mw-082 (68.0 μg/L), LL1mw-084 (68.5 μg/L J). The Groundwater Bedrock Zone Background Criteria (filtered) is 52.3 μg/L.
- Unconsolidated Zone: - None. 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.

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 – FBQmw-274 (3.1 μg/L J B), and LL1mw-081 (1.6 μg/L J B). There is no MCL for Acetone. The Region 9 PRG is 5500 μg/L.

- Carbon Disulfide – SCFmw-001 (5.7 μg/L), SCFmw-002 (1.2 μg/L), and SCFmw-004 (0.53 μg/L J). There is no MCL for Carbon Disulfide. The Region 9 PRG is 1000 μg/L.

- Carbon Tetrachloride – LL3mw-239 (0.27 μg/L J). The MCL for Carbon tetrachloride is 5 μg/L. The Region 9 PRG is 0.17 μg/L.

- Chloroform – LL3mw-239 (0.41 μg/L J B). There is no MCL for Chloroform. The Region 9 PRG is 0.17 μg/L.

- Toluene – NTAmw-113 (0.21 μg/L J). The MCL for Toluene is 1,000 μg/L. The Region 9 PRG is 720 μg/L.

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 (0.27 μg/L J).

- Chloroform at a concentration exceeding the Region 9 PRG of 0.17 μg/L at LL3mw-239 (0.41 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 – CBPmw-004 (1.1 μg/L J), CBPmw-005 (1.3 μg/L J), CBPmw-006 (2.2 μg/L J), FBQmw-169 (0.83 μg/L J), FBQmw-173 (1.5 μg/L J B), LL1mw-067 (1.0 μg/L J), LL1mw-082 (0.85 μg/L J), LL1mw-084 (0.87 μg/L J), LL2mw-266 (2.1 μg/L J B), LL2mw-267 (3.2 μg/L J B), LL2mw-269 (1.6 μg/L J B), LL3mw-236 (2.2 μg/L J B), LL3mw-237 (1.9 μg/L J B), LL3mw-242 (29 μg/L), LL3mw-243 (2.8 μg/L J B), LNWmw-025 (0.81 μg/L J), NTAmw-113 (3.0 μg/L J B), SCFmw-001 (3.0 μg/L J B), SCFmw-002 (2.2 μg/L J B), and SCFmw-004 (1.7 μg/L J B). There is no MCL for Bis(2-Ethylhexyl)phthalate. The Region 9 PRG is 4.8 μg/L.

- Benzyl Alcohol –WBGmw-006 (0.43 μg/L J). There is no MCL for Benzyl Alcohol. The Region 9 PRG is 1100 μg/L.

- Di-n-butyl phthalate –FBQmw-172 (0.72 μg/L J B), FBQmw-173 (0.69 μg/L J B), LL2mw-266 (0.79 μg/L J B), LL2mw-267 (0.76 μg/L J B), LL2mw-269 (0.72 μg/L J B), LL3mw-236 (1.0 μg/L B), LL3mw-237 (0.90 μg/L J B), LL3mw-242 (1.0 μg/L B), LL3mw-243 (1.0 μg/L B), SCFmw-001 (0.72 μg/L J B), SCFmw-002 (0.69 μg/L J B), and SCFmw-004 (0.72 μg/L J B). There is no MCL or Region 9 PRG for Di-n-butyl phthalate.

Table 3-3. FWGWMP January 2011 Inorganics Analytical Results

Station ID					CBPmw-001	CBPmw-004	CBPmw-005	CBPmw-007	CBPmw-008	CPmw-002	CPmw-005
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCBPmw-001C-1655-GF	FWGCBPmw-004C-1656-GF	FWGCBPmw-005C-1657-GF	FWGCBPmw-007C-1658-GF	FWGCBPmw-008C-1659-GF	FWGCPmw-002C-1660-GF	FWGCPmw-005C-1661-GF
Date Collected					1/20/2011	1/20/2011	1/19/2011	1/20/2011	1/19/2011	1/20/2011	1/20/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	37000	50.0 U	50.0 U	**19.7 J**	**147**	50.0 U	50.0 U	50.0 U
Antimony	µg/L	6	15	15	**0.28 J**	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	**34.7**	**30.1**	**22.3**	**10.1**	**5.8**	5.0 U	**47.5**
Barium	µg/L	2000	2600	7300	**8.0 J**	**65.1**	**45.3**	**14.0**	**10.2**	**51.5**	**155**
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	**334000**	**66100**	**72700**	**152000**	**204000**	**96700**	**58200**
Chromium	µg/L	100	110	55000*	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**3.3 JB**
Cobalt	µg/L	NS	730	11	**2.8 J**	5.0 U	5.0 U	5.0 U	**1.6 J**	5.0 U	**3.1 J**
Copper	µg/L	1300	1500	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ
Iron	µg/L	300	11000	26000	**1350**	**164**	**580**	50.0 U	50.0 U	50.0 U	**424**
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	**170000**	**32800**	**34600**	**78200**	**91600**	**27900**	**24100**
Manganese	µg/L	50	880	880	**150**	**30.1**	**54.1**	**65.5**	**232**	**216**	**34.7**
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	**3.6 J**	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	**3.8 J**
Potassium	µg/L	NS	NS	NS	**5790**	**2000**	**3600**	**4310**	**4510**	**721 J**	**2420**
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	**3.8 J**
Sodium	µg/L	NS	NS	NS	**59900 J**	**17000 J**	**25000 J**	**104000 J**	**85900 J**	**12300 J**	**33000 J**
Thallium	µg/L	2	2.4	NS	0.22 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	NS	36	180	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	**2.5 JB**
Zinc	µg/L	5000	11000	11000	**3.0 JB**	10.0 U	10.0 U	**3.3 JB**	10.0 U	**6.3 JB**	**2.5 JB**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-3. FWGWMP January 2011 Inorganics Analytical Results

Station ID					CPmw-006	DA2mw-106	DA2mw-107	DA2mw-110	EBGmw-123	EBGmw-124	EBGmw-126
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCPmw-006C-1662-GF	FWGDA2mw-106C-1663-GF	FWGDA2mw-107C-1664-GF	FWGDA2mw-110C-1665-GF	FWGEBGmw-123C-1666-GF	FWGEBGmw-124C-1667-GF	FWGEBGmw-126C-1668-GF
Date Collected					1/20/2011	1/21/2011	1/21/2011	1/21/2011	1/20/2011	1/20/2011	1/20/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	37000	**22.8 J**	**109**	50.0 U	**212**	50.0 U	**277**	**138**
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	5.0 U	5.0 U	5.0 U	**46.5**	**22.8**	**15.5**
Barium	µg/L	2000	2600	7300	**62.0**	**43.1**	**34.0**	**11.1**	**184**	**162**	**198**
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	**66400**	**126000**	**85500**	**54500**	**90800**	**73800**	**79300**
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	**8.6**	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 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ
Iron	µg/L	300	11000	26000	**1710**	**518**	**310**	50.0 U	**4020**	**1860**	**4380**
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	**25700**	**43200**	**28500**	**16700**	**15700**	**15400**	**13600**
Manganese	µg/L	50	880	880	**656**	**4850**	**322**	**37.4**	**118**	**51.0**	**129**
Mercury	µg/L	2	11	0.57	**0.33**	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	**0.25**
Nickel	µg/L	NS	730	730	10.0 U	**7.9 J**	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Potassium	µg/L	NS	NS	NS	**3820**	**1420**	**1530**	**1050**	**1010**	**1250**	**1190**
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	**23400 J**	**13800 J**	**9260 J**	**4540 J**	**7410 J**	**14100 J**	**6620 J**
Thallium	µg/L	2	2.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
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 JB**	**6.8 JB**	**2.4 JB**	10.0 U	10.0 U	**5.1 JB**	**10.3 B**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-3. FWGWMP January 2011 Inorganics Analytical Results

Station ID					EBGmw-129	FBQmw-169	FBQmw-172	FBQmw-173	FBQmw-174	LL1mw-067	LL1mw-081
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGEBGmw-129C-1669-GF	FWGFBQmw-169C-1670-GF	FWGFBQmw-172C-1671-GF	FWGFBQmw-173C-1672-GF	FWGFBQmw-174C-1673-GF	FWGLL1mw-067C-1640-GF	FWGLL1mw-081C-1641-GF
Date Collected					1/20/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011	1/17/2011	1/17/2011
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	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	7300	**31.5**	**42.5**	**34.3**	**10.3**	**15.9**	**34.1**	**20.6**
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	**0.75**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**49800**	**20000**	**73900**	**7890**	**6870**	**50300**	**65500**
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	**9.3**	5.0 U	5.0 U	5.0 U	5.0 U	**4.6 J**
Copper	µg/L	1300	1500	1500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide	mg/L	0.2	0.73	0.73	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 U	0.010 U
Iron	µg/L	300	11000	26000	**1840**	**378**	50.0 U	**305**	50.0 U	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	**11100**	**13400**	**31800**	**3080**	**2120**	**60900**	**13700**
Manganese	µg/L	50	880	880	**488**	**4790**	**30.2**	**328**	**3.0 J**	**67.7**	**2030**
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	**11.1**	10.0 U	**3.6 J**	10.0 U	**46.6**	**9.0 J**
Potassium	µg/L	NS	NS	NS	**972 J**	**1920**	**702 J**	**1290**	**946 J**	**1290**	**2540**
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	**3580 J**	**27900**	**7190**	**1720**	**867 J**	**5200 J**	**2140 J**
Thallium	µg/L	2	2.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
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	**11.8**	10.0 U	**5.7 J**	**3.6 JB**	**7.9 J**	**31.0**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-3. FWGWMP January 2011 Inorganics Analytical Results

Station ID					LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269	LL3mw-236
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-081C-1641-GF	FWGLL1mw-084C-1643-GF	FWGLL1mw-085C-1644-GF	FWGLL2mw-266C-1645-GF	FWGLL2mw-267C-1646-GF	FWGLL2mw-269C-1647-GF	FWGLL3mw-236C-1648-GF
Date Collected					1/17/2011	1/17/2011	1/17/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	37000	50.0 U	**337**	50.0 U	50.0 U	**318**	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	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	7300	**11.1**	**17.8**	**16.3**	**21.0**	**14.9**	**232**	10.0 U
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	**0.20 J**	**1.8**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium	µg/L	NS	NS	NS	**39100**	**46400**	**70000**	**24500**	**37000**	**29800**	**20700**
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	**16.4**	**20.6**	5.0 U	**13.0**	**2.2 J**	5.0 U	5.0 U
Copper	µg/L	1300	1500	1500	5.0 U	**9.4**	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	**0.0064 J**	0.010 UJ	**0.0084 J**	0.010 UJ
Iron	µg/L	300	11000	26000	50.0 U	50.0 U	50.0 U	**2250**	**660**	**6590**	50.0 U
Lead	µg/L	15	NS	NS	3.0 U	**2.7 J**	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	µg/L	NS	NS	NS	**16000**	**3190**	**19700**	**11000**	**18000**	**14400**	**12500**
Manganese	µg/L	50	880	880	**2660**	**222**	**179**	**936**	**547**	**1570**	**129**
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	**31.7**	**37.4**	**2.7 J**	**11.4**	**3.8 J**	10.0 U	**3.5 J**
Potassium	µg/L	NS	NS	NS	**2050**	**2590**	**1670**	**1420**	**731 J**	**3390**	**1290**
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	**1290 J**	**3330 J**	**1560 J**	**10300**	**16600**	**6630**	**4190**
Thallium	µg/L	2	2.4	NS	1.0 U	0.71 UJ	1.0 U	1.0 U	1.0 U	1.0 U	0.28 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	**68.0**	**68.5**	10.0 U	**3.8 J**	**3.8 J**	10.0 U	**5.2 J**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-3. FWGWMP January 2011 Inorganics Analytical Results

Station ID					LL3mw-237	LL3mw-238	LL3mw-239	LL3mw-242	LL3mw-243	LL4mw-196	LL4mw-197
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-237C-1649-GF	FWGLL3mw-238C-1650-GF	FWGLL3mw-239C-1651-GF	FWGLL3mw-242C-1652-GF	FWGLL3mw-243C-1703-GF	FWGLL4mw-196C-1653-GF	FWGLL4mw-197C-1654-GF
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/18/2011	1/18/2011	1/19/2011	1/19/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	37000	50.0 U	50.0 U	**394**	50.0 U	50.0 U	**19.9 J**	**26.8 J**
Antimony	µg/L	6	15	15	**0.13 J**	2.0 U	2.0 U	2.0 U	**0.46 J**	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	0.045	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	7300	10.0 U	**8.9 J**	**19.2**	**4.5 J**	**17.9**	**43.4**	**20.8**
Beryllium	µg/L	4	73	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
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	**31100**	**54200**	**8790**	**13100**	**17800**	**60300**	**109000**
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	**2.5 J**	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 UJ	0.010 UJ	0.010 UJ	0.010 UJ	**0.0056 J**	0.010 UJ	0.010 UJ
Iron	µg/L	300	11000	26000	50.0 U	50.0 U	**818**	50.0 U	50.0 U	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	**8980**	**5950**	**4520**	**5380**	**6640**	**17500**	**17200**
Manganese	µg/L	50	880	880	**91.6**	10.0 U	**182**	**29.5**	10.0 U	**41.9**	**5.0 J**
Mercury	µg/L	2	11	0.57	0.20 U	**0.26 J**	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	NS	730	730	**5.2 J**	10.0 U	**7.3 J**	**5.9 J**	**2.2 J**	10.0 U	10.0 U
Potassium	µg/L	NS	NS	NS	**1310**	**2210**	**1250**	**872 J**	**1210**	**703 J**	**1060**
Selenium	µg/L	50	180	180	5.0 U	**5.8**	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	**4170**	**4870 J**	**17000 J**	**11300**	**3790**	**1920 J**	**1270 J**
Thallium	µg/L	2	2.4	NS	1.0 U	0.19 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	**3.8 J**	**2.8 JB**	**8.0 JB**	**6.7 J**	**3.4 J**	10.0 U	10.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-3. FWGWMP January 2011 Inorganics Analytical Results

Station ID					LNWmw-025	MBSmw-001	NTAmw-112	NTAmw-113	SCFmw-001	SCFmw-002	SCFmw-003
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLNWmw-025C-1674-GF	FWGMBSmw-001C-1681-GF	FWGNTAmw-112C-1679-GF	FWGNTAmw-113C-1680-GF	FWGSCFmw-001-1682-GF	FWGSCFmw-002-1683-GF	FWGSCFmw-003-1684-GF
Date Collected					1/19/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
Aluminum	µg/L	200	36000	37000	**70.0**	50.0 U	**157**	**107**	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	**1.5 J**	2.0 U	2.0 U
Arsenic	µg/L	10	0.045	0.045	**3.7 J**	**4.7 J**	**17.0**	**10.7**	5.0 U	**11.4**	5.0 U
Barium	µg/L	2000	2600	7300	**32.6**	**126**	**35.1**	**38.7**	10.0 U	**42.5**	**76.2**
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	**39700**	**86300**	**133000**	**89800**	**49800**	**79700**	**66700**
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	**2.1 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	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ
Iron	µg/L	300	11000	26000	**1810**	50.0 U	**1090**	50.0 U	50.0 U	50.0 U	**80.9 B**
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	**11700**	**22900**	**40600**	**32800**	**15200**	**25300**	**26500**
Manganese	µg/L	50	880	880	**731**	**375**	**475**	**277**	**606**	**72.7**	**239**
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	10.0 U	10.0 U	10.0 U	10.0 U
Potassium	µg/L	NS	NS	NS	**935 J**	**1190**	**1330**	**1600**	**14600**	**2140**	**1410**
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	**6470 J**	**11200**	**18600**	**14900**	**17200**	**20500**	**6170 J**
Thallium	µg/L	2	2.4	NS	0.20 UJ	0.36 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	10.0 U	10.0 U	**2.9 J**	10.0 U	**2.6 J**	10.0 U	10.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-3. FWGWMP January 2011 Inorganics Analytical Results

Station ID					SCFmw-004	SCFmw-005	SCFmw-006	WBGmw-005	WBGmw-006	WBGmw-007	WBGmw-009
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-004-1685-GF	FWGSCFmw-005-1686-GF	FWGSCFmw-006-1687-GF	FWGWBGmw-005C-1675-GF	FWGWBGmw-006C-1676-GF	FWGWBGmw-007C-1677-GF	FWGWBGmw-009C-1678-GF
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011
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	**21.9 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	5.0 U	**9.3**	**10.5**	5.0 U	5.0 U	5.0 U
Barium	µg/L	2000	2600	7300	**96.7**	**18.8**	**118**	**58.0**	**20.0**	**33.8**	**11.5**
Beryllium	µg/L	4	73	73	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
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	**149000**	**83100**	**57200**	**46600**	**65600**	**60900**	**51800**
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	**5.0**	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 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ	0.010 UJ
Iron	µg/L	300	11000	26000	50.0 U	**5090**	**84.0 B**	**8760**	50.0 U	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	**59300**	**39900**	**15500**	**15200**	**21900**	**15700**	**15800**
Manganese	µg/L	50	880	880	**708**	**1870**	**164**	**1310**	**46.8**	**100**	**82.4**
Mercury	µg/L	2	11	0.57	0.20 U	0.20 U	**0.22 J**	0.20 U	0.20 U	**0.23 J**	0.20 U
Nickel	µg/L	NS	730	730	10.0 U	10.0 U	10.0 U	**2.6 J**	10.0 U	10.0 U	10.0 U
Potassium	µg/L	NS	NS	NS	**2580**	**2300**	**7100**	**789 J**	**753 J**	**1100**	**651 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	**13000**	**6950 J**	**10900 J**	**10800 J**	**5660 J**	**4230 J**	**3880 J**
Thallium	µg/L	2	2.4	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.15 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	10.0 UJ	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	**2.4 JB**

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-3. FWGWMP January 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

Table 3-5. FWGWMP January 2011 VOCs Analytical Results

Station ID					CBPmw-001	CBPmw-004	CBPmw-005	CBPmw-007	CBPmw-008	CPmw-002	CPmw-005
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCBPmw-001C-1655-GW	FWGCBPmw-004C-1656-GW	FWGCBPmw-005C-1657-GW	FWGCBPmw-007C-1658-GW	FWGCBPmw-008C-1659-GW	FWGCPmw-002C-1660-GW	FWGCPmw-005C-1661-GW
Date Collected					1/20/2011	1/20/2011	1/19/2011	1/20/2011	1/19/2011	1/20/2011	1/20/2011
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 UJ	10 UJ	10 U	10 UJ	10 U	10 UJ	10 UJ
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 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:

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP January 2011 VOCs Analytical Results

Station ID					CPmw-006	DA2mw-106	DA2mw-107	DA2mw-110	EBGmw-123	EBGmw-124	EBGmw-126
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCPmw-006C-1662-GW	FWGDA2mw-106C-1663-GW	FWGDA2mw-107C-1664-GW	FWGDA2mw-110C-1665-GW	FWGEBGmw-123C-1666-GW	FWGEBGmw-124C-1667-GW	FWGEBGmw-126C-1668-GW
Date Collected					1/20/2011	1/21/2011	1/21/2011	1/21/2011	1/20/2011	1/20/2011	1/20/2011
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 UJ	10 U	10 U	10 U	10 UJ	10 UJ	10 UJ
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 UJ	2.0 U	2.0 U	2.0 U
o-xylene	µg/L	NS	NS	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP January 2011 VOCs Analytical Results

Station ID					EBGmw-129	FBQmw-169	FBQmw-172	FBQmw-173	FBQmw-174	LL1mw-067	LL1mw-081
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGEBGmw-129C-1669-GW	FWGFBQmw-169C-1670-GW	FWGFBQmw-172C-1671-GW	FWGFBQmw-173C-1672-GW	FWGFBQmw-174C-1673-GW	FWGLL1mw-067C-1640-GW	FWGLL1mw-081C-1641-GW
Date Collected					1/20/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011	1/17/2011	1/17/2011
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 UJ	10 U	10 U	10 U	**3.1 JB**	10 U	**1.6 JB**
Benzene	µg/L	5	0.35	0.41	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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 UJ
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 UJ	1.0 UJ
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP January 2011 VOCs Analytical Results

Station ID					LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269	LL3mw-236
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-082C-1642-GW	FWGLL1mw-084C-1643-GW	FWGLL1mw-085C-1644-GW	FWGLL2mw-266C-1645-GW	FWGLL2mw-267C-1646-GW	FWGLL2mw-269C-1647-GW	FWGLL3mw-236C-1648-GW
Date Collected					1/17/2011	1/17/2011	1/17/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011
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 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 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP January 2011 VOCs Analytical Results

Station ID					LL3mw-237	LL3mw-238	LL3mw-239	LL3mw-242	LL3mw-243	LL4mw-196	LL4mw-197
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-237C-1649-GW	FWGLL3mw-238C-1650-GW	FWGLL3mw-239C-1651-GW	FWGLL3mw-242C-1652-GW	FWGLL3mw-243C-1703-GW	FWGLL4mw-196C-1653-GW	FWGLL4mw-197C-1654-GW
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/18/2011	1/18/2011	1/19/2011	1/19/2011
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	**0.27 J**	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	NS	110	91	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	NS	4.6	21000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	NS	0.17	0.19	1.0 U	1.0 U	**0.41 JB**	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	2.0 U
o-xylene	µg/L	NS	NS	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP January 2011 VOCs Analytical Results

Station ID					LNWmw-025	MBSmw-001	NTAmw-112	NTAmw-113	SCFmw-001	SCFmw-002	SCFmw-003
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLNWmw-025C-1674-GW	FWGMBSmw-001C-1681-GW	FWGNTAmw-112C-1679-GW	FWGNTAmw-113C-1680-GW	FWGSCFmw-001-1682-GW	FWGSCFmw-002-1683-GW	FWGSCFmw-003-1684-GW
Date Collected					1/19/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011
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	**5.7**	**1.2**	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 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ
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	**0.21 J**	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP January 2011 VOCs Analytical Results

Station ID					SCFmw-004	SCFmw-005	SCFmw-006	WBGmw-005	WBGmw-006	WBGmw-007	WBGmw-009
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-004-1685-GW	FWGSCFmw-005-1686-GW	FWGSCFmw-006-1687-GW	FWGWBGmw-005C-1675-GW	FWGWBGmw-006C-1676-GW	FWGWBGmw-007C-1677-GW	FWGWBGmw-009C-1678-GW
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011
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	**0.53 J**	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 UJ	2.0 UJ	2.0 U	2.0 UJ
o-xylene	µg/L	NS	NS	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	100	1600	1600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	0.1	0.11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	720	2300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	µg/L	10000	210	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-dichloroethene	µg/L	100	120	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	NS	0.4	0.43	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.028	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	0.02	0.016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

NS = no standard

Bold = detected compound above the MDL

Table 3-5. FWGWMP January 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.

- Phenol – SCFmw-006 (1.2 μg/L). There is no MCL for Phenol. The Region 9 PRG is 11000 μg/L.

As shown in Table 3-6 the following SVOCs were detected at a level exceeding either the MCL or the Region 9 PRGs:

- Bis(2-Ethylhexyl)phthalate at a concentration exceeding the Region 9 PRG of 4.8 μg/L at LL3mw-242 (29 μg/L).

3.2.5 Pesticides and Polychlorinated Biphenyls (PCBs)

Pesticides and PCBs analytical results are summarized in Table 3-7. The following pesticides and PCBs were detected above the MDL for this sampling event.

- Beta-BHC – CBPmw-007 (0.017 μg/L J), LL3mw-238 (0.15 μg/L J) and LL3mw-239 (0.011 μg/L J). There is no MCL for beta BHC. The Region 9 PRG is 0.037 μg/L.

As shown in Table 3-7 the only pesticide detected at a level exceeding either the MCL or the Region 9 PRG was beta-BHC at a concentration of 0.15 μg/L J at LL3mw-238 (the Region 9 PRG is 0.037 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.

LL1mw-067 (0.020 μg/L J)
LL1mw-082 (0.041 μg/L J)
LL1mw-084 (0.083 μg/L)
LL2mw-266 (0.023 μg/L J)
LL3mw-236 (0.023 μg/L J)

None of 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 3-6. FWGWMP January 2011 SVOCs Analytical Results

Station ID					CBPmw-001	CBPmw-004	CBPmw-005	CBPmw-007	CBPmw-008	CPmw-002	CPmw-005
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCBPmw-001C-1655-GW	FWGCBPmw-004C-1656-GW	FWGCBPmw-005C-1657-GW	FWGCBPmw-007C-1658-GW	FWGCBPmw-008C-1659-GW	FWGCPmw-002C-1660-GW	FWGCPmw-005C-1661-GW
Date Collected					1/20/2011	1/20/2011	1/19/2011	1/20/2011	1/19/2011	1/20/2011	1/20/2011
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 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	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 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	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 January 2011 SVOCs Analytical Results

Station ID					CBPmw-001	CBPmw-004	CBPmw-005	CBPmw-007	CBPmw-008	CPmw-002	CPmw-005
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCBPmw-001C-1655-GW	FWGCBPmw-004C-1656-GW	FWGCBPmw-005C-1657-GW	FWGCBPmw-007C-1658-GW	FWGCBPmw-008C-1659-GW	FWGCPmw-002C-1660-GW	FWGCPmw-005C-1661-GW
Date Collected					1/20/2011	1/20/2011	1/19/2011	1/20/2011	1/19/2011	1/20/2011	1/20/2011
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	10 U	**1.1 J**	**1.3 J**	10 U	10 U	10 U	10 U
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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 UJ	10 U	10 UJ	10 U	10 U
Hexachloroethane	µg/L	NS	4.8	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	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 January 2011 SVOCs Analytical Results

Station ID					CPmw-006	DA2mw-106	DA2mw-107	DA2mw-110	EBGmw-123	EBGmw-124	EBGmw-126
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCPmw-006C-1662-GW	FWGDA2mw-106C-1663-GW	FWGDA2mw-107C-1664-GW	FWGDA2mw-110C-1665-GW	FWGEBGmw-123C-1666-GW	FWGEBGmw-124C-1667-GW	FWGEBGmw-126C-1668-GW
Date Collected					1/20/2011	1/21/2011	1/21/2011	1/21/2011	1/20/2011	1/20/2011	1/20/2011
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 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	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 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	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 January 2011 SVOCs Analytical Results

Station ID					CPmw-006	DA2mw-106	DA2mw-107	DA2mw-110	EBGmw-123	EBGmw-124	EBGmw-126
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCPmw-006C-1662-GW	FWGDA2mw-106C-1663-GW	FWGDA2mw-107C-1664-GW	FWGDA2mw-110C-1665-GW	FWGEBGmw-123C-1666-GW	FWGEBGmw-124C-1667-GW	FWGEBGmw-126C-1668-GW
Date Collected					1/20/2011	1/21/2011	1/21/2011	1/21/2011	1/20/2011	1/20/2011	1/20/2011
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 UJ	10 UJ	10 UJ	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	**2.2 J**	10 U	10 U	10 U	10 U	10 U	10 U
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	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 January 2011 SVOCs Analytical Results

Station ID					EBGmw-129	FBQmw-169	FBQmw-172	FBQmw-173	FBQmw-174	LL1mw-067	LL1mw-081
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGEBGmw-129C-1669-GW	FWGFBQmw-169C-1670-GW	FWGFBQmw-172C-1671-GW	FWGFBQmw-173C-1672-GW	FWGFBQmw-174C-1673-GW	FWGLL1mw-067C-1640-GW	FWGLL1mw-081C-1641-GW
Date Collected					1/20/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011	1/17/2011	1/17/2011
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	1.2 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	1.2 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	1.2 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	1.2 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	1.2 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	6.2 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	6.2 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	2.5 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	2.5 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	6.2 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.2 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	6.2 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	1.2 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	1.2 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	0.25 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	1.2 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	2.5 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	2.5 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	6.2 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	2.5 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.2 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	2.5 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	2.5 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	2.5 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	2.5 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	1.2 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	2.5 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	6.2 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	0.25 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	0.25 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	0.25 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	0.25 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	0.25 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	0.25 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	0.25 U	0.20 U

Table 3-6. FWGWMP January 2011 SVOCs Analytical Results

Station ID					EBGmw-129	FBQmw-169	FBQmw-172	FBQmw-173	FBQmw-174	LL1mw-067	LL1mw-081
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGEBGmw-129C-1669-GW	FWGFBQmw-169C-1670-GW	FWGFBQmw-172C-1671-GW	FWGFBQmw-173C-1672-GW	FWGFBQmw-174C-1673-GW	FWGLL1mw-067C-1640-GW	FWGLL1mw-081C-1641-GW
Date Collected					1/20/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011	1/17/2011	1/17/2011
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	0.25 U	0.20 U
Benzoic acid	µg/L	NS	150000	150000	10 U	10 U	10 U	10 U	10 U	12 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	6.2 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	1.2 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	1.2 U	1.0 U
bis(2-Ethylhexyl) phthalate	µg/L	NS	4.8	4.8	10 U	**0.83 JB**	**1.6 JB**	**1.5 JB**	10 U	**1.0 J**	10 U
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2 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	1.2 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	0.25 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	0.25 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	1.2 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	1.2 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	1.2 U	1.0 U
Di-n-butyl phthalate	µg/L	NS	NS	NS	1.0 U	1.0 U	**0.77 JB**	**0.69 JB**	1.0 U	1.2 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	1.2 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	0.25 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	0.25 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	0.25 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	1.2 U	1.0 U
Hexachlorocyclopentadiene	µg/L	50	220	220	10 U	10 UJ	10 UJ	10 UJ	10 UJ	12 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	1.2 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	0.25 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	1.2 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	0.25 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	1.2 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	1.2 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	1.2 U	1.0 U
Pentachlorophenol	µg/L	1	0.56	0.56	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.2 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.25 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	1.2 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	0.25 U	0.20 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

Table 3-6. FWGWMP January 2011 SVOCs Analytical Results

Station ID					LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269	LL3mw-236
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-082C-1642-GW	FWGLL1mw-084C-1643-GW	FWGLL1mw-085C-1644-GW	FWGLL2mw-266C-1645-GW	FWGLL2mw-267C-1646-GW	FWGLL2mw-269C-1647-GW	FWGLL3mw-236C-1648-GW
Date Collected					1/17/2011	1/17/2011	1/17/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011
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 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	**1.8 J**	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 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	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 January 2011 SVOCs Analytical Results

Station ID					LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269	LL3mw-236
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-082C-1642-GW	FWGLL1mw-084C-1643-GW	FWGLL1mw-085C-1644-GW	FWGLL2mw-266C-1645-GW	FWGLL2mw-267C-1646-GW	FWGLL2mw-269C-1647-GW	FWGLL3mw-236C-1648-GW
Date Collected					1/17/2011	1/17/2011	1/17/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011
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	**0.85 J**	**0.87 J**	10 U	**2.1 JB**	**3.2 JB**	**1.6 JB**	**2.2 JB**
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	**1.3**	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	**0.79 JB**	**0.76 JB**	**0.72 JB**	**1.0 B**
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 UJ	10 UJ	10 UJ	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 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	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 January 2011 SVOCs Analytical Results

Station ID					LL3mw-237	LL3mw-238	LL3mw-239	LL3mw-242	LL3mw-243	LL4mw-196	LL4mw-197
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-237C-1649-GW	FWGLL3mw-238C-1650-GW	FWGLL3mw-239C-1651-GW	FWGLL3mw-242C-1652-GW	FWGLL3mw-243C-1703-GW	FWGLL4mw-196C-1653-GW	FWGLL4mw-197C-1654-GW
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/18/2011	1/18/2011	1/19/2011	1/19/2011
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 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	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 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	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 January 2011 SVOCs Analytical Results

Station ID					LL3mw-237	LL3mw-238	LL3mw-239	LL3mw-242	LL3mw-243	LL4mw-196	LL4mw-197
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-237C-1649-GW	FWGLL3mw-238C-1650-GW	FWGLL3mw-239C-1651-GW	FWGLL3mw-242C-1652-GW	FWGLL3mw-243C-1703-GW	FWGLL4mw-196C-1653-GW	FWGLL4mw-197C-1654-GW
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/18/2011	1/18/2011	1/19/2011	1/19/2011
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	**1.9 JB**	10 U	10 U	**29**	**2.8 JB**	10 U	10 U
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	**0.90 JB**	1.0 U	1.0 U	**1.0 B**	**1.0 B**	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 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	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 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	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 January 2011 SVOCs Analytical Results

Station ID					LNWmw-025	MBSmw-001	NTAmw-112	NTAmw-113	SCFmw-001	SCFmw-002	SCFmw-003
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLNWmw-025C-1674-GW	FWGMBSmw-001C-1681-GW	FWGNTAmw-112C-1679-GW	FWGNTAmw-113C-1680-GW	FWGSCFmw-001-1682-GW	FWGSCFmw-002-1683-GW	FWGSCFmw-003-1684-GW
Date Collected					1/19/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011
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 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	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 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	NS	NS	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	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 January 2011 SVOCs Analytical Results

Station ID					LNWmw-025	MBSmw-001	NTAmw-112	NTAmw-113	SCFmw-001	SCFmw-002	SCFmw-003
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLNWmw-025C-1674-GW	FWGMBSmw-001C-1681-GW	FWGNTAmw-112C-1679-GW	FWGNTAmw-113C-1680-GW	FWGSCFmw-001-1682-GW	FWGSCFmw-002-1683-GW	FWGSCFmw-003-1684-GW
Date Collected					1/19/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011
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	**0.81 J**	10 U	10 U	**3.0 JB**	**3.0 JB**	**2.2 JB**	10 U
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	**0.72 JB**	**0.69 JB**	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 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	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 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	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 January 2011 SVOCs Analytical Results

Station ID					SCFmw-004	SCFmw-005	SCFmw-006	WBGmw-005	WBGmw-006	WBGmw-007	WBGmw-009
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-004-1685-GW	FWGSCFmw-005-1686-GW	FWGSCFmw-006-1687-GW	FWGWBGmw-005C-1675-GW	FWGWBGmw-006C-1676-GW	FWGWBGmw-007C-1677-GW	FWGWBGmw-009C-1678-GW
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011
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 UJ	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 UJ	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 UJ	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 UJ	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	NS	73	73	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
2,4-Dinitrotoluene	µg/L	NS	73	0.22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	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 UJ	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 UJ	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 UJ	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 U	5.0 U	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 UJ	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 UJ	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 UJ	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 January 2011 SVOCs Analytical Results

Station ID					SCFmw-004	SCFmw-005	SCFmw-006	WBGmw-005	WBGmw-006	WBGmw-007	WBGmw-009
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-004-1685-GW	FWGSCFmw-005-1686-GW	FWGSCFmw-006-1687-GW	FWGWBGmw-005C-1675-GW	FWGWBGmw-006C-1676-GW	FWGWBGmw-007C-1677-GW	FWGWBGmw-009C-1678-GW
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011
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 UJ	10 U	10 U
Benzyl alcohol	µg/L	NS	11000	3700	5.0 U	5.0 U	5.0 U	5.0 U	**0.43 J**	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	**1.7 JB**	10 U	10 U	10 U	10 U	10 U	10 U
Butyl benzyl phthalate	µg/L	NS	7300	35	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	**0.72 JB**	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 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	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 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Phenanthrene	µg/L	NS	NS	NS	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Phenol	µg/L	NS	11000	11000	1.0 U	1.0 U	**1.2**	1.0 U	1.0 UJ	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 January 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 January 2011 Pesticides and PCBs Analytical Results

Station ID					CBPmw-001	CBPmw-004	CBPmw-005	CBPmw-007	CBPmw-008	CPmw-002	CPmw-005
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCBPmw-001C-1655-GW	FWGCBPmw-004C-1656-GW	FWGCBPmw-005C-1657-GW	FWGCBPmw-007C-1658-GW	FWGCBPmw-008C-1659-GW	FWGCPmw-002C-1660-GW	FWGCPmw-005C-1661-GW
Date Collected					1/20/2011	1/20/2011	1/19/2011	1/20/2011	1/19/2011	1/20/2011	1/20/2011
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 U	0.030 UJ	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 U	0.030 UJ	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 U	0.030 UJ	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 U	0.030 UJ	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 U	0.030 UJ	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 U
beta-BHC	µg/L	NS	0.037	0.037	0.030 UJ	0.030 UJ	0.030 UJ	**0.017 J**	0.030 U	0.030 UJ	0.030 U
delta-BHC	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	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 U	0.030 UJ	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 U	0.025 UJ	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 U	0.025 UJ	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 U
Endrin	µg/L	2	11	11	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	0.030 U
Endrin ketone	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	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 U	0.030 UJ	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ	0.030 U	0.030 UJ	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 U	0.030 UJ	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 U	0.030 UJ	0.030 U
Methoxychlor	µg/L	40	180	180	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ	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 U	2.0 UJ	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 U	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 U	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 U	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 U	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 U	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 U	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 U	0.50 UJ	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

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

Station ID					CPmw-006	DA2mw-106	DA2mw-107	DA2mw-110	EBGmw-123	EBGmw-124	EBGmw-126
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGCPmw-006C-1662-GW	FWGDA2mw-106C-1663-GW	FWGDA2mw-107C-1664-GW	FWGDA2mw-110C-1665-GW	FWGEBGmw-123C-1666-GW	FWGEBGmw-124C-1667-GW	FWGEBGmw-126C-1668-GW
Date Collected					1/20/2011	1/21/2011	1/21/2011	1/21/2011	1/20/2011	1/20/2011	1/20/2011
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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	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 UJ	0.50 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

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

Station ID					EBGmw-129	FBQmw-169	FBQmw-172	FBQmw-173	FBQmw-174	LL1mw-067	LL1mw-081
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGEBGmw-129C-1669-GW	FWGFBQmw-169C-1670-GW	FWGFBQmw-172C-1671-GW	FWGFBQmw-173C-1672-GW	FWGFBQmw-174C-1673-GW	FWGLL1mw-067C-1640-GW	FWGLL1mw-081C-1641-GW
Date Collected					1/20/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011	1/17/2011	1/17/2011
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 U	0.30 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 U	0.30 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 U	0.30 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 U	0.30 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 U	0.30 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 U	0.30 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 U	0.30 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 U	0.30 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 U	0.30 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 U	0.25 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 U	0.25 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 U	0.30 UJ	0.030 UJ	0.030 UJ
Endrin	µg/L	2	11	11	0.030 UJ	0.030 UJ	0.030 U	0.030 U	0.30 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 U	0.30 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 U	0.30 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 U	0.30 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 U	0.30 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 U	0.30 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 U	0.30 UJ	0.030 UJ	0.030 UJ
Methoxychlor	µg/L	40	180	180	0.10 UJ	0.10 UJ	0.10 U	0.10 U	1.0 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 U	20 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 U	0.50 U	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 U	0.50 U	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 U	0.50 U	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 U	0.50 U	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 U	0.50 U	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 U	0.50 U	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 U	0.50 U	0.50 U	0.50 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

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

Station ID					LL1mw-082	LL1mw-084	LL1mw-085	LL2mw-266	LL2mw-267	LL2mw-269	LL3mw-236
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL1mw-082C-1642-GW	FWGLL1mw-084C-1643-GW	FWGLL1mw-085C-1644-GW	FWGLL2mw-266C-1645-GW	FWGLL2mw-267C-1646-GW	FWGLL2mw-269C-1647-GW	FWGLL3mw-236C-1648-GW
Date Collected					1/17/2011	1/17/2011	1/17/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
4,4'-DDD	µg/L	NS	0.28	0.28	0.030 UJ	0.15 U	0.030 U	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	0.15 U	0.030 U	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	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Aldrin	µg/L	NS	0.004	0.004	0.030 UJ	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
alpha-BHC	µg/L	NS	0.011	0.011	0.030 UJ	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.030 UJ	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
beta-BHC	µg/L	NS	0.037	0.037	0.030 UJ	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
delta-BHC	µg/L	NS	NS	NS	0.030 UJ	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 UJ	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endosulfan I	µg/L	NS	0.022	0.022	0.025 UJ	0.12 U	0.025 U	0.025 UJ	0.025 UJ	0.025 U	0.025 U
Endosulfan II	µg/L	NS	0.022	0.022	0.025 UJ	0.12 U	0.025 U	0.025 UJ	0.025 UJ	0.025 U	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 UJ	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endrin	µg/L	2	11	11	0.030 UJ	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.030 UJ	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Endrin ketone	µg/L	NS	NS	NS	0.030 UJ	0.15 U	0.030 U	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	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.030 UJ	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Heptachlor	µg/L	0.4	0.015	0.015	0.030 UJ	0.15 U	0.030 U	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	0.15 U	0.030 U	0.030 UJ	0.030 UJ	0.030 U	0.030 U
Methoxychlor	µg/L	40	180	180	0.10 UJ	0.50 U	0.10 U	0.10 UJ	0.10 UJ	0.10 U	0.10 U
Toxaphene	µg/L	3	0.061	0.061	2.0 UJ	10 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 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

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

Station ID					LL3mw-237	LL3mw-238	LL3mw-239	LL3mw-242	LL3mw-243	LL4mw-196	LL4mw-197
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLL3mw-237C-1649-GW	FWGLL3mw-238C-1650-GW	FWGLL3mw-239C-1651-GW	FWGLL3mw-242C-1652-GW	FWGLL3mw-243C-1703-GW	FWGLL4mw-196C-1653-GW	FWGLL4mw-197C-1654-GW
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/18/2011	1/18/2011	1/19/2011	1/19/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
4,4'-DDD	µg/L	NS	0.28	0.28	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
4,4'-DDE	µg/L	NS	0.2	0.2	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
4,4'-DDT	µg/L	NS	0.2	0.2	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
Aldrin	µg/L	NS	0.004	0.004	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
alpha-BHC	µg/L	NS	0.011	0.011	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
alpha-Chordane	µg/L	NS	NS	NS	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
beta-BHC	µg/L	NS	0.037	0.037	0.30 U	**0.15 J**	**0.011 J**	0.030 U	0.030 U	0.030 UJ	0.030 UJ
delta-BHC	µg/L	NS	NS	NS	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
Dieldrin	µg/L	NS	0.0042	0.0042	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
Endosulfan I	µg/L	NS	0.022	0.022	0.25 U	0.25 UJ	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 UJ
Endosulfan II	µg/L	NS	0.022	0.022	0.25 U	0.25 UJ	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 UJ
Endosulfan sulfate	µg/L	NS	NS	NS	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
Endrin	µg/L	2	11	11	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
Endrin aldehyde	µg/L	NS	NS	NS	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
Endrin ketone	µg/L	NS	NS	NS	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
Gamma-BHC	µg/L	0.2	0.052	0.061	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
gamma-Chlordane	µg/L	NS	NS	NS	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
Heptachlor	µg/L	0.4	0.015	0.015	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.30 U	0.30 UJ	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 UJ
Methoxychlor	µg/L	40	180	180	1.0 U	1.0 UJ	0.10 U	0.10 U	0.10 U	0.10 UJ	0.10 UJ
Toxaphene	µg/L	3	0.061	0.061	20 U	20 UJ	2.0 U	2.0 U	2.0 U	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 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

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

Station ID					LNWmw-025	MBSmw-001	NTAmw-112	NTAmw-113	SCFmw-001	SCFmw-002	SCFmw-003
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGLNWmw-025C-1674-GW	FWGMBSmw-001C-1681-GW	FWGNTAmw-112C-1679-GW	FWGNTAmw-113C-1680-GW	FWGSCFmw-001-1682-GW	FWGSCFmw-002-1683-GW	FWGSCFmw-003-1684-GW
Date Collected					1/19/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/19/2011
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 UJ	0.30 UJ	0.15 U	0.030 U
4,4'-DDE	µg/L	NS	0.2	0.2	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
4,4'-DDT	µg/L	NS	0.2	0.2	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
Aldrin	µg/L	NS	0.004	0.004	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
alpha-BHC	µg/L	NS	0.011	0.011	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
beta-BHC	µg/L	NS	0.037	0.037	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
delta-BHC	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
Endosulfan I	µg/L	NS	0.022	0.022	0.025 UJ	0.025 U	0.025 UJ	0.025 UJ	0.25 UJ	0.12 U	0.025 U
Endosulfan II	µg/L	NS	0.022	0.022	0.025 UJ	0.025 U	0.025 UJ	0.025 UJ	0.25 UJ	0.12 U	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
Endrin	µg/L	2	11	11	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
Endrin ketone	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
Gamma-BHC	µg/L	0.2	0.052	0.061	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
Heptachlor	µg/L	0.4	0.015	0.015	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.030 UJ	0.030 U	0.030 UJ	0.030 UJ	0.30 UJ	0.15 U	0.030 U
Methoxychlor	µg/L	40	180	180	0.10 UJ	0.10 U	0.10 UJ	0.10 UJ	1.0 UJ	0.50 U	0.10 U
Toxaphene	µg/L	3	0.061	0.061	2.0 UJ	2.0 U	2.0 UJ	2.0 UJ	20 UJ	10 U	2.0 U
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 U	0.50 U
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 U	0.50 U
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 U	0.50 U
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 U	0.50 U
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 U	0.50 U
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 U	0.50 U
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 U	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

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

Station ID					SCFmw-004	SCFmw-005	SCFmw-006	WBGmw-005	WBGmw-006	WBGmw-007	WBGmw-009
Sample ID		MCL	Region 9 PRG	USEPA RSL	FWGSCFmw-004-1685-GW	FWGSCFmw-005-1686-GW	FWGSCFmw-006-1687-GW	FWGWBGmw-005C-1675-GW	FWGWBGmw-006C-1676-GW	FWGWBGmw-007C-1677-GW	FWGWBGmw-009C-1678-GW
Date Collected					1/18/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011	1/19/2011
Sample Type					Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analyte	Units										
4,4'-DDD	µg/L	NS	0.28	0.28	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
4,4'-DDE	µg/L	NS	0.2	0.2	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
4,4'-DDT	µg/L	NS	0.2	0.2	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
Aldrin	µg/L	NS	0.004	0.004	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
alpha-BHC	µg/L	NS	0.011	0.011	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
alpha-Chordane	µg/L	NS	NS	NS	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
beta-BHC	µg/L	NS	0.037	0.037	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
delta-BHC	µg/L	NS	NS	NS	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
Dieldrin	µg/L	NS	0.0042	0.0042	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
Endosulfan I	µg/L	NS	0.022	0.022	0.050 U	0.025 UJ	0.025 U	0.025 UJ	0.050 UJ	0.025 UJ	0.025 U
Endosulfan II	µg/L	NS	0.022	0.022	0.050 U	0.025 UJ	0.025 U	0.025 UJ	0.050 UJ	0.025 UJ	0.025 U
Endosulfan sulfate	µg/L	NS	NS	NS	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
Endrin	µg/L	2	11	11	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
Endrin aldehyde	µg/L	NS	NS	NS	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
Endrin ketone	µg/L	NS	NS	NS	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
Gamma-BHC	µg/L	0.2	0.052	0.061	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
gamma-Chlordane	µg/L	NS	NS	NS	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
Heptachlor	µg/L	0.4	0.015	0.015	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
Heptachlor epoxide	µg/L	0.2	0.0074	0.0074	0.060 U	0.030 UJ	0.030 U	0.030 UJ	0.060 UJ	0.030 UJ	0.030 U
Methoxychlor	µg/L	40	180	180	0.20 U	0.10 UJ	0.10 U	0.10 UJ	0.20 UJ	0.10 UJ	0.10 U
Toxaphene	µg/L	3	0.061	0.061	4.0 U	2.0 UJ	2.0 U	2.0 UJ	4.0 UJ	2.0 UJ	2.0 U
PCB- 1016	µg/L	0.5	0.96	0.96	0.50 U	0.50 R	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1221	µg/L	0.5	0.034	0.0068	0.50 U	0.50 R	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1232	µg/L	0.5	0.034	0.0068	0.50 U	0.50 R	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1242	µg/L	0.5	0.034	0.034	0.50 U	0.50 R	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1248	µg/L	0.5	0.034	0.034	0.50 U	0.50 R	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1254	µg/L	0.5	0.034	0.034	0.50 U	0.50 R	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U
PCB- 1260	µg/L	0.5	0.034	0.034	0.50 U	0.50 R	0.50 U	0.50 UJ	0.50 UJ	0.50 U	0.50 U

Notes:

NS = no standard

Bold = detected compound above the MDL

N/A = Not Analyzed

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

Station ID	Sample ID	Date Collected	Perchlorate (ug/L)
LL1mw-067	FWGLL1mw-067C-1640-GF	1/17/2011	0.020 J
LL1mw-081	FWGLL1mw-081C-1641-GF	1/17/2011	0.050 U
LL1mw-082	FWGLL1mw-082C-1642-GF	1/17/2011	0.041 J
LL1mw-084	FWGLL1mw-084C-1643-GF	1/17/2011	0.083
LL1mw-085	FWGLL1mw-085C-1644-GF	1/17/2011	0.050 U
LL2mw-266	FWGLL2mw-266C-1645-GF	1/18/2011	0.023 J
LL2mw-267	FWGLL2mw-267C-1646-GF	1/18/2011	0.050 U
LL2mw-269	FWGLL2mw-269C-1647-GF	1/18/2011	0.050 U
LL3mw-236	FWGLL3mw-236C-1648-GF	1/18/2011	0.023 J

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 January 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 January 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-nine wells were sampled during a five-day quarterly sampling event from January 17-21, 2011. During the quarterly event, 15 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 January 2011 sampling event the following laboratory or field contamination at detections greater than ½ MRL was reported for the field QA/QC samples.

A1A180417/ A1A180421/ A1A180415

Equipment Rinse

- 2,4,6-trinitrotolune was detected in FWGEQUIPRinse1-1698-GW at 0.071ug/L, o-Xylene at 0.91ug/L, m,p-xylene at 2.5ug/L, acetone at 26ug/L, 2-butanone at 19ug/L, toluene at 2.2ug/L and ethylbenzene at 0.59ug/L.

Method Blank

- Methylene chloride was detected at 0.66ug/L
- The method blank had sodium detected at 18.4ug/L

Trip Blanks

- FWGTEAM1-Trip had acetone detected at 12ug/L, 2-butanone at 0.62ug/L and 4-methyl-2-pentanone at 0.39ug/L.
- FWGTEAM2-Trip had acetone detected at 12ug/L, 2-butanone at 0.65ug/L and 4-methyl-2-pentanone at 0.34ug/L.
- FWGTEAM3-Trip had acetone detected at 13ug/L.

A1A190402/ A1A190406/ A1A190407

Equipment Rinse

- 2-butanone was detected in FWGEQUIPRinse2-1699-GW at 5.1ug/L, acetone at 11ug/L and chloroform at 0.59ug/L, bis(2-ethylhexyl)phthalate at 0.2.2ug/L and di-n-butyl phthalate at 0.92ug/L.

Method Blanks

- bis(2-ethylhexyl)phthalate was detected in the method blank at 0.93ug/L and di-n-butyl phthalate at 0.69ug/L.

Trip Blanks

- FWGTEAM1-Trip had acetone detected at 14ug/L, 2-butanone at 0.68ug/L and 4-methyl-2-pentanone at 0.38ug/L.
- FWGTEAM3-Trip had acetone detected at 14ug/L and 2-butanone at 0.61ug/L.
- FWGTEAM2-Trip had acetone detected at 12ug/L.

A1A200403/ A1A200401

Equipment Rinse

- 2-butanone was detected in FWGEQUIPRinse3-1700-GW at 3.3ug/L, acetone at 8.1ug/L, chloroform at 0.61ug/L, sodium at 16.1ug/L, iron at 26.8ug/L and zinc at 3.1ug/L.

Method Blanks

- The method blank had sodium detected at 43ug/L and zinc at 3.7ug/L

Trip Blanks

- FWGTEAM1-Trip had acetone detected at 13ug/L, 2-butanone at 0.59ug/L and 4-methyl-2-pentanone at 0.32ug/L.
- FWGTEAM3-Trip had acetone detected at 12ug/L, 2-butanone at 0.59ug/L and 4-methyl-2-pentanone at 0.34ug/L.
- FWGTEAM2-Trip had acetone detected at 13ug/L and 2-butanone at 0.62ug/L.

A1A200532/ A1A200534

Equipment Rinse

- Acetone was detected in FWGEQUIPRinse4-1701-GW at 7.7ug/L, chloroform at 0.73ug/L and 2-butanone at 2.3ug/L

Method Blanks

- The method blank had chromium detected at 2ug/L and vanadium at 2.4ug/L.
- The method blank had sodium detected at 57.9ug/L and zinc at 3.8ug/L.

Trip Blanks

- FWGTEAM1-Trip had acetone detected at 13ug/L, 2-butanone at 0.68ug/L and 4-methyl-2-pentanone at 0.37ug/L.
- FWGTEAM2-Trip had acetone detected at 12ug/L and 4-methyl-2-pentanone at 0.33ug/L.
- FWGTEAM3-Trip had acetone detected at 12ug/L.

A1A210540/ A1A210536

Equipment Rinse

- 2-butanone was detected in FWGEQUIPRinse5-1702-GW at 1.9ug/L, acetone at 7.0ug/L, chloroform at 0.76ug/L and sodium at 21.5ug/L.

Method Blanks

- The method blank had vanadium detected at 2.4ug/L and chromium at 2.0ug/L.
- The method blank had sodium detected at 57.9ug/L and zinc at 3.8ug/L.

Trip Blanks

- FWGTEAM1-Trip had acetone detected at 11ug/L.
- FWGTEAM3-Trip had acetone detected at 12ug/L.
- FWGTEAM2-Trip had acetone detected at 11ug/L and 2-butanone at 0.572ug/L.

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. Due to surrogate outliers in the initial analysis, sample FWGSCFmw-005-1686-GW in SDG A1A200401was re-extracted. The re-extraction was completed outside of 2x hold. The FWGSCFmw-005-1686-GW sample was qualified as unusable, "R", for the following targets:Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260. This does not, however, have any negative effect on the usability of other parameters analyzed under the same method. Rejected data do call into question the interpretation of that particular data for a given monitoring event and it is important to correct any problems to prevent a reoccurrence for future sampling events. All methods met the 90% completion requirement.

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	826	0	100
6020	472	0	100
6860	12	0	100
7470A	59	0	100
8081A	1239	0	100
8082	413	7	98.3
8260B	2886	0	100
8270C	3894	0	100
8330	944	0	100
9012A	59	0	100
8330 Modified	59	0	100
WS-WC-0050	59	0	100
TOTAL	**10930**	**7**	**99.9**

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 January 2011 sampling:

- 2,4,6-Trinitotoluene at a concentration exceeding the Region 9 PRG of 2.2 µg/L at FBQmw-174 (44 µg/L), LL1mw-084 (13 µg/L J), and LL3mw-238 (69 µg/L).

- RDX at a concentration exceeding the Region 9 PRG of 0.61 µg/L at LL1mw-081 (1.1 µg/L J), LL1mw-084 (0.69 µg/L J), LL2mw-267 (1.7 µg/L J), LL3mw-238 (11 µg/L J), LL3mw-239 (1.6 µg/L J), WBGmw-006 (29 µg/L J) and WBGmw-009 (3.5 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 (0.27 µg/L J).

- Chloroform at a concentration exceeding the Region 9 PRG of 0.17 µg/L at LL3mw-239 (0.41 µg/L J B).

Semivolatile Organic Compounds

As shown in Table 3-6 the following SVOC was detected at a level exceeding either the MCL or the Region 9 PRGs:

- Bis(2-Ethylhexyl)phthalate at a concentration exceeding the Region 9 PRG of 4.8 µg/L at LL3mw-242 (29 µg/L).

Pesticides and Polychlorinated Biphenyls (PCBs)

As shown in Table 3-7 the only pesticide detected at a level exceeding either the MCL or the Region 9 PRGs was:

- beta-BHC at a concentration of 0.15 μg/L J at LL3mw-238 (the Region 9 PRG is 0.037 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	**606**		50	880	1,340
	SCFmw-002	Arsenic	**11.4**		10	0.045	0
		Manganese	**72.7**		50	880	1,340
	SCFmw-003	Manganese	**239**		50	880	1,340
	SCFmw-004	Manganese	**708**		50	880	1,340
	SCFmw-005	Iron	**5090**		300	11,000	1,430
		Manganese	**1870**		50	880	1,340
	SCFmw-006	Arsenic	**9.3**		10	0.045	0
		Manganese	**164**		50	880	1,340
Central Burn Pits	CBPmw-001	Arsenic	**34.7**		10	0.045	0
		Iron	**1350**		300	11000	1,430
		Manganese	**150**		50	880	1,340
	CBPmw-004	Arsenic	**30.1**		10	0.045	0
	CBPmw-005	Arsenic	**22.3**		10	0.045	0
		Iron	**580**		300	11000	1,430
		Manganese	**54.1**		50	880	1,340
	CBPmw-007	Arsenic	**10.1**		10	0.045	0
		Manganese	**65.5**		50	880	1,340
	CBPmw-008	Manganese	**232**		50	880	1,340
Cobbs pond	CPmw-002	Manganese	**216**		50	880	1,340
	CPmw-005	Arsenic	**47.5**		10	0.045	0
		Iron	**424**		300	11000	1,430
	CPmw-006	Iron	**1710**		300	11000	1,430
		Manganese	**656**		50	880	1,340
Open Demolition Area 2	DA2mw-106	Iron	**518**		300	11000	1,430
		Manganese	**4850**		50	880	1,340
	DA2mw-107	Iron	**310**		300	11000	1,430
		Manganese	**322**		50	880	1,340
	DA2mw-110	Aluminum	**212**		200	36,000	0
Erie Burning Grounds	EBGmw-123	Arsenic	**46.5**		10	0.045	0
		Iron	**4020**		300	11000	1,430
		Manganese	**118**		50	880	1,340
	EBGmw-124	Aluminum	**277**		200	36,000	0
		Arsenic	**22.8**		10	0.045	0
		Iron	**1860**		300	11000	1,430
		Manganese	**51.0**		50	880	1,340
	EBGmw-126	Arsenic	**15.5**		10	0.045	0
		Iron	**4380**		300	11000	1,430
		Manganese	**129**		50	880	1,340
	EBGmw-129	Iron	**1840**		300	11000	1,430
		Manganese	**488**		50	880	1,340
Fuze and Booster Quarry	FBQmw-169	Iron	**378**		300	11000	1,430
		Manganese	**4790**		50	880	1,340
	FBQmw-173	Iron	**305**		300	11000	1,430
		Manganese	**328**		50	880	1,340
Load Line 1	LL1mw-067	Manganese	**67.7**		50	880	1,340
	LL1mw-081	Manganese	**2030**		50	880	1,340
	LL1mw-082	Manganese	**2660**		50	880	1,340
	LL1mw-084	Aluminum	**337**		200	36,000	0
		Manganese	**222**		50	880	1,340
	LL1mw-085	Manganese	**179**		50	880	1,340

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)
Load Line 2	LL2mw-266	Manganese	**2250**		50	880	1,340
		Iron	**936**		300	11,000	1,430
	LL2mw-267	Aluminum	**318**		200	36,000	0
		Iron	**660**		300	11,000	1,430
		Manganese	**547**		50	880	1,340
	LL2mw-269	Iron	**6590**		300	11,000	1,430
		Manganese	**1570**		50	880	1,340
Load Line 3	LL3mw-236	Manganese	**129**		50	880	1,340
	L3mw-237	Manganese	**91.6**		50	880	1,340
	LL3mw-239	Arsenic	**394**		10	0.045	0
		Iron	**818**		300	11,000	1,430
		Manganese	**182**		50	880	1,020
Landfill North of Winklepeck	LNWmw-025	Arsenic	**3.7**	**J**	10	0.045	0
		Iron	**1810**		300	11,000	279
		Manganese	**731**		50	880	1,020
Suspected Mustard Burial Grounds	MBSmw-001	Arsenic	**4.7**	**J**	10	0.045	11.7
		Manganese	**375**		50	880	1,020
NACA Test Area	NTAmw-112	Arsenic	**17**		10	0.045	0
		Iron	**1090**		300	11,000	1,430
		Manganese	**475**		50	880	1,340
	NTAmw-113	Arsenic	**10.7**		10	0.045	11.7
		Manganese	**277**		50	880	1,020
Winklepeck Burning Grounds	WBGmw-005	Arsenic	**10.5**		10	0.045	0
		Iron	**8760**		300	11,000	279
		Manganese	**1310**		50	880	1,020
	WBGmw-007	Manganese	**100**		50	880	1,020
	WBGmw-009	Manganese	**82.4**		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

Portage Environmental, 2004. *RVAAP Facility-Wide Groundwater Monitoring Program Plan*.

SAIC, 2001. *RVAAP Facility-Wide Sampling and Analysis Plan/Quality Assurance Project Plan.*

SAIC, 2001b, *Phase II Remedial Investigation report for the Winklepeck Burning Grounds at Ravenna Army Ammunition Plant, Ravenna, Ohio.*

SAIC/REIMS, 2005. *Table of Reported Construction Depths from REIMS Information.*

SpecPro, Inc., 2005a. *Facility-Wide Groundwater Monitoring Program Report on the April 2005 Sampling Event, Ravenna Training and Logistics Site / Ravenna Army Ammunition Plant, Ravenna, Ohio.*

SpecPro, Inc., 2005b: *Facility-Wide Groundwater Monitoring Program, Report on the July 2005 Sampling Event, Ravenna Training and Logistics Site/Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2006a, *Facility-Wide Groundwater Monitoring Program, Annual Report for 2005, Ravenna Training and Logistics Site/Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2006b, *Facility-Wide Groundwater Monitoring Program, Report on the March 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2006c, *Facility-Wide Groundwater Monitoring Program, Report on the May 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2006d, (Draft) *Facility-Wide Groundwater Monitoring Program, Annual Report for 2006, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2007a, *Facility-Wide Groundwater Monitoring Program, Report on the July 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2007b, *Facility-Wide Groundwater Monitoring Program, Report on the October 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*

SpecPro, Inc. 2007c, *Facility- Wide Groundwater Monitoring Program, Report on the January 2006 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio.*

Environmental Quality Management, Inc. 2007d, *Facility-Wide Groundwater Monitoring Program, Report on the April 2007 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2007e, *Facility-Wide Groundwater Monitoring Program, Report on the July 2007 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2007f, *Facility-Wide Groundwater Monitoring Program, Report on the October 2007 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2008a, *Facility-Wide Groundwater Monitoring Program, Report on the January 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2008b, *Facilit- Wide Groundwater Monitoring Program, Report on the April 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2008c, *Facilit- Wide Groundwater Monitoring Program, Report on the July 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2008d, *Facility-Wide-Groundwater Monitoring Program, Report on the October 2008 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2009a, *Facility-Wide Groundwater Monitoring Program, Report on the January 2009 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2009b, *Facility-Wide Groundwater Monitoring Program, Report on the April 2009 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2009c, *Facility-Wide Groundwater Monitoring Program, Report on the July 2009 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2009c, *Facility-Wide Groundwater Monitoring Program, Report on the October 2009 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio*.

Environmental Quality Management, Inc. 2010, *Facility-Wide Groundwater Monitoring Program, Report on the January 2010 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio.*

Environmental Quality Management, Inc. 2010, *Facility-Wide Groundwater Monitoring Program, Report on the July 2010 Sampling Event, Ravenna Army Ammunition Plant, Ravenna, Ohio.*

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

Mark W. Nichter, PG
Geologist
Environmental Compliance (CELRL-ED-E-C)
Louisville District
U.S. Army Corps of Engineers
(502) 315-6375 (Office)
(502) 418-8449 (Mobile)
600 Dr. Martin Luther King Jr. Place
Louisville, KY 40202-2232
mark.w.nichter@usace.army.mil

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 **Content-Type:** application/octet-stream **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				

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

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

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

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

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

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Load Line 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.

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						
	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				

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

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

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

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Load Line 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.

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

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Load Line 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				

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						
	ASYmw-008	Unconsolidated																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
	ASYmw-009	Sharon																Bis(2-ethylhexyl)phthalate	Yes				
	ASYmw-010	Unconsolidated																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
Building 1200	B12mw-010	Sharon	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Indeno(1,2,3-cd)pyrene and Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	B12mw-011	Sharon																Bis(2-ethylhexyl)phthalate	Yes				
	B12mw-012	Sharon	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Bis(2-ethylhexyl)phthalate is increasing in concentrations.
C-Block Quarry	CBLmw-001	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	CBLmw-002	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	CBLmw-003	Homewood																Bis(2-ethylhexyl)phthalate	Yes				
	CBLmw-004	Homewood	Annual				1	1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate dectected at concentration above CUG. Added to 2010 program for annual monitoring.
Central Burn Pits	CBPmw-001	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis(2-ethylhexyl)phthalate	Yes				Time-Trend graphs presented in 2009 Annual FWGWMP report suggests Arsenic and Magnesium are increasing in concentrations (above background values)
	CBPmw-002	Unconsolidated																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
	CBPmw-003	Unconsolidated																Arsenic, Bis(2-ethylhexyl)phthalate	Yes				
	CBPmw-004	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis(2-ethylhexyl)phthalate	Yes	Yes			Arsenic dectected at concentration above CUG. Added to 2010 program for annual monitoring.
	CBPmw-005	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic	Yes			Yes	Monitors GW flow to Sand Creek.
	CBPmw-006	Unconsolidated																Arsenic	Yes				
	CBPmw-007	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic	Yes			Yes	Monitors GW flow to Sand Creek.
	CBPmw-008	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Magnesium is increasing in concentrations (above background value)
	CPmw-001	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				

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

RVAAP Area	Location / Well ID	Monitored Zone	Proposed Sample Frequency	Proposed Sample Schedule				Proposed Analytical Parameters										List Chemicals that Exceed 2009 MCLs?	Do Chemicals with MCL Exceedances have FWCUGs?	Do Chemicals Exceed FWCUGs? If yes, include in program.	Is Well a RCRA Well? If yes, include in program.	Is Well Located Down-Gradient of AOC with FWCUG Exceedances (or other Sensitive Areas)? If yes, include in program.	Rationale For / Against Selection
				Apr 2010	Jul 2010	Oct 2010	Jan 2011	VOCs	SVOCs	Explosives	Propellants	Pesticides	PCBs	TAL Metals	Cyanide	Nitrate/Nitrite	Perchlorate						
Cobbs Pond	CPmw-002	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate detected at concentration above CUG. Added to 2010 program for annual monitoring.
	CPmw-003	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	CPmw-004	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	CPmw-005	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis(2ethylhexyl)phthalate	Yes				Time-Trend graph presented in 2009 Annual FWGWMP report suggests Barium is increasing in concentrations (above background value)
	CPmw-006	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Arsenic, Bis(2ethylhexyl)phthalate	Yes	Yes			Manganese and Naphthalene dectected at concentration above CUG. Added to 2010 program for annual monitoring.
Open Demolition Area 2	DET-001B	Unconsolidated																					
	DET-002	Unconsolidated																					
	DET-003	Unconsolidated	Semi-Annual		1		1	2	2	2	2	2	2	2	2			Bis(2-ethylhexyl)phthalate	Yes		Yes		RCRA well. Bi-Annual monitoring required by DFF&Os.
	DET-004	Unconsolidated	Semi-Annual		1		1	2	2	2	2	2	2	2	2			Arsenic, Bis(2ethylhexyl)phthalate	Yes		Yes		RCRA well. Bi-Annual monitoring required by DFF&Os.
	DA2mw-104	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	DA2mw-105	Unconsolidated																Bis(2-ethylhexyl)phthalate					
	DA2mw-106	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Manganese dectected at concentration above CUG. Added to 2010 program for annual monitoring. Time-Trend graph presented in 2009 Annual FWGWMP report suggests Magnesium is increasing in concentration
	DA2mw-107	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1							Yes	Down-gradient to ODA2 RCRA Unit.
	DA2mw-108	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	DA2mw-109	Unconsolidated																Bis(2-ethylhexyl)phthalate	Yes				
	DA2mw-110	Unconsolidated	Annual			1		1	1	1	1	1	1	1	1			Bis(2-ethylhexyl)phthalate	Yes	Yes			Bis(2-ethylhexyl)phthalate 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 dectected 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				
	LNWmw-024	Unconsolidated																Bis(2-ethylhexyl)phthalate					
Landfill North of Winklepeck	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					
	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					
NACA Test Area	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 JANUARY 2011 EVENT

January 2011 Well Sampling List

Well Number	Location
SCFmw-001	Facility-wide
SCFmw-002	Facility-wide
SCFmw-003	Facility-wide
SCFmw-004	Facility-wide
SCFmw-005	Facility-wide
SCFmw-006	Facility-wide
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-237	Load Line 3
LL3mw-238	Load Line 3
LL3mw-239	Load Line 3
LL3mw-242	Load Line 3
LL3mw-243	Load Line 3
LL4mw-196	Load Line 4
LL4mw-197	Load Line 4
CBPmw-001	Central Burn Pits
CBPmw-004	Central Burn Pits
CBPmw-005	Central Burn Pits
CBPmw-007	Central Burn Pits
CBPmw-008	Central Burn Pits
CPmw-002	Cobbs Pond
CPmw-005	Cobbs Pond
CPmw-006	Cobbs Pond
DA2mw-106	Open Demolition Area 2
DA2mw-107	Open Demolition Area 2
DA2mw-110	Open Demolition Area 2
EBGmw-123	Erie Burning Grounds
EBGmw-124	Erie Burning Grounds
EBGmw-126	Erie Burning Grounds
EBGmw-129	Erie Burning Grounds
FBQmw-169	Fuze and Booster Quarry
FBQmw-172	Fuze and Booster Quarry
FBQmw-173	Fuze and Booster Quarry
FBQmw-174	Fuze and Booster Quarry
LNWmw-025	Landfill N. of Winklepeck
NTAmw-112	NACA Test Area
NTAmw-113	NACA Test Area
WBGmw-005	Winklepeck Burning Grounds
WBGmw-006	Winklepeck Burning Grounds
WBGmw-007	Winklepeck Burning Grounds
WBGmw-009	Winklepeck Burning Grounds
MBSmw-001	Suspected Mustard Agent Burial Site

APPENDIX C

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

Signature Page

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

Field Personnel

Name	Affiliation	Initials
Colleen A. Lear	EQM	CAL
Erik Corbin	EQM	EC
John Miller	EQM	JM
Lisa Sebesta	EQM	LS
Steve Lester	EQM	SL
Stephen Stuergon	EQM	SS
Dave Gomez	Planteco	DG

Project and Field Leads

Name, Title, Affiliation

John Miller, Project Manager / QC Check, EQM

Signature: _____

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

Signature: _____

Erik Corbin, Sample Manager, EQM

Signature: _____

Comprehensive Water Levels Measurements

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2011

Well Number	Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
CBPmw 007	Central Burn Pits	1/17/2011	15:35	17.11	31.85	Hard	5767
CBPmw 006	Central Burn Pits	1/17/2011	15:40	12.79	27.32	Hard	5767
CBPmw 004	Central Burn Pits	1/17/2011	15:50	11.61	29.62	Hard	5767
CBPmw 001	Central Burn Pits	1/17/2011	15:55	14.48	34.64	Hard	5767
CBPmw 008	Central Burn Pits	1/17/2011	16:00	16.91	27.90	Hard	5767
CPmw 006	Cobbs Pond	1/17/2011	16:05	8.28	20.62	Hard	5767
CPmw 005	Cobbs Pond	1/17/2011	16:10	12.28	43.19	Hard	5767
CPmw 002	Cobbs Pond	1/17/2011	16:20	0.51	15.00	Hard	5767
DA2mw 106	Demo.Area 2	1/21/2011	8:48	3.67	16.79	Hard	1266
DA2mw 107	Demo.Area 2	1/21/2011	8:40	7.95	16.88	Medium	Keck
DA2mw 110	Demo.Area 2	1/21/2011	8:45	9.29	22.32	Medium	5769
EBGmw 126	Erie Burning Grounds	1/18/2011	12:20	2.39	27.77	Hard	5767
EBGmw 129	Erie Burning Grounds	1/18/2011	12:30	5.71	30.94	Hard	5767
EBGmw 123	Erie Burning Grounds	1/18/2011	12:40	9.85	34.75	Hard	5767
EBGmw 124	Erie Burning Grounds	1/18/2011	12:50	3.49	32.65	Medium	5767
FBQmw 172	Fuze and Booster Quarry	1/18/2011	10:30	29.81	34.40	Medium	5767
FBQmw 173	Fuze and Booster Quarry	1/18/2011	10:45	46.11	53.19	Medium	5767
FBQmw 174	Fuze and Booster Quarry	1/18/2011	11:00	19.60	23.09	Hard	5767
FBQmw 169	Fuze and Booster Quarry	1/18/2011	11:15	6.60	18.08	Hard	5767
LNWmw 025	Landfill North of Winklepeck	1/19/2011	8:25	5.42	20.31	Hard	5767
LL1mw 081	Loadline 1	1/17/2011	12:55	32.68	41.98	Soft	5767
LL1mw 084	Loadline 1	1/17/2011	13:00	31.53	39.04	Soft	5767
LL1mw 083	Loadline 1	1/17/2011	13:10	34.29	41.51	Hard	5767
LL1mw 085	Loadline 1	1/17/2011	13:15	38.41	45.15	Hard	5767
LL1mw 067	Loadline 1	1/17/2011	13:20	22.41	25.68	Hard	5767

*All measurements from top of casing

COMPREHENSIVE WATER LEVEL MEASUREMENTS

RVAAP FACILITY-WIDE GROUNDWATER MONITORING PROGRAM JANUARY 2011

Well Number		Location	Date	Time	Depth To Water*	Depth to Bottom	Description of bottom	Instrument/Serial Number
LL2mw	269	Loadline 2	1/17/2011	13:45	17.35	30.24	Hard	5767
LL2mw	266	Loadline 2	1/17/2011	13:50	12.45	22.70	Hard	5767
LL2mw	267	Loadline 2	1/17/2011	13:55	9.68	22.00	Hard	5767
LL3mw	242	Loadline 3	1/17/2011	14:10	17.10	22.50	Hard	5767
LL3mw	243	Loadline 3	1/17/2011	14:15	14.65	26.32	Hard	5767
LL3mw	236	Loadline 3	1/17/2011	14:20	15.68	26.58	Hard	5767
LL3mw	238	Loadline 3	1/17/2011	14:40	16.05	23.38	Hard	5767
LL3mw	239	Loadline 3	1/17/2011	14:45	25.90	36.90	Medium	5767
LL3mw	237	Loadline 3	1/17/2011	15:00	17.23	25.51	Hard	5767
LL4mw	197	Loadline 4	1/17/2011	15:20	15.25	23.58	Hard	5767
LL4mw	196	Loadline 4	1/17/2011	15:25	14.08	21.71	Medium	5767
NTAmw	112	NACA Test Area	1/18/2011	9:30	9.24	26.62	Soft	5767
NTAmw	113	NACA Test Area	1/18/2011	9:40	7.22	29.82	Hard	5767
SCFmw	001	Sharon Conglomerate	1/18/2011	8:41	89.69	214.52	Hard	Keck
SCFmw	002	Sharon Conglomerate	1/18/2011	11:05	19.85	149.79	Hard	Keck
SCFmw	003	Sharon Conglomerate	1/19/2011	12:21	9.56	139.60	Hard	Keck
SCFmw	004	Sharon Conglomerate	1/18/2011	12:45	0.89	113.15	Hard	Keck
SCFmw	005	Sharon Conglomerate	1/19/2011	8:45	12.13	158.50	Hard	Keck
SCFmw	006	Sharon Conglomerate	1/19/2011	11:01	18.58	88.35	Hard	Keck
MBSmw	001	Suspected Mustard Agent Burial Sit	1/18/2011	9:00	17.65	31.05	Hard	5767
WBGmw	005	Winklepeck Burning Grounds	1/19/2011	8:15	6.09	21.13	Hard	5767
WBGmw	006	Winklepeck Burning Grounds	1/19/2011	9:40	7.70	20.15	Hard	5767
WBGmw	007	Winklepeck Burning Grounds	1/19/2011	9:45	17.90	26.39	Hard	5767
WBGmw	009	Winklepeck Burning Grounds	1/19/2011	9:00	14.29	24.28	Hard	5767

*All measurements from top of casing

Logbook

RVAAP: USACE

Book #1



"Rite in the Rain"®

ALL-WEATHER

ENVIRONMENTAL

No. 550

EPM

Ravenna Ohio

No. 550 Enviro-Poly Cover

6 32281 55014 2

140

Location RVAAP overcast Date 1/17/11

Project / Client USACE 10-20° JAN EVENT

LS, JM, SS, DG, SL, EC, CAL GW Monitoring WI event.

1200 Teams mobbed
site arrival / unload + load
organize for day + calibrate
equipment.
Setup

1300 H+S

1330 Sample + purge wells 3 teams
JM conduct WI event.

1730 LL, wells started, sample prep
wells prepped for fed ex/lab.
two wells bailed (lab to filter the perchlorate)

1900 lab pick up.
deliver fedex

1825 OFFSITE

Cal

141

Location RVAAP Date 1/17/11

Project / Client USACE

Drum Log

Drum ID	Contents
EQM 2011-1	Decon / Rinse Water
EQM 2011-2	Purge Water *
EQM 2011-3	Purge Water *
EQM 2011-4	Purge Water

* LLs 1-4, EBG, WBG, CNW
FBG MBS NTA DA2
CBP, CP.

Cal

142

Location RVAAP Date 1/18/11

Project / Client USACE 30-35°

LS JM SS DG EC SL CAL FREEZE/RAIN

0730 onsite setup for day
0745 H+S
0810 sample purge LL2, LL3
MBS, MT4, FBD, SCF
continue LL wells.
1700 organize for next day
finalize last of coolers.
prep samples for fedexp
and lab.
1745 delivery to fedexp.
1800 lab pick up.
1820 OFFSITE

143

Location RVAAP Date 1/19/11

Project / Client USACE FLURRIES 15-20°
@ 30°

LS EC JM SS DG SL CAL

0730 onsite
organize for the day
set up for purge/sample.
no perchlorate filters left
for LL4 wells - not run.
will hope for backorder to be
filled next event.
0800 H+S
meet ACE to unlock UBG.
sample purge @ UBG, LNW
SCF, LL3, CBP
1715 organize / clean building
prep samples for
fedexp + lab pickup.
1800 fedexp delivery
lab pickup.
1830 OFFSITE

...elines)
...d - Amber Jug •
...ottles • BOD - Bottle •
...Mouth

144

Location RVAAP Date 1/20/11

Project / Client USACE 10-20°

LS EC SL DG SS CAL FLURRIES

0730	ONSITE
	Organize for day
0800	H+S
0815	purge sample @ EB09CP, CBP
1430	Clean 1036 Building
	prep for final day + demob
	prep Samples for fed exp and lab
1515	Lab pickup fed exp delivery.
1530	OFFSITE

145

Location RVAAP Date 1/21/11

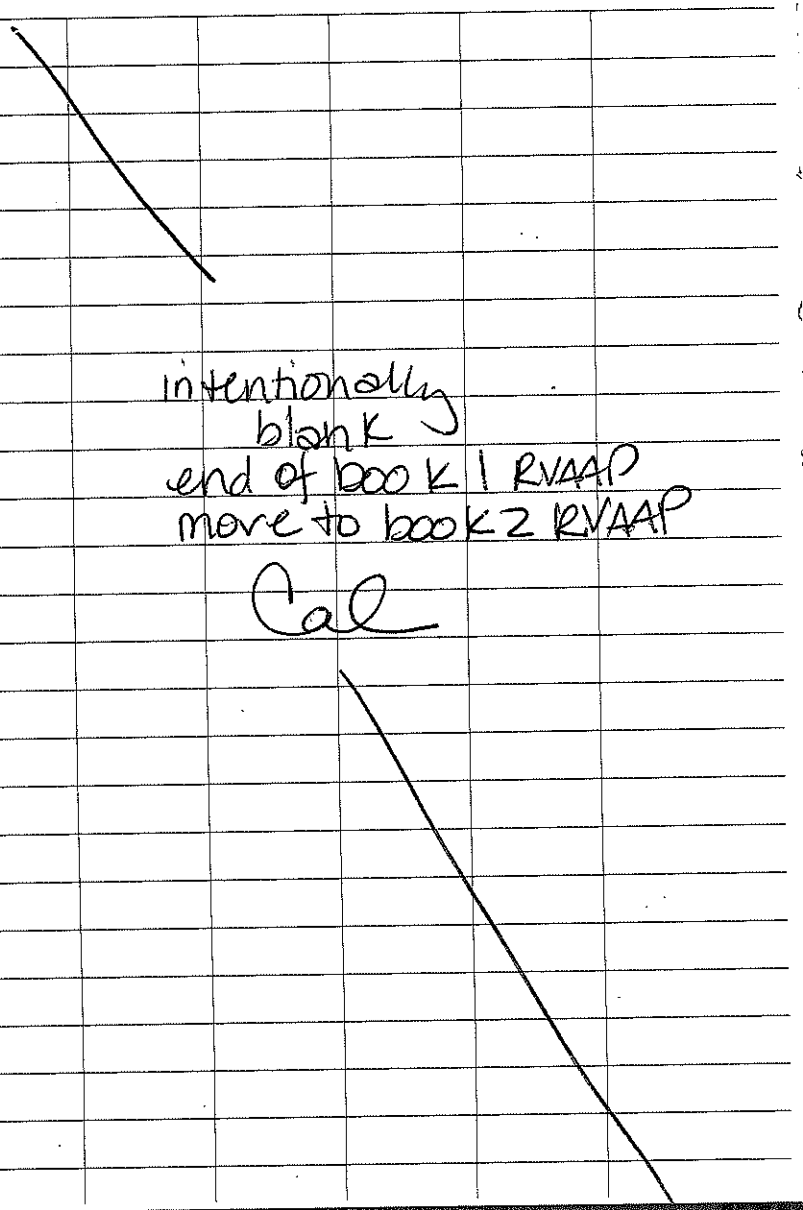
Project / Client USACE 5-20°

SS LS DG EC SL CAL flurries

0730	perpare for the day, organize
0800	H+S
	Sample + WL event at Demo 2 Area.
0815	Demo 2
1010	Bldg 1036
1030	Prep samples for lab & Cool
1045	IDW Sampling + pack for demob
1100	clean 1036
1130	partial teams to demob SS to clean 1036 + await the lab
1145	partial offsite/demob
1300	lab PICK UP
1310	OFFSITE

Location _____ Date _____

Project / Client _____



The manufacturers of "Rite in the Rain" all-weather writing products are grateful to the numerous environmental experts who have contributed to the development of this book. Should you have any additions, improvements or corrections for future publications of this field book or have suggestions for other environmental field book formats, we welcome your input.

Although much effort has been taken to ensure the accuracy of the following reference pages, the J. L. Darling Corp. cannot guarantee the accuracy of the data.

To provide input or solicit pricing on these or custom printed field books, contact your "Rite in the Rain" dealer or J. L. Darling Corp., 253-922-5000 or fax 253-922-5300.

www.RiteintheRain.com / sales@riteintherain.com

Common Field Data Error Codes

Error codes are used to explain common mistakes and are written above or close to the mistake.
Commonly used error codes include:

RE	Recording Error
CE	Calculation Error
TE	Transcription Error
SE	Spelling Error
CL	Changed for Clarity
DC	Original Sample Description Changed After Further Evaluation
WO	Write Over
NI	Not Initialed and Dated at Time of Entry
OB	Not Recorded at the Time of Initial Observation

Note: Error code should be circled, dated, and initialed when recorded.

Hazard Classifications

Class 1 Explosives
Class 2 Gas
Class 3 Flammable Liquid
Class 4 Flammable Solids (Potential spontaneous combustion, or emission of flammable gases when in contact with water)
Class 5 Oxidizing Substances and Organic Peroxides
Class 6 Toxic (poisonous) and infectious substances
Class 7 Radioactive material
Class 8 Corrosives
Class 9 Miscellaneous dangerous goods

Container type abbreviations (for sampling guidelines)

BR - Boston Round • ABR - Amber Boston Round • AJ - Amber Jug • AWM - Amber Wide Mouth • Poly - Polyethylene Bottles • BOD - Bottle • CWM - Clear Wide Mouth

Static Water Levels

Measurements

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/17/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
CBPmw-007	Central Burn	31.85	5767	JM	15:35	17.111		0
	Cmt:Good, Hard							
CBPmw-006	Central Burn	27.32	5767	JM	15:40	12.79		0
	Cmt:Good, Hard							
CBPmw-004	Central Burn	29.62	5767	JM	15:50	11.61		0
	Cmt:Good, Hard							
CBPmw-001	Central Burn	34.64	5767	JM	15:55	14.48		0
	Cmt:Good, Hard							
CBPmw-008	Central Burn	27.9	5767	JM	16:00	16.91		0
	Cmt:Good, Hard							
CPmw-006	Cobbs Pond	20.62	5767	JM	16:05	8.28		0
	Cmt:Good, Hard							
CPmw-005	Cobbs Pond	43.19	5767	JM	16:10	12.28		0
	Cmt:Good, Hard							
CPmw-002	Cobbs Pond	15	5767	JM	16:20	0.51		0
	Cmt:Good, Hard							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/17/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL1mw-081	Loadline 1	41.98	5767	JM	12:55	32.68		0
	Cmt:Good, Soft							
LL1mw-084	Loadline 1	39.04	5767	JM	13:00	31.53		0
	Cmt:Good, Soft							
LL1mw-083	Loadline 1	41.51	5767	JM	13:10	34.29		0
	Cmt:Good, Hard							
LL1mw-085	Loadline 1	45.15	5767	JM	13:15	38.41		0
	Cmt:Good, Hard							
LL1mw-067	Loadline 1	25.68	5767	JM	13:20	22.41		0
	Cmt:Good, Hard							
LL1mw-085	Loadline 1	45.1	QED	CAL	13:55	38.39		0
	Cmt:Good,							
LL1mw-084	Loadline 1		1266	EC	14:05	31.45		0
	Cmt:Good,							
LL1mw-081	Loadline 1		05769	LS	14:50	32.63		0
	Cmt:Good,							
LL1mw-067	Loadline 1	25.68	QED	CAL	15:07	22.42		0
	Cmt:Good,							
LL1mw-082	Loadline 1		QED	CAL	16:30	34.07		0
	Cmt:Good,							
LL2mw-269	Loadline 2	30.24	5767	JM	13:45	17.35		0
	Cmt:Good, Hard							
LL2mw-266	Loadline 2	22.7	5767	JM	13:50	12.45		0
	Cmt:Good, Hard							
LL2mw-267	Loadline 2	22	5767	JM	13:55	9.68		0
	Cmt:Good, Hard							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/17/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL3mw-242	Loadline 3	22.5	5767	JM	14:10	17.1		0
	Cmt:Good, Hard							
LL3mw-243	Loadline 3	26.32	5767	JM	14:15	14.65		0
	Cmt:Good, Hard							
LL3mw-236	Loadline 3	26.58	5767	JM	14:20	15.68		0
	Cmt:Good, Hard							
LL3mw-238	Loadline 3	23.38	5767	JM	14:40	16.05		0
	Cmt:Good, Hard							
LL3mw-239	Loadline 3	36.9	5767	JM	14:45	25.9		0
	Cmt:Good, Medium							
LL3mw-237	Loadline 3	25.51	5767	JM	15:00	17.23		0
	Cmt:Good, Hard							
LL4mw-197	Loadline 4	23.58	5767	JM	15:20	15.25		0
	Cmt:Good, Hard							
LL4mw-196	Loadline 4	21.71	5767	JM	15:25	14.08		0
	Cmt:Good, Medium							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/18/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
EBGmw-126	Erie Burning	27.77	5767	JM	12:20	2.39		0
	Cmt:Good, Hard							
EBGmw-129	Erie Burning	30.94	5767	JM	12:30	5.71		0
	Cmt:Good, Hard							
EBGmw-123	Erie Burning	34.75	5767	JM	12:40	9.85		0
	Cmt:Good, Hard							
EBGmw-124	Erie Burning	32.65	5767	JM	12:50	3.49		0
	Cmt:Good, Medium							
FBQmw-172	Fuze and Bo	34.4	5767	JM	10:30	29.81		0
	Cmt:Good, Medium							
FBQmw-173	Fuze and Bo	53.19	5767	JM	10:45	46.11		0
	Cmt:Good, Medium							
FBQmw-174	Fuze and Bo	23.09	5767	JM	11:00	19.6		0
	Cmt:Good, Hard							
FBQmw-169	Fuze and Bo	18.08	5767	JM	11:15	6.6		0
	Cmt:Good, Hard							
FBQmw-169	Fuze and Bo		1266	EC	13:05	6.4		0
	Cmt:Good,							
FBQmw-172	Fuze and Bo		1266	EC	14:28	29.65		0
	Cmt:Good,							
FBQmw-173	Fuze and Bo		1266	EC	15:51	46.02		0
	Cmt:Good,							
LL2mw-266	Loadline 2		05769	LS	8:45	12.61		0
	Cmt:Good,							
LL2mw-267	Loadline 2		05769	LS	10:00	9.71		0
	Cmt:Good,							
LL2mw-269	Loadline 2		05769	LS	11:45	17.11		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/18/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
LL3mw-236	Loadline 3		05769	LS	14:00	18.49		0
	Cmt:Good,							
LL3mw-243	Loadline 3		05769	LS	14:15	14.73		0
	Cmt:Good,							
LL3mw-237	Loadline 3		QED	CAL	15:01	17.14		0
	Cmt:Good,							
LL3mw-242	Loadline 3		05769	LS	15:10	16.94		0
	Cmt:Good,							
NTAmw-112	NACA Test	26.62	5767	JM	9:30	9.24		0
	Cmt:Good, Soft							
NTAmw-113	NACA Test	29.82	5767	JM	9:40	7.22		0
	Cmt:Good, Hard							
NTAmw-112	NACA Test		1266	EC	10:36	9.24		0
	Cmt:Good,							
NTAmw-113	NACA Test		1266	EC	11:54	7.19		0
	Cmt:Good,							
SCFmw-001	Sharon Cong	214.52	Keck	JM	8:41	89.69		0
	Cmt:Good, Hard							
scfmw-001	Sharon Cong		QED	CAL	8:41	89.69		0
	Cmt:Good,							
SCFmw-002	Sharon Cong	149.79	Keck	JM	11:05	19.85		0
	Cmt:Good, Hard							
scfmw-002	Sharon Cong		QED	CAL	11:05	19.85		0
	Cmt:Good,							
SCFmw-004	Sharon Cong	113.15	Keck	JM	12:45	0.89		0
	Cmt:Good, Hard							
scfmw-004	Sharon Cong		QED	CAL	12:45	0.89		0
	Cmt:Good,							
MBS-001	Suspected M	31.05	1266	EC	8:57	17.65		0
	Cmt:Good,							
MBSmw-001	Suspected M	31.05	5767	JM	9:00	17.65		0
	Cmt:Good, Hard							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/19/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
CBPmw-005	Central Burn		05769	LS	16:00	12.75		0
	Cmt:Good,							
CBPmw-008	Central Burn		05769	LS	16:45	16.79		0
	Cmt:Good,							
FBQmw-174	Fuze and Bo		1266	EC	12:45	19.59		0
	Cmt:Good, Hard							
LNWmw-025	Landfill North	20.31	5767	JM	8:25	5.42		0
	Cmt:Good, Hard							
LNWmw-025	Landfill North		1266	EC	8:39	5.2		0
	Cmt:Good,							
LNWmw-025	Landfill North		1266	EC	8:42	5.2		0
	Cmt:Good,							
LL3mw-239	Loadline 3		05769	LS	14:30	26.11		0
	Cmt:Good,							
LL3mw-238	Loadline 3		QED	CAL	15:01	16.18		0
	Cmt:Good,							
LL4mw-197	Loadline 4		1266	EC	14:40	15.25		0
	Cmt:Good,							
LL4mw-196	Loadline 4		1266	EC	16:10	14.04		0
	Cmt:Good,							
scfmw-005	Sharon Cong		QED	CAL	8:45	12.13		0
	Cmt:Good,							
SCFmw-005	Sharon Cong	158.5	Keck	JM	8:45	12.13		0
	Cmt:Good, Hard							
scfmw-006	Sharon Cong		QED	CAL	11:01	18.58		0
	Cmt:Good,							
SCFmw-006	Sharon Cong	88.35	Keck	JM	11:01	18.58		0
	Cmt:Good, Hard							
scfmw-003	Sharon Cong		QED	CAL	12:21	9.56		0
	Cmt:Good,							
SCFmw-003	Sharon Cong	139.6	Keck	JM	12:21	9.56		0
	Cmt:Good, Hard							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/19/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
WBGmw-005	Winklepeck	21.13	5767	JM	8:15	6.09		0
	Cmt:Good, Hard							
WBGmw-005	Winklepeck		05769	LS	8:55	6.08		0
	Cmt:Good,							
WBGmw-009	Winklepeck	24.28	5767	JM	9:00	14.29		0
	Cmt:Good, Hard							
WBGmw-006	Winklepeck	20.15	5767	JM	9:40	7.7		0
	Cmt:Good, Hard							
WBGmw-007	Winklepeck	26.39	5767	JM	9:45	17.9		0
	Cmt:Good, Hard							
WBGmw-006	Winklepeck		05769	LS	10:40	7.69		0
	Cmt:Good,							
WBGmw-007	Winklepeck		1266	EC	10:58	17.88		0
	Cmt:Good,							
WBGmw-009	Winklepeck		05769	LS	12:00	14.3		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/20/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
CBPmw-004	Central Burn		QED	CAL	12:13	11.59		0
	Cmt:Good, black tint to start then cloudy brwn extra purge to try & lower turb							
CBPmw-001	Central Burn		05769	LS	12:20	14.5		0
	Cmt:Good,							
CBPmw-007	Central Burn		05769	LS	14:00	17		0
	Cmt:Good,							
CPmw-005	Cobbs Pond		05769	LS	8:30	12.24		0
	Cmt:Good,							
CPmw-002	Cobbs Pond		QED	CAL	8:48	0.18		0
	Cmt:Good,							
CPmw-006	Cobbs Pond		QED	CAL	10:11	8.2		0
	Cmt:Good, black start then dark grey cloudy extra purge to try & lower turb							
EBGmw-126	Erie Burning		1266	EC	8:52	1.96		0
	Cmt:Good,							
EBGmw-129	Erie Burning		1266	EC	10:26	5.65		0
	Cmt:Good,							
EBGmw-124	Erie Burning		1266	EC	11:49	3.34		0
	Cmt:Good,							
EBGmw-123	Erie Burning		1266	EC	12:43	9.5		0
	Cmt:Good,							

MONITOR WELL STATIC WATER LEVEL FORM

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

FIELD BOOK#: 1 DATE: 1/21/2011

Monitor Well Number	Location	Total Well Depth (ft)	Water Level Indicator	Sampler	Time	Depth to Static Water Level (ft)	Sounding	PID Reading (above bkgrnd)
DA2mw-107	Demo.Area	16.88	Keck	JM	8:40	7.95		0
	Cmt:Good, Medium							
DA2mw-107	Demo.Area		QED	CAL	8:40	7.95		0
	Cmt:Good,							
DA2mw-110	Demo.Area		05769	LS	8:45	9.29		0
	Cmt:Good,							
DA2mw-110	Demo.Area	22.32	5769	JM	8:45	9.29		0
	Cmt:Good, Medium							
DA2mw-106	Demo.Area		1266	EC	8:48	3.67		0
	Cmt:Good, Hard							
DA2mw-106	Demo.Area	16.79	1266	JM	8:48	3.67		0
	Cmt:Good, Hard							

Purge/Sample Records

MONITOR WELL PURGING FORM

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

LOCATION: CENTRAL BUR DATE: 1/20/2011 START TIME: 12:20

WELL ID: CBPmw-001

WELL DEPTH: _____ INITIAL WATER LEVEL: 14.5

WELL DIAMETER _____ SCREEN INTERVAL: 21.8 - 31.8

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 26.8

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

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:27	15.03	0.15	0.5	11.73	2.66	2.6	8.21	23.7
12:30	15.52	0.15	0.45	11.48	2.84	2.68	8.23	11.4
12:33	16.10	0.15	0.45	11.68	2.8	2.4	8.21	11.1

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

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **CENTRAL BU** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: CBPmw-001 SampleID: FWGCBPMW-001C-1655-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2011 TIME: 12:35

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 2.79	Color:	Clear
		Odor:	None

pH: 8.17 Temperature (°C): 12.01 DO (mg/L): 2.38 Specific Conductivity (mS/cm): 11.1

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: SW AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: CENTRAL BUR DATE: 1/20/2011 START TIME: 12:13

WELL ID: CBPmw-004

WELL DEPTH: _____ INITIAL WATER LEVEL: 11.59

WELL DIAMETER _____ SCREEN INTERVAL: 17 - 27

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 22.0

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

COMMENTS black tint to start then cloudy brwn extra purge to try & lower turb Coudy Tan 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	11.70	0.15	0.25	7.68	0.821	2.31	7.18	9999
12:19	11.71	0.15	0.45	7.98	0.886	0.37	7.12	9999
12:22	11.73	0.15	0.45	8.4	0.91	0.3	7.12	9999
12:25	11.75	0.15	0.45	8.32	0.921	0.32	7.14	9999
12:28	11.76	0.15	0.45	8.29	0.998	0.3	7.16	9999

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

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **CENTRAL BU** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: CBPmw-004 SampleID: FWGCBPmw-004C-1656-GW/GF DuplID:

SplitID: RinseID: FWGEQUIPRinse4-1701-GW

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

GRAB: Y COMPOSITE: N DATE: 1/20/2011 TIME: 12:30

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 9999	Color:	Coudy Tan
		Odor:	None

pH: 7.19 Temperature (°C): 8.3 DO (mg/L): 0.12 Specific Conductivity (mS/cm): 1.09

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: W AMBIENT TEMP (°F): 20

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8330	Explo
1L/Poly	2	HNO3	6010/6020/7470	Metals
1L/Amber	4	4C	353.2/8330	Propellants
1L/Amber	4	4C	8082	PCB
40ml/Vial	6	HCl	8260	VOC
1L/Amber	4	4C	8081	Pest
1L/Amber	4	4C	8270	SVOC
250ml/Poly	2	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

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

LOCATION: CENTRAL BUR DATE: 1/19/2011 START TIME: 16:00

WELL ID: CBPmw-005

WELL DEPTH: INITIAL WATER LEVEL: 12.75

WELL DIAMETER SCREEN INTERVAL: 14.5 - 24.5

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

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

COMMENTS Gray tint Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:03	12.94	0.4	1	13.47	1.01	4.49	8.69	838
16:06	12.94	0.4	1.2	13.68	1.01	1.63	8.76	398
16:09	12.95	0.4	1.2	13.57	0.99	1.03	8.78	245

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

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **CENTRAL BU** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: CBPmw-005 SampleID: FWGCBPMW-005C-1658-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 16:10

FIELD READINGS / OBSERVATIONS

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

pH: 8.78 Temperature (°C): 13.81 DO (mg/L): 1.01 Specific Conductivity (mS/cm): 0.97

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8270	SVOC
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	8081	Pest

MONITOR WELL PURGING FORM

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

LOCATION: CENTRAL BUR DATE: 1/20/2011 START TIME: 14:00

WELL ID: CBPmw-007

WELL DEPTH: _____ INITIAL WATER LEVEL: 17

WELL DIAMETER _____ SCREEN INTERVAL: 19.5 - 29.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 24.5

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)
14:13	19.45	0.4	1	13.42	2.22	5.77	8.27	768
14:16	19.45	0.4	1.2	13.54	2.18	6.07	8.22	632
14:19	19.45	0.4	1.2	13.6	2.13	6.36	8.17	473

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

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **CENTRAL BU** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: CBPmw-007 SampleID: FWGCBPMW-007C-1658-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2011 TIME: 14:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 362	Color:	Clear
		Odor:	None

pH: 8.14 Temperature (°C): 13.69 DO (mg/L): 6.25 Specific Conductivity (mS/cm): 2.11

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: SW AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	353.2/8330	Propellants
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

MONITOR WELL PURGING FORM

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

LOCATION: CENTRAL BUR DATE: 1/19/2011 START TIME: 16:45

WELL ID: CBPmw-008

WELL DEPTH: INITIAL WATER LEVEL: 16.79

WELL DIAMETER SCREEN INTERVAL: 15 - 25

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 20.0

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

COMMENTS Odor:

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:55	19.23	0.4	1	13.47	2.03	3.9	8.55	20.4
16:58	19.45	0.4	1.2	13.51	2.03	4.38	8.5	14.6
17:01	19.61	0.4	1.2	13.56	2.01	4.77	8.45	12.9

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

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **CENTRAL BU** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: CBPmw-008 SampleID: FWGCBPMW-008C-1659-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2011 TIME: 17:05

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 11.9	Color:	Clear
		Odor:	None

pH: 8.44 Temperature (°C): 13.57 DO (mg/L): 4.83 Specific Conductivity (mS/cm): 2.02

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8270	SVOC
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
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	8081	Pest
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

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

LOCATION: COBBS POND DATE: 1/20/2011 START TIME: 8:48

WELL ID: CPmw-002

WELL DEPTH: INITIAL WATER LEVEL: 0.18

WELL DIAMETER SCREEN INTERVAL: 5.5 - 15.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 10.5

PUMP READINGS: Throttle: 30 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)
8:54	0.25	0.16	0.2	6.51	0.952	0.61	6.79	137
8:57	0.50	0.16	0.48	6.62	1	0.33	6.99	188
9:00	0.67	0.16	0.48	6.6	1.01	0.12	7.03	168
9:03	0.70	0.16	0.48	6.67	1.11	0.3	7.06	184

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

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **COBBS POND** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: CPmw-002 SampleID: FWGCPmw-002C-1660-GW/GF DupliID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2011 TIME: 9:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 163	Color:	Clear
		Odor:	None

pH: 7.07 Temperature (°C): 6.76 DO (mg/L): 0.22 Specific Conductivity (mS/cm): 1.2

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 20

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

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

MONITOR WELL PURGING FORM

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

LOCATION: COBBS POND DATE: 1/20/2011 START TIME: 8:30

WELL ID: CPmw-005

WELL DEPTH: INITIAL WATER LEVEL: 12.24

WELL DIAMETER SCREEN INTERVAL: 29.5 - 39.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 34.5

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)
8:55	13.36	0.3	1	12.48	0.73	0.89	8.24	0
8:58	13.49	0.3	0.9	12.74	0.739	0.58	8.38	0
9:01	13.61	0.3	0.9	13.04	0.741	0.57	8.47	0
9:04	13.65	0.3	0.9	13.1	0.743	0.66	8.52	0
9:07	13.70	0.3	0.9	13.08	0.747	0.75	8.54	0

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

Field Personnel: LS

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **COBBS POND** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: CPmw-005 SampleID: FWGCPMW-005C-1661-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2011 TIME: 9:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 0.748	Color:	Clear
		Odor:	None

pH: 8.55 Temperature (°C): 13.04 DO (mg/L): 0.75 Specific Conductivity (mS/cm): 0.748

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 25

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: COBBS POND DATE: 1/20/2011 START TIME: 10:11

WELL ID: CPmw-006

WELL DEPTH: _____ INITIAL WATER LEVEL: 8.2

WELL DIAMETER _____ SCREEN INTERVAL: 8 - 18

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

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

COMMENTS black start then dark grey cloudy extra purge to try & lower turb grey 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)
10:16	8.31	0.2	0.25	8.55	0.724	3.3	6.94	9999
10:19	8.32	0.25	0.75	9.11	0.744	7.08	6.62	9999
10:22	8.33	0.25	0.75	9.23	0.761	7	6.59	9999
10:25	8.33	0.25	0.75	9.58	0.775	6.92	6.57	934
10:28	8.33	0.25	0.75	9.61	0.777	6.89	6.56	930
10:31	8.33	0.25	0.75	9.93	0.778	6.85	6.56	932
10:34	8.33	0.25	0.75	9.92	0.778	6.86	6.57	935

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

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **COBBS POND** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: CPmw-006 SampleID: FWGCPmw-006C-1662-GW/GF DupID: FWGCPmw-DUP4-1695-GW/GF

SplitID: FWGCPmw-006C-1690s-GW/GF RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2011 TIME: 10:40

FIELD READINGS / OBSERVATIONS

	Turb (NTU):	933	Color: grey cloudy
			Odor: None

pH: 6.56 Temperature (°C): 9.93 DO (mg/L): 6.9 Specific Conductivity (mS/cm): 0.796

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 25

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt: 1/2 hr after sampling started the turb =932

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

MONITOR WELL PURGING FORM

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

LOCATION: DEMO.AREA 2 DATE: 1/21/2011 START TIME: 8:48

WELL ID: DA2mw-106

WELL DEPTH: _____ INITIAL WATER LEVEL: 3.67

WELL DIAMETER _____ SCREEN INTERVAL: 8.3 - 15.3

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 11.8

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)
9:03	4.62	0.2	0.5	6	1.18	9.46	6.52	320
9:03	4.62	0.2	0.5	6	1.18	9.46	6.52	320
9:06	5.15	0.2	0.6	5.85	1.19	10.06	6.65	428
9:06	5.15	0.2	0.6	5.85	1.19	10.06	6.65	428
9:09	5.82	0.2	0.6	6.06	1.18	10.24	6.71	399
9:09	5.82	0.2	0.6	6.06	1.18	10.24	6.71	399
9:12	6.44	0.2	0.6	5.8	1.19	10.86	6.74	290
9:12	6.44	0.2	0.6	5.8	1.19	10.86	6.74	290

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

Field Personnel: JM

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: DA2mw-106 SampleID: FWGDA2mw-106C-1663-GW DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/21/2011 TIME: 9:17

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 225	Color:	Clear
		Odor:	None

pH: 6.76 Temperature (°C): 5.73 DO (mg/L): 11.06 Specific Conductivity (mS/cm): 1.19

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: E AMBIENT TEMP (°F): 12

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

MONITOR WELL PURGING FORM

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

LOCATION: DEMO.AREA 2 DATE: 1/21/2011 START TIME: 8:40

WELL ID: DA2mw-107

WELL DEPTH: 16.88 INITIAL WATER LEVEL: 7.95

WELL DIAMETER SCREEN INTERVAL: 8.8 - 13.8

PUMP/PURGING DEVICE: - PUMP INTAKE DEPTH: 11.3

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

COMMENTS Medium tint Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:46	8.00	0.15	0.25	7.15	0.45	5.94	6.49	850
8:46	8.00	0.15	0.25	7.15	0.45	5.94	6.49	850
8:49	8.45	0.175	0.525	7.61	0.693	4.89	6.98	539
8:49	8.45	0.175	0.525	7.61	0.693	4.89	6.98	539
8:52	8.45	0.2	0.6	7.13	0.703	4.52	7.12	463
8:52	8.45	0.2	0.6	7.13	0.703	4.52	7.12	463
8:55	8.45	0.2	0.6	7.19	0.699	4.18	7.15	325
8:55	8.45	0.2	0.6	7.19	0.699	4.18	7.15	325
8:58	8.45	0.2	0.6	7.27	0.701	4.03	7.17	279
8:58	8.45	0.2	0.6	7.27	0.701	4.03	7.17	279
9:01	8.45	0.2	0.6	7.29	0.7	3.76	7.2	243
9:01	8.45	0.2	0.6	7.29	0.7	3.76	7.2	243

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: DA2mw-107 SampleID: FWGDA2mw-107C-1664-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/21/2011 TIME: 9:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU):	211	Color: tint
			Odor: None

pH: 7.21 Temperature (°C): 7.26 DO (mg/L): 3.41 Specific Conductivity (mS/cm): 0.698

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: NW AMBIENT TEMP (°F): 15

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	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
1L/Poly	1	HNO3	6010/6020/7470	Metals
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo

MONITOR WELL PURGING FORM

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

LOCATION: DEMO.AREA 2 DATE: 1/21/2011 START TIME: 8:45

WELL ID: DA2mw-110

WELL DEPTH: INITIAL WATER LEVEL: 9.29

WELL DIAMETER SCREEN INTERVAL: 9.3 - 19.3

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

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

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:52	10.39	0.4	0.25	13.53	0.471	1.82	6.55	0
8:52	10.39	0.4	0.25	13.53	0.471	1.82	6.55	0
8:55	12.24	0.4	1.2	13.34	0.469	1.9	6.8	0
8:55	12.24	0.4	1.2	13.34	0.469	1.9	6.8	0
8:58	12.78	0.2	0.6	12.95	0.466	2.02	7.08	0
8:58	12.78	0.2	0.6	12.95	0.466	2.02	7.08	0
9:01	12.83	0.2	0.6	13.01	0.468	2.16	7.16	0
9:01	12.83	0.2	0.6	13.01	0.468	2.16	7.16	0
9:04	12.89	0.2	0.6	13.15	0.465	2.13	7.23	0
9:04	12.89	0.2	0.6	13.15	0.465	2.13	7.23	0
9:07	13.02	0.2	0.6	12.37	0.464	2.14	7.28	0
9:07	13.02	0.2	0.6	12.37	0.464	2.14	7.28	0
9:10	13.21	0.2	0.6	12.35	0.465	2.2	7.32	0
9:10	13.21	0.2	0.6	12.35	0.465	2.2	7.32	0

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: DA2mw-110 SampleID: FWGDA2MW-110C-1665-GW/GF DupIID:

SplitID: RinseID: FWGEQUIPRINSE-1702-GW

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

GRAB: Y COMPOSITE: N DATE: 1/21/2011 TIME: 9:15

FIELD READINGS / OBSERVATIONS

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

pH: 7.36 Temperature (°C): 12.93 DO (mg/L): 2.05 Specific Conductivity (mS/cm): 0.465

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: NW AMBIENT TEMP (°F): 14

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
250ml/Poly	2	NaOH	9012	Cyanide
1L/Amber	4	4C	353.2/8330	Propellants
1L/Amber	4	4C	8081	Pest
1L/Amber	2	4C	8330	Explo
40ml/Vial	6	HCl	8260	VOC
1L/Amber	4	4C	8270	SVOC
1L/Amber	4	4C	8082	PCB
1L/Poly	2	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

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

LOCATION: ERIE BURNING DATE: 1/20/2011 START TIME: 12:43

WELL ID: EBGmw-123

WELL DEPTH: _____ INITIAL WATER LEVEL: 9.5

WELL DIAMETER _____ SCREEN INTERVAL: 21 - 31

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 26.0

PUMP READINGS: Throttle: 60 Recharge: 10.5 Discharge: 4.5

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)
12:48	9.85	0.2	0.5	7.35	0.68	6.46	7.4	96.7
12:51	9.93	0.2	0.6	7.93	0.678	4.55	7.34	69.5
12:54	10.02	0.2	0.6	8.42	0.681	4.55	7.33	68.1
12:57	10.03	0.2	0.6	8.64	0.691	4.8	7.33	67.5

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **ERIE BURNIN** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: EBGmw-123 SampleID: FWGEBGmw-123C-1666-GW DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2011 TIME: 13:06

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 69.1	Color:	Clear
		Odor:	None

pH: 7.34 Temperature (°C): 8.69 DO (mg/L): 5.01 Specific Conductivity (mS/cm): 0.694

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: E AMBIENT TEMP (°F): 20

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
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
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: ERIE BURNING DATE: 1/20/2011 START TIME: 11:49

WELL ID: EBGmw-124

WELL DEPTH: _____ INITIAL WATER LEVEL: 3.34

WELL DIAMETER _____ SCREEN INTERVAL: 20 - 30

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 25.0

PUMP READINGS: Throttle: 50 Recharge: 10.5 Discharge: 4.5

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)
11:50	3.54	0.2	0.5	7.57	0.672	8.52	7.57	999
11:53	3.54	0.2	0.6	7.75	0.667	6.93	7.54	999
11:56	3.54	0.2	0.6	8.02	0.667	5.49	7.51	999

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **ERIE BURNIN** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: EBGmw-124 SampleID: FWGEBGmw-124C-1667-GW DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2011 TIME: 12:02

FIELD READINGS / OBSERVATIONS

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

pH: 7.5 Temperature (°C): 8.04 DO (mg/L): 5.06 Specific Conductivity (mS/cm): 0.666

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: E AMBIENT TEMP (°F): 20

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/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: ERIE BURNING DATE: 1/20/2011 START TIME: 8:52

WELL ID: EBGmw-126

WELL DEPTH: _____ INITIAL WATER LEVEL: 1.96

WELL DIAMETER _____ SCREEN INTERVAL: 15.2 - 25.2

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 20.2

PUMP READINGS: Throttle: 40 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)
8:58	2.81	0.2	0.5	7.77	0.711	9.46	6.3	263
9:01	2.91	0.2	0.6	8.09	0.704	4.64	6.66	318
9:04	2.92	0.2	0.6	8.04	0.713	3.77	6.83	261
9:07	2.92	0.2	0.6	8.11	0.727	3.26	6.93	208
9:10	2.92	0.2	0.6	8.04	0.742	2.99	7.01	193
9:13	2.96	0.2	0.6	8.24	0.756	2.85	7.04	186
9:16	2.96	0.2	0.6	8.27	0.766	2.75	7.11	173

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **ERIE BURNIN** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: EBGmw-126 SampleID: FWGWBGmw-126C-1668-GW DupliID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2011 TIME: 9:23

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 146	Color:	Clear
		Odor:	None

pH: 7.13 Temperature (°C): 8.29 DO (mg/L): 2.66 Specific Conductivity (mS/cm): 0.777

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: E AMBIENT TEMP (°F): 17

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
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	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8082	PCB

MONITOR WELL PURGING FORM

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

LOCATION: ERIE BURNING DATE: 1/20/2011 START TIME: 10:26

WELL ID: EBGmw-129

WELL DEPTH: _____ INITIAL WATER LEVEL: 5.65

WELL DIAMETER _____ SCREEN INTERVAL: 16 - 26

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 21.0

PUMP READINGS: Throttle: 40 Recharge: 11 Discharge: 4

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:28	5.65	0.2	0.5	7.37	0.435	7.05	7.66	482
10:31	5.65	0.2	0.6	7.48	0.432	5.41	7.61	542
10:34	5.65	0.2	0.6	7.5	0.433	4.55	7.56	518

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **ERIE BURNIN** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: EBGmw-129 SampleID: FWGEBGmw-129C-1669-GW DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/20/2011 TIME: 10:42

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 495	Color:	Clear
		Odor:	None

pH: 7.54 Temperature (°C): 7.65 DO (mg/L): 4.27 Specific Conductivity (mS/cm): 0.432

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: E AMBIENT TEMP (°F): 20

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8082	PCB
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

MONITOR WELL PURGING FORM

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

LOCATION: FUZE AND BO DATE: 1/18/2011 START TIME: 13:05

WELL ID: FBQmw-169

WELL DEPTH: INITIAL WATER LEVEL: 6.4

WELL DIAMETER SCREEN INTERVAL: 5 - 15

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 10.0

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)
13:10	6.80	0.1	0.5	8.2	0.47	7.1	7.16	999
13:13	6.85	0.1	0.3	8.7	0.48	7.1	6.86	429
13:16	6.92	0.1	0.3	8.8	0.458	6.4	6.62	318
13:19	6.97	0.1	0.3	8.9	0.446	6.1	6.33	259
13:22	7.03	0.1	0.3	8.8	0.444	5.8	6.17	220
13:25	7.08	0.1	0.3	8.9	0.442	5.7	6.07	195
13:28	7.14	0.1	0.3	8.9	0.441	5.5	6.02	172
13:31	7.18	0.1	0.3	9	0.441	5.3	5.98	160

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **FUZE AND BO** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: FBQmw-169 SampleID: FWGFBQmw-169C-1670-GW DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 13:43

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 132	Color:	Clear
		Odor:	None

pH: 5.99 Temperature (°C): 9 DO (mg/L): 5.2 Specific Conductivity (mS/cm): 0.441

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: E 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/Amber	2	4C	8270	SVOC
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	1	4C	8330	Explo
1L/Amber	2	4C	8081	Pest

MONITOR WELL PURGING FORM

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

LOCATION: FUZE AND BO DATE: 1/18/2011 START TIME: 14:28

WELL ID: FBQmw-172

WELL DEPTH: _____ INITIAL WATER LEVEL: 29.65

WELL DIAMETER _____ SCREEN INTERVAL: 20 - 30

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 25.0

PUMP READINGS: Throttle: 60 Recharge: 11.5 Discharge: 3.5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:33	29.81	0.2	0.5	9.8	0.642	7.6	6.44	164
14:36	29.87	0.2	0.6	10	0.647	7.2	6.51	119
14:39	29.91	0.2	0.6	10.2	0.637	6.6	6.56	75.1
14:42	29.91	0.2	0.6	10.2	0.615	6.4	6.59	58.1

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **FUZE AND BO** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: FBQmw-172 SampleID: FWGFBQmw-172C-1671-GW DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 14:54

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 39.9	Color:	Clear
		Odor:	None

pH: 6.61 Temperature (°C): 10.3 DO (mg/L): 6.2 Specific Conductivity (mS/cm): 0.609

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: E 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
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

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

LOCATION: FUZE AND BO DATE: 1/18/2011 START TIME: 15:51

WELL ID: FBQmw-173

WELL DEPTH: INITIAL WATER LEVEL: 46.02

WELL DIAMETER SCREEN INTERVAL: 29.5 - 49.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 39.5

PUMP READINGS: Throttle: 70 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)
15:55	46.15	0.1	0.5	8.9	0.123	8.6	6.78	81.2
15:58	46.15	0.1	0.3	8.8	0.121	8.3	6.6	48.3
16:01	46.15	0.1	0.3	8.9	0.116	7.9	6.35	42.6
16:04	46.15	0.1	0.3	8.9	0.116	7.9	6.23	42.5
16:07	46.15	0.1	0.3	9.1	0.114	7.7	6.17	41.8
16:10	46.15	0.1	0.3	9	0.114	7.6	6.15	35

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **FUZE AND BO** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: FBQmw-173 SampleID: FWGFBQmw-173C-1672-GW DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 16:17

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 34.2	Color:	Clear
		Odor:	None

pH: 6.14 Temperature (°C): 9 DO (mg/L): 7.7 Specific Conductivity (mS/cm): 0.113

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: E AMBIENT TEMP (°F): 36

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: FUZE AND BO DATE: 1/19/2011 START TIME: 12:45

WELL ID: FBQmw-174

WELL DEPTH: INITIAL WATER LEVEL: 19.59

WELL DIAMETER SCREEN INTERVAL: 12 - 22

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

PUMP READINGS: Throttle: 40 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)
12:57	19.75	0.1	0.5	3.53	0.096	9.79	7.16	20.1
13:00	19.78	0.1	0.3	3.86	0.094	9.44	6.89	26.4
13:03	19.78	0.1	0.3	4.21	0.09	9.33	6.67	35.7
13:06	19.78	0.1	0.3	4.44	0.09	9.42	6.39	32.5
13:09	19.78	0.1	0.3	4.53	0.089	9.45	6.34	28.3
13:12	19.79	0.1	0.3	4.42	0.089	9.38	6.31	26.8

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **FUZE AND BO** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: FBQmw-174 SampleID: FWGFBQmw-174C-1673-GW DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 13:21

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 24.5	Color:	Clear
		Odor:	None

pH: 6.31 Temperature (°C): 4.41 DO (mg/L): 9.44 Specific Conductivity (mS/cm): 0.09

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: NE AMBIENT TEMP (°F): 25

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: LANDFILL NO DATE: 1/19/2011 START TIME: 8:39

WELL ID: LNWmw-025

WELL DEPTH: INITIAL WATER LEVEL: 5.2

WELL DIAMETER SCREEN INTERVAL: 8 - 18

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

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)
8:46	5.84	0.2	0.5	7.69	0.333	6.79	6.18	999
8:49	5.84	0.2	0.5	7.8	0.333	3.74	6.18	999
8:52	6.25	0.2	0.6	7.99	0.333	3.75	6.26	453
8:55	6.32	0.2	0.6	8.3	0.33	3.3	6.27	406

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

Field Personnel: EC

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LNWmw-025 SampleID: FWGLNWmw-025C-1674-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 9:03

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 332	Color:	Clear
		Odor:	None

pH: 6.28 Temperature (°C): 8.5 DO (mg/L): 2.93 Specific Conductivity (mS/cm): 0.329

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 25

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 1 DATE: 1/17/2011 START TIME: 15:07

WELL ID: LL1mw-067

WELL DEPTH: 25.68 INITIAL WATER LEVEL: 22.42

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 Tan 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	22.89	0.5	0.75	8.7	0.64	7.69	7.46	213
15:14	23.53	0.5	2	9.7	0.95	7.22	6.5	-5
15:17	23.95	0.5	3.25	10.1	0.9	7.56	5.98	-5
15:20	24.10	0.5	5.5	10.4	0.69	8.69	5.76	934
15:23	24.05	0.5	7.7	10.4	0.99	7.8	5.68	-5
15:26	24.20	0.5	10	10.4	1	7.7	5.63	707
15:29	24.28	0.5	11.7	10.4	1	7.8	5.62	-5

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

Field Personnel: CAL

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL1mw-067 SampleID: FWGLL1mw-067C-1640-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/17/2011 TIME: 15:30

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 953	Color:	Tan
		Odor:	None

pH: 5.51 Temperature (°C): 10 DO (mg/L): 9.74 Specific Conductivity (mS/cm): 0.72

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: S AMBIENT TEMP (°F): 20

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: percholrate

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 1 DATE: 1/17/2011 START TIME: 14:50

WELL ID: LL1mw-081

WELL DEPTH: INITIAL WATER LEVEL: 32.63

WELL DIAMETER SCREEN INTERVAL: 29.4 - 38.9

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

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

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
15:02	33.46	0.4	2	14.27	0.554	7.76	7.39	406
15:05	34.84	0.4	1.2	14.26	0.547	1.94	7.41	327
15:08	35.03	0.4	1.2	14.35	0.541	1.7	7.39	296

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL1mw-081 SampleID: FWGLL1MW-081C-1641-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/17/2011 TIME: 15:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 163	Color:	Clear
		Odor:	None

pH: 7.39 Temperature (°C): 14.37 DO (mg/L): 1.51 Specific Conductivity (mS/cm): 0.54

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: NW AMBIENT TEMP (°F): 20

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt: + Perchlorate

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 1 DATE: 1/17/2011 START TIME: 16:30

WELL ID: LL1mw-082

WELL DEPTH: INITIAL WATER LEVEL: 34.07

WELL DIAMETER SCREEN INTERVAL: 28.9 - 38.5

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

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)
16:40	34.19	0.13	0.25	8.34	0.71	8.01	6.27	394
16:43	34.30	0.13	0.39	8.19	0.79	7.8	6.26	329
16:46	34.42	0.13	0.39	8.31	0.78	7.64	6.24	333

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

Field Personnel: CAL

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL1mw-082 SampleID: FWGLL1mw-082C-1642-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/17/2011 TIME: 16:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 309	Color:	Clear
		Odor:	None

pH: 6.23 Temperature (°C): 8.33 DO (mg/L): 7.57 Specific Conductivity (mS/cm): 0.76

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: S AMBIENT TEMP (°F): 18

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: percholrate

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	8081	Pest
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	353.2/8330	Propellants
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 1 DATE: 1/17/2011 START TIME: 14:05

WELL ID: LL1mw-084

WELL DEPTH: INITIAL WATER LEVEL: 31.45

WELL DIAMETER SCREEN INTERVAL: 26.7 - 36.3

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

PUMP READINGS: Throttle: 60 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)
14:48	31.78	0.1	0.5	10.2	0.839	6.5	5.04	29.5
14:51	31.80	0.1	0.3	9.4	0.554	5.8	5.27	33.5
14:54	31.82	0.1	0.3	9.1	0.42	5.3	5.26	32
14:57	31.86	0.1	0.3	9.2	0.373	5.1	5.31	29.5
15:00	31.90	0.1	0.3	9.3	0.35	4.9	5.33	27.6
15:03	31.92	0.1	0.3	9.4	0.34	4.9	5.37	25.4

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-1643-GW/GF DupIID: FWGLL1mw-DUP2-1693-GW/GF

SplitID: FWGLL1mw-084C-1692S-GW/GF RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/17/2011 TIME: 15:07

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 24.4	Color:	Clear
		Odor:	None

pH: 5.4 Temperature (°C): 9.4 DO (mg/L): 4.7 Specific Conductivity (mS/cm): 0.334

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 25

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: EC Cmt: PERCHLORATES

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 1 DATE: 1/17/2011 START TIME: 13:55

WELL ID: LL1mw-085

WELL DEPTH: 45.1 INITIAL WATER LEVEL: 38.39

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 tan 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)
14:02	45.10	1	1	11.5	0.52	9.6	6.75	338
14:06	39.50	1	3	11.6	0.57	3.48	6.92	3.78
14:09	41.18	1	8	11.4	0.73	5.1	7.07	170
14:12	42.03	1	12	11.3	0.98	4.34	7.07	212
14:15	43.00	1	15	11.1	0.48	8.92	7.12	176
14:18	33.56	1	19	11.3	0.48	9.37	7.04	519
14:21	43.90	1	21	11.2	0.49	9.1	7.1	224

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

Field Personnel: CAL

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL1mw-085 SampleID: FWGLL1mw-085C-1644-GW/BF DupID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/17/2011 TIME: 14:25

FIELD READINGS / OBSERVATIONS

	Turb (NTU):	198	Color: tan
			Odor: None

pH: 7.11 Temperature (°C): 11.2 DO (mg/L): 8.89 Specific Conductivity (mS/cm): 0.49

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: S AMBIENT TEMP (°F): 20

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: percholrate

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 2 DATE: 1/18/2011 START TIME: 8:45

WELL ID: LL2mw-266

WELL DEPTH: INITIAL WATER LEVEL: 12.61

WELL DIAMETER SCREEN INTERVAL: 9.8 - 19.8

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

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

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:56	13.89	0.4	2	13.58	0.16	7.96	5.47	32.2
8:59	14.21	0.4	1.2	13.47	0.157	8.41	5.73	5.4
9:02	14.67	0.4	1.2	13.62	0.165	7.92	6.18	16.1
9:05	14.82	0.4	1.2	13.61	0.167	7.66	6.23	21.9
9:08	15.02	0.4	1.2	13.64	0.17	7.74	6.27	17.7

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL2mw-266 SampleID: FWGLL2MW-266C-1645-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 9:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 22.3	Color:	Clear
		Odor:	None

pH: 6.33 Temperature (°C): 13.65 DO (mg/L): 7.03 Specific Conductivity (mS/cm): 0.174

GENERAL INFORMATION

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

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt: + Perchlorate

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
250ml/Poly	1	NaOH	9012	Cyanide
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 2 DATE: 1/18/2011 START TIME: 10:00

WELL ID: LL2mw-267

WELL DEPTH: _____ INITIAL WATER LEVEL: 9.71

WELL DIAMETER _____ SCREEN INTERVAL: 9.8 - 19.8

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

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

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
10:07	10.20	0.4	1	13.05	0.529	2.49	6.69	298
10:10	10.25	0.4	1.2	13.3	0.52	1.87	6.81	273
10:13	10.25	0.4	1.2	13.38	0.512	1.7	6.82	246
10:16	10.25	0.4	1.2	13.41	0.508	1.7	6.82	0.254

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL2mw-267 SampleID: FWGLL2MW-267C-1646-GW/GF DupIID: FWGLL2MW-DUP3-1649-GW/GF

SplitID: FWGLL2MW-267C-1691-GW/GF RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 10:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 221	Color:	Clear
		Odor:	None

pH: 6.8 Temperature (°C): 13.54 DO (mg/L): 1.79 Specific Conductivity (mS/cm): 0.502

GENERAL INFORMATION

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

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: LS/SS Cmt: + Perchlorate, dup @ 1120

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8330	Explo
1L/Poly	2	HNO3	6010/6020/7470	Metals
40ml/Vial	6	HCl	8260	VOC
1L/Amber	4	4C	353.2/8330	Propellants
1L/Amber	4	4C	8082	PCB
1L/Amber	4	4C	8081	Pest
1L/Amber	4	4C	8270	SVOC
250ml/Poly	2	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 2 DATE: 1/18/2011 START TIME: 11:45

WELL ID: LL2mw-269

WELL DEPTH: _____ INITIAL WATER LEVEL: 17.11

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)
11:51	17.41	0.4	1	14.28	0.426	3.4	7.45	30.5
11:54	17.85	0.4	1.2	14.32	0.418	2.25	7.36	40.2
11:57	18.09	0.4	1.2	14.52	0.422	1.93	7.32	19.3
12:00	18.26	0.4	1.2	14.52	0.42	2.06	7.27	9.4

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL2mw-269 SampleID: FWGLL2MW-269C-1647-GW/GF DupID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 12:05

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 9.6	Color:	Clear
		Odor:	None

pH: 7.23 Temperature (°C): 14.58 DO (mg/L): 1.95 Specific Conductivity (mS/cm): 0.421

GENERAL INFORMATION

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

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt: + Perchlorate

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 3 DATE: 1/18/2011 START TIME: 14:00

WELL ID: LL3mw-236

WELL DEPTH: _____ INITIAL WATER LEVEL: 18.49

WELL DIAMETER _____ SCREEN INTERVAL: 13.8 - 23.8

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

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

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:05	18.71	0.4	1	13.52	0.245	5.2	6.58	0
14:08	18.95	0.4	1.2	14.1	0.27	4.51	6.64	0
14:11	19.22	0.4	1.2	14.11	0.274	4.45	6.74	0
14:14	19.61	0.4	1.2	14.12	0.287	4.33	6.78	0
14:17	19.65	0.4	1.2	14.14	0.294	4.35	6.81	0

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL3mw-236 SampleID: FWGLL3MW-236C-1648-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 14:20

FIELD READINGS / OBSERVATIONS

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

pH: 6.82 Temperature (°C): 14.12 DO (mg/L): 4.5 Specific Conductivity (mS/cm): 0.298

GENERAL INFORMATION

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

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt: + Perchlorate

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 3 DATE: 1/18/2011 START TIME: 15:01

WELL ID: LL3mw-237

WELL DEPTH: _____ INITIAL WATER LEVEL: 17.14

WELL DIAMETER _____ SCREEN INTERVAL: 12.7 - 22.7

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 17.7

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)
15:02	17.20	0.25	0.254	7.66	0.362	7.08	7.16	177
15:05	17.31	0.25	0.75	10.12	0.362	5.96	6.94	149
15:08	17.64	0.25	0.75	10.31	0.36	5.92	6.82	123
15:11	17.71	0.25	0.75	10.46	0.358	5.84	6.7	87.9
15:14	17.78	0.25	0.75	10.51	0.358	5.81	6.67	82.9
15:17	17.82	0.25	0.75	10.53	0.357	5.81	6.64	79.5

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-237 SampleID: FWGLL3mw-237C-1649-GW/GF DupIID:

SplitID: RinseID: FWGEQUIPRinse2-

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 15:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 73	Color:	tint
		Odor:	None

pH: 6.63 Temperature (°C): 10.57 DO (mg/L): 5.76 Specific Conductivity (mS/cm): 0.358

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: rinse at 1630

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Poly	2	HNO3	6010/6020/7470	Metals
1L/Amber	4	4C	8270	SVOC
1L/Amber	4	4C	8081	Pest
1L/Amber	4	4C	8082	PCB
40ml/Vial	6	HCl	8260	VOC
1L/Amber	2	4C	8330	Explo
1L/Amber	4	4C	353.2/8330	Propellants
250ml/Poly	2	NaOH	9012	Cyanide

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 3 DATE: 1/19/2011 START TIME: 15:01

WELL ID: LL3mw-238

WELL DEPTH: _____ INITIAL WATER LEVEL: 16.18

WELL DIAMETER _____ SCREEN INTERVAL: 10.5 - 20.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 15.5

PUMP READINGS: Throttle: 50 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)
15:04	16.25	0.275	0.5	8.82	0.427	8.3	6.91	380
15:07	16.40	0.25	0.75	8.79	0.426	8.57	6.83	433
15:10	16.50	0.25	0.75	8.93	0.426	8.5	6.75	370
15:13	16.58	0.25	0.75	8.98	0.425	8.54	6.7	319
15:16	16.66	0.25	0.75	9.15	0.428	8.39	6.67	228

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-238 SampleID: FWGLL3mw-238C-1650-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 15:25

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 201	Color:	tint
		Odor:	None

pH: 6.66 Temperature (°C): 9.23 DO (mg/L): 8.28 Specific Conductivity (mS/cm): 0.427

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 28

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 3 DATE: 1/19/2011 START TIME: 14:30

WELL ID: LL3mw-239

WELL DEPTH: _____ INITIAL WATER LEVEL: 26.11

WELL DIAMETER _____ SCREEN INTERVAL: 24.9 - 34.9

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

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

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:44	28.11	0.3	0.25	13.97	0.253	0.47	7.16	3.2
14:47	28.24	0.3	0.9	14.1	0.253	0.23	6.95	0.5
14:50	28.41	0.3	0.9	14.23	0.252	0	6.72	0
14:53	28.72	0.3	0.9	14.26	0.252	0	6.64	0
14:56	28.88	0.3	0.9	14.25	0.249	0	6.66	0

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL3mw-239 SampleID: FWGLL3MW-239C-1651-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 15:00

FIELD READINGS / OBSERVATIONS

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

pH: 6.71 Temperature (°C): 14.22 DO (mg/L): 0 Specific Conductivity (mS/cm): 0.249

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: SW AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	1	4C	8330	Explo
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
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: LOADLINE 3 DATE: 1/18/2011 START TIME: 15:10

WELL ID: LL3mw-242

WELL DEPTH: INITIAL WATER LEVEL: 16.94

WELL DIAMETER SCREEN INTERVAL: 9.8 - 19.8

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

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)
15:14	17.09	0.4	1	11.82	0.225	5.32	5.94	112
15:17	17.22	0.4	1.2	12.3	0.225	4.41	5.91	64.3
15:20	17.35	0.4	1.2	12.54	0.225	4.04	5.83	40.2
15:23	17.41	0.4	1.2	12.66	0.226	4.25	5.82	24.4

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL3mw-242 SampleID: FWGLL3MW-242C-1652-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 15:25

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 17.3	Color:	Clear
		Odor:	None

pH: 5.8 Temperature (°C): 12.7 DO (mg/L): 4.26 Specific Conductivity (mS/cm): 0.227

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: SW AMBIENT TEMP (°F): 32

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS 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	8270	SVOC
1L/Amber	2	4C	8081	Pest
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
1L/Amber	1	4C	8330	Explo

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 3 DATE: 1/18/2011 START TIME: 14:15

WELL ID: LL3mw-243

WELL DEPTH: INITIAL WATER LEVEL: 14.73

WELL DIAMETER SCREEN INTERVAL: 13.8 - 23.8

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

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

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
16:20	14.73	0.4	1	12.32	0.219	6.61	6.02	0
16:23	14.74	0.4	1.2	12.86	0.219	4.92	5.93	0
16:26	14.47	0.4	1.2	13.18	0.222	4.51	5.88	0
16:29	14.47	0.4	1.2	13.24	0.221	4.61	5.84	0

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: LL3mw-243 SampleID: FWGLL3MW-243C-1703-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 16:30

FIELD READINGS / OBSERVATIONS

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

pH: 5.84 Temperature (°C): 13.26 DO (mg/L): 4.53 Specific Conductivity (mS/cm): 0.222

GENERAL INFORMATION

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

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS 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/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: 1/19/2011 START TIME: 16:10

WELL ID: LL4mw-196

WELL DEPTH: INITIAL WATER LEVEL: 14.04

WELL DIAMETER SCREEN INTERVAL: 9.2 - 19.2

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

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

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:12	14.21	0.2	0.5	10.02	0.591	8.98	7.27	433
14:15	14.24	0.2	0.6	9.43	0.543	4.74	6.96	335
14:18	14.25	0.2	0.6	9.25	0.54	3.32	6.88	305
14:21	14.28	0.2	0.6	9.11	0.541	2.46	6.87	293

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-1653-GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 14:29

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 287	Color:	Clear
		Odor:	None

pH: 6.9 Temperature (°C): 9.06 DO (mg/L): 1.95 Specific Conductivity (mS/cm): 0.539

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 25

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

MONITOR WELL PURGING FORM

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

LOCATION: LOADLINE 4 DATE: 1/19/2011 START TIME: 14:40

WELL ID: LL4mw-197

WELL DEPTH: _____ INITIAL WATER LEVEL: 15.25

WELL DIAMETER _____ SCREEN INTERVAL: 10.8 - 20.8

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

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

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
14:42	15.31	0.2	0.5	7.2	0.674	7.58	6.83	127
14:45	15.36	0.2	0.6	7.05	0.692	6.63	7.06	111
14:48	15.37	0.2	0.6	7.65	0.693	6.23	7.16	108
14:51	15.39	0.2	0.6	8.51	0.697	6.29	7.22	99.2
14:54	15.41	0.2	0.6	8.8	0.703	6.39	7.25	97.6
14:57	15.44	0.2	0.6	8.99	0.71	6.73	7.27	93.6

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-1654-GW DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 15:04

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 99.2	Color:	Clear
		Odor:	None

pH: 7.28 Temperature (°C): 8.99 DO (mg/L): 6.93 Specific Conductivity (mS/cm): 0.711

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: NE AMBIENT TEMP (°F): 30

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

MONITOR WELL PURGING FORM

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

LOCATION: SUSPECTED M DATE: 1/18/2011 START TIME: 8:57

WELL ID: MBS-001

WELL DEPTH: 31.05 INITIAL WATER LEVEL: 17.65

WELL DIAMETER SCREEN INTERVAL: 19 - 28.7

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 23.9

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)
9:03	17.69	0.2	1	8.9	0.9	7.1	6.05	39.9
9:06	17.69	0.2	0.6	9.6	0.9	5.6	6.28	34
9:09	17.70	0.2	0.6	9.7	0.813	4.9	6.5	34.2
9:12	17.70	0.2	0.6	9.8	0.742	4.9	6.62	27.4
9:15	17.70	0.2	0.6	9.8	0.714	4.9	6.71	25.9
9:18	17.70	0.2	0.6	9.8	0.694	4.9	6.79	25.7
9:21	17.70	0.2	0.6	10	0.677	4.9	6.87	24.7
9:24	17.70	0.2	0.6	10	0.66	4.8	6.89	23.3

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

Field Personnel: EC

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: MBS-001 SampleID: FWGMBSmw-001C-1681-GW DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 9:34

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 19.6	Color:	Clear
		Odor:	None

pH: 6.91 Temperature (°C): 10 DO (mg/L): 4.8 Specific Conductivity (mS/cm): 0.657

GENERAL INFORMATION

SUN/OVERCAST: Sunny PERCIPITATION: N WIND DIRECTION: E AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: NACA TEST A DATE: 1/18/2011 START TIME: 10:36

WELL ID: NTAmw-112

WELL DEPTH: INITIAL WATER LEVEL: 9.24

WELL DIAMETER SCREEN INTERVAL: 13.9 - 23.9

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 18.9

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)
10:44	9.28	0.2	1	9.7	0.895	5	7	376
10:47	9.28	0.2	0.6	9.8	0.908	4.3	7.02	393
10:50	9.28	0.2	0.6	10	0.945	3.8	7.05	417

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **NACA TEST A** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: NTAmw-112 SampleID: FWGNTAmw-112C-1679-GW DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 10:58

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 392	Color:	Clear
		Odor:	None

pH: 7.05 Temperature (°C): 10.1 DO (mg/L): 3.4 Specific Conductivity (mS/cm): 0.957

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: E AMBIENT TEMP (°F): 36

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
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC

MONITOR WELL PURGING FORM

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

LOCATION: NACA TEST A DATE: 1/18/2011 START TIME: 11:54

WELL ID: NTAmw-113

WELL DEPTH: INITIAL WATER LEVEL: 7.19

WELL DIAMETER SCREEN INTERVAL: 17 - 27

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 22.0

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)
11:59	7.19	0.2	0.5	8.3	0.847	6	7.28	935
12:02	7.19	0.2	0.6	8.8	0.82	5.1	7.3	896
12:05	7.19	0.2	0.6	9	0.805	5.3	7.33	850

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

Field Personnel: EC

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **NACA TEST A** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: NTAmw-113 SampleID: FWGNTAmw-113C-1680-GW DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 12:12

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 750	Color:	Clear
		Odor:	None

pH: 7.36 Temperature (°C): 9.2 DO (mg/L): 5.7 Specific Conductivity (mS/cm): 0.807

GENERAL INFORMATION

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

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: EC Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: SHARON CON DATE: 1/18/2011 START TIME: 8:41

WELL ID: SCFmw-001

WELL DEPTH: 214.52 INITIAL WATER LEVEL: 89.69

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: - PUMP INTAKE DEPTH: 0.0

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

COMMENTS Hard 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)
9:16	89.69	0.27	0.5	2	0.63	3.55	7.64	9
9:16	89.69	0.27	0.5	2	0.63	3.55	7.64	9
9:18	89.70	0.27	0.54	1.99	0.6	0.75	9.01	17
9:18	89.70	0.27	0.54	1.99	0.6	0.75	9.01	17
9:21	89.70	0.27	0.81	2.04	0.59	0.68	9.08	21
9:21	89.70	0.27	0.81	2.04	0.59	0.68	9.08	21
9:24	89.70	0.27	0.81	2.14	0.59	0.31	9.11	18.2
9:24	89.70	0.27	0.81	2.14	0.59	0.31	9.11	18.2

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

Field Personnel: CAL

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **SHARON CON** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: scfmw-001 SampleID: FWGSCFmw-001-1682-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 9:30

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 19.4	Color:	Clear
		Odor:	SULFER

pH: 8.12 Temperature (°C): 2.18 DO (mg/L): 0.26 Specific Conductivity (mS/cm): 0.59

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	2	4C	8081	Pest
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
1L/Amber	2	4C	353.2/8330	Propellants
250ml/Poly	1	NaOH	9012	Cyanide
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Amber	2	4C	8270	SVOC

MONITOR WELL PURGING FORM

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

LOCATION: SHARON CON DATE: 1/18/2011 START TIME: 11:05

WELL ID: SCFmw-002

WELL DEPTH: 149.79 INITIAL WATER LEVEL: 19.85

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: - PUMP INTAKE DEPTH: 0.0

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

COMMENTS Hard 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)
11:11	19.85	0.4	0.5	5.78	0.75	1.6	7.93	6
11:11	19.85	0.4	0.5	5.78	0.75	1.6	7.93	6
11:14	19.85	0.4	1.2	6.3	0.74	1.3	7.91	7.5
11:14	19.85	0.4	1.2	6.3	0.74	1.3	7.91	7.5
11:17	19.85	0.4	1.2	6.7	0.75	1.3	7.9	3.6
11:17	19.85	0.4	1.2	6.7	0.75	1.3	7.9	3.6

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

Field Personnel: JM

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **SHARON CON** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: scfmw-002 SampleID: FWGSCFmw-002-1683-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 11:25

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 2.7	Color:	Clear
		Odor:	None

pH: 7.9 Temperature (°C): 6.82 DO (mg/L): 1.47 Specific Conductivity (mS/cm): 0.74

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 30

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	8081	Pest
1L/Amber	2	4C	8270	SVOC
40ml/Vial	3	HCl	8260	VOC
1L/Amber	2	4C	8082	PCB
1L/Amber	2	4C	353.2/8330	Propellants
1L/Amber	1	4C	8330	Explo
250ml/Poly	1	H2SO4	353.2	NO3/NO2
1L/Poly	1	HNO3	6010/6020/7470	Metals

MONITOR WELL PURGING FORM

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

LOCATION: SHARON CON DATE: 1/19/2011 START TIME: 12:21

WELL ID: SCFmw-003

WELL DEPTH: 139.6 INITIAL WATER LEVEL: 9.56

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: - PUMP INTAKE DEPTH: 0.0

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

COMMENTS Hard 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)
12:33	9.57	0.5	0.5	5.88	0.624	9.59	6.59	11.5
12:33	9.57	0.5	0.5	5.88	0.624	9.59	6.59	11.5
12:36	9.80	0.5	1.5	7.02	0.615	9.33	6.74	12
12:36	9.80	0.5	1.5	7.02	0.615	9.33	6.74	12
12:39	9.81	0.5	1.5	7.26	0.605	9.28	6.79	10.5
12:39	9.81	0.5	1.5	7.26	0.605	9.28	6.79	10.5
12:41	9.81	0.5	1	7.47	0.613	9.23	6.86	8.2
12:41	9.81	0.5	1	7.47	0.613	9.23	6.86	8.2
12:44	9.83	0.5	1.5	7.55	0.619	9.12	6.89	7.5
12:44	9.83	0.5	1.5	7.55	0.619	9.12	6.89	7.5

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-003 SampleID: FWGSCFmw-003-1684-GW/GF DuplID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 12:50

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 9.2	Color:	Clear
		Odor:	None

pH: 6.9 Temperature (°C): 7.43 DO (mg/L): 9.14 Specific Conductivity (mS/cm): 0.618

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: W AMBIENT TEMP (°F): 26

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: SHARON CON DATE: 1/18/2011 START TIME: 12:45

WELL ID: scfmw-004

WELL DEPTH: INITIAL WATER LEVEL: 0.89

WELL DIAMETER SCREEN INTERVAL: -

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

PUMP READINGS: Throttle: 70 Recharge: 10 Discharge: 5

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
12:48	0.90	0.5	0.5	6.67	1.35	5.06	7.4	3.5
12:48	0.90	0.5	0.5	6.67	1.35	5.06	7.4	3.5
12:51	0.89	0.5	1.5	7.36	1.41	4.5	7.32	2
12:51	0.89	0.5	1.5	7.36	1.41	4.5	7.32	2
12:54	0.90	0.5	1.5	7.77	1.57	4.33	7.29	0.7
12:54	0.90	0.5	1.5	7.77	1.57	4.33	7.29	0.7
12:57	0.91	0.5	1.5	8.19	1.75	3.88	7.28	2
12:57	0.91	0.5	1.5	8.19	1.75	3.88	7.28	2
13:00	0.90	0.5	1.5	8.34	1.76	3.53	7.26	1
13:00	0.90	0.5	1.5	8.34	1.76	3.53	7.26	1
13:03	0.89	0.5	1.5	8.34	1.8	3.37	7.25	1.6
13:03	0.89	0.5	1.5	8.34	1.8	3.37	7.25	1.6

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-004 SampleID: FWGSCFmw-004-1685-GW/GF DuplID: FWGSCFmw-DUP1-1697-GW/GF

SplitID: FWGSCFmw-004-1688s-GW/GF RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/18/2011 TIME: 13:10

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 2.4	Color:	Clear
		Odor:	None

pH: 7.25 Temperature (°C): 8.47 DO (mg/L): 3.2 Specific Conductivity (mS/cm): 1.82

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: W AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Multiple Labs

SAMPLER: CAL Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: SHARON CON DATE: 1/19/2011 START TIME: 8:45

WELL ID: SCFmw-005

WELL DEPTH: 158.5 INITIAL WATER LEVEL: 12.13

WELL DIAMETER SCREEN INTERVAL: -

PUMP/PURGING DEVICE: - PUMP INTAKE DEPTH: 0.0

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

COMMENTS Hard 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)
8:55	12.14	0.28	0.5	3.44	0.99	0.78	6.57	1.5
8:55	12.14	0.28	0.5	3.44	0.99	0.78	6.57	1.5
8:58	12.14	0.28	0.84	5.4	0.98	0.34	6.53	0.5
8:58	12.14	0.28	0.84	5.4	0.98	0.34	6.53	0.5
9:01	12.14	0.28	0.84	6.24	0.99	0.3	6.55	1.1
9:01	12.14	0.28	0.84	6.24	0.99	0.3	6.55	1.1
9:04	12.14	0.28	0.84	6.29	1	0.31	6.54	3
9:04	12.14	0.28	0.84	6.29	1	0.31	6.54	3

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

Field Personnel: JM

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **SHARON CON** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: scfmw-005 SampleID: FWGSCFmw-005-1686-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 9:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 2.8	Color:	Clear
		Odor:	None

pH: 6.54 Temperature (°C): 6.26 DO (mg/L): 0.3 Specific Conductivity (mS/cm): 1

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: W AMBIENT TEMP (°F): 28

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt:

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
1L/Amber	1	4C	8330	Explo
1L/Poly	1	HNO3	6010/6020/7470	Metals
1L/Amber	2	4C	8081	Pest
250ml/Poly	1	H2SO4	353.2	NO3/NO2
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

MONITOR WELL PURGING FORM

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

LOCATION: SHARON CON DATE: 1/19/2011 START TIME: 11:01

WELL ID: SCFmw-006

WELL DEPTH: 88.35 INITIAL WATER LEVEL: 18.58

WELL DIAMETER SCREEN INTERVAL: -

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

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

COMMENTS Hard 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)
11:10	18.59	0.5	0.5	7.53	0.571	1.03	9.89	34.7
11:10	18.59	0.5	0.5	7.53	0.571	1.03	9.89	34.7
11:13	18.59	0.5	1.5	7.08	0.584	1.46	9.88	28.1
11:13	18.59	0.5	1.5	7.08	0.584	1.46	9.88	28.1
11:16	18.60	0.5	1.5	7.9	0.574	1	9.84	33
11:16	18.60	0.5	1.5	7.9	0.574	1	9.84	33

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

Field Personnel: JM

FIELD SAMPLING REPORT

PROJECT: **RVAAP** LOCATION: **SHARON CON** PROJECT NO.: **030240.0006**

SAMPLE INFORMATION

WELL: scfmw-006 SampleID: FWGSCFmw-006-1687-GW/GF DupliID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 11:20

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 30.9	Color:	Clear
		Odor:	None

pH: 9.82 Temperature (°C): 8.08 DO (mg/L): 0.88 Specific Conductivity (mS/cm): 0.576

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: W AMBIENT TEMP (°F): 28

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: CAL Cmt: double checked 4 pH as 4.09 & well pH as 9.45

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

MONITOR WELL PURGING FORM

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

LOCATION: WINKLEPECK DATE: 1/19/2011 START TIME: 8:55

WELL ID: WBGmw-005

WELL DEPTH: _____ INITIAL WATER LEVEL: 6.08

WELL DIAMETER _____ SCREEN INTERVAL: 8.3 - 18.3

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 13.3

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

COMMENTS Orange tint Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
8:54	6.72	0.4	1	12.79	0.409	2.96	7.25	237
8:57	7.34	0.4	1.2	12.77	0.41	4.5	7.4	207
9:00	8.26	0.4	1.2	12.68	0.413	6.33	7.45	181
9:03	8.84	0.4	1.2	12.58	0.415	7.31	7.48	153

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: WBGmw-005 SampleID: FWGWBGMW-005C-1675-GW/GF DupIID: FWGMW-DUP5-1696-GW/GF

SplitID: FWGWBDMW-005C-1689s-GW/G RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 9:05

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 144	Color:	Orange tint
		Odor:	None

pH: 7.48 Temperature (°C): 12.72 DO (mg/L): 7.52 Specific Conductivity (mS/cm): 0.417

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab PU/FedEx

SHIPPED TO: Multiple Labs

SAMPLER: LS/SS Cmt: Dup @ 1005

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

MONITOR WELL PURGING FORM

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

LOCATION: WINKLEPECK DATE: 1/19/2011 START TIME: 10:40

WELL ID: WBGmw-006

WELL DEPTH: INITIAL WATER LEVEL: 7.69

WELL DIAMETER SCREEN INTERVAL: 7.6 - 17.6

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 12.6

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)
10:53	7.71	0.4	1	12.23	0.599	6.28	6.88	56.5
10:56	7.76	0.4	1.2	13.26	0.611	4.67	7.22	54.9
10:59	7.80	0.4	1.2	13.5	0.608	3.94	7.59	24.1
11:02	7.80	0.4	1.2	13.67	0.611	3.85	7.78	21.5
11:05	7.81	0.4	1.2	13.7	0.612	3.86	7.87	13.1
11:08	7.81	0.4	1.2	13.75	0.612	3.79	7.92	12.6
11:11	7.81	0.4	1.2	13.71	0.614	3.91	7.95	12.7

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: WBGmw-006 SampleID: FWGMWBMW-006C-1676-GW/GF DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 11:15

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 9.9	Color:	Clear
		Odor:	None

pH: 7.97 Temperature (°C): 13.75 DO (mg/L): 3.82 Specific Conductivity (mS/cm): 0.612

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: N WIND DIRECTION: SW AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt:

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

MONITOR WELL PURGING FORM

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

LOCATION: WINKLEPECK DATE: 1/19/2011 START TIME: 10:58

WELL ID: WBGmw-007

WELL DEPTH: INITIAL WATER LEVEL: 17.88

WELL DIAMETER SCREEN INTERVAL: 13.5 - 23.5

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 18.5

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

COMMENTS Clear Odor:None

TIME	WATER LEVEL (btoc)	PURGE RATE L/min)	VOLUME PURGED (L)	TEMP. (°C)	SPECIFIC CONDUCT. (mS/cm)	DO (mg/L)	pH	Turb (NTU)
11:00	17.92	0.2	0.5	6.43	0.486	5.23	6.98	725
11:03	17.92	0.2	0.6	7.57	0.481	4.27	7.24	680
11:06	17.92	0.2	0.6	8.51	0.489	4.57	7.4	398
11:09	17.92	0.2	0.6	8.83	0.491	4.89	7.49	273
11:12	17.92	0.2	0.6	8.98	0.491	4.93	7.5	237

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

Field Personnel: EC

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: WBGmw-007 SampleID: FWGWBGmw-007C-1677-GW DupIID:

SplitID: RinseID:

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 11:19

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 224	Color:	Clear
		Odor:	None

pH: 7.52 Temperature (°C): 9.09 DO (mg/L): 5.11 Specific Conductivity (mS/cm): 0.491

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: NE AMBIENT TEMP (°F): 25

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

MONITOR WELL PURGING FORM

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

LOCATION: WINKLEPECK DATE: 1/19/2011 START TIME: 12:00

WELL ID: WBGmw-009

WELL DEPTH: INITIAL WATER LEVEL: 14.3

WELL DIAMETER SCREEN INTERVAL: 11.4 - 21.4

PUMP/PURGING DEVICE: BP - BLADDER PUMP PUMP INTAKE DEPTH: 16.4

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)
12:08	14.90	0.4	1	12.7	0.397	7.03	7.63	2.8
12:11	15.30	0.4	1.2	13.61	0.406	1.46	7.26	0
12:14	15.68	0.4	1.2	13.62	0.468	0.89	7.05	0
12:17	15.89	0.4	1.2	13.47	0.475	0.75	6.96	0
12:20	16.22	0.4	1.2	13.76	0.532	0.71	7.04	16.5
12:23	16.67	0.4	1.2	13.79	0.575	0.57	7.18	13.2
12:26	16.98	0.4	1.2	13.97	0.583	0.61	7.22	18.3
12:29	17.05	0.4	1.2	13.95	0.585	0.64	7.26	9.6

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

Field Personnel: LS

FIELD SAMPLING REPORT

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

SAMPLE INFORMATION

WELL: WBGmw-009 SampleID: FWGWBGMW-009C-1678-GW/GF DupIID:

SplitID: RinseID: FWGEQUIPRINSE3-1700-GW

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

GRAB: Y COMPOSITE: N DATE: 1/19/2011 TIME: 12:30

FIELD READINGS / OBSERVATIONS

	Turb (NTU): 11.5	Color:	Clear
		Odor:	None

pH: 7.26 Temperature (°C): 14.02 DO (mg/L): 0.69 Specific Conductivity (mS/cm): 0.587

GENERAL INFORMATION

SUN/OVERCAST: Overcast PERCIPITATION: Y WIND DIRECTION: SW AMBIENT TEMP (°F): 30

SHIPPED VIA: Lab Pickup

SHIPPED TO: Testamerica

SAMPLER: LS/SS Cmt: Rinse @ 1330

CONTAINER		PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
SIZE/TYPE	*NUMBER*			
40ml/Vial	6	HCl	8260	VOC
1L/Amber	4	4C	8270	SVOC
1L/Amber	4	4C	8081	Pest
1L/Amber	4	4C	8082	PCB
1L/Amber	2	4C	8330	Explo
1L/Amber	4	4C	353.2/8330	Propellants
250ml/Poly	2	NaOH	9012	Cyanide
1L/Poly	2	HNO3	6010/6020/7470	Metals

Daily QC Records

Date: 17-Jan

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	011711	
		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: LL1mw-067, LL1mw-081, LL1mw-084, and LL1mw-085

Field duplicate and QA split samples were collected from LL1mw-084. 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 # 1.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	011711
Job No.	30240.0006	Date:	1/17/2011

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 wells LL1mw-085 and LL1mw-067 based on historical data of pumps not fitting in the wells properly.

SPECIAL NOTES:

NA

TOMORROWS EXPECTATIONS:

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

Date: 18-Jan

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	011811	
		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: MBSmw-001, NTAmw-112, NTAmw-113, FBQmw-169, FBQmw-172, FBQmw-173, SCFmw-001, SCFmw-002, SCFmw-004, LL2mw-266, LL2mw-267, LL2mw-269, LL3mw-236, LL3mw-237, LL3mw-242, & LL3mw-243

Field duplicate and QA split samples were collected from SCFmw-004 & LL3mw-267. Extra volume was collected from LL2mw-269 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.	011811
Job No.	30240.0006	Date:	1/18/2011

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:

NA

TOMORROWS EXPECTATIONS:

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

Date: 19-Jan

S	M	T	X W	T	F	S

DAILY QUALITY CONTROL REPORT

COE Project Manager Glen Beckham

Project Ravenna Army Ammunition Plant Groundwater Monitoring

Job No. 30240.0006

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	011911	
		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:
CBPmw-007, CBPmw-008, LNWmw-025, SCFmw-003, SCFmw-005, SCFmw-006, WBGmw-005, WBGmw-006, WBGmw-008, WBGmw-009, FBQmw-174, LL3mw-238, LL3mw-239, LL4mw-196, & LL4mw-197

Field duplicate and QA split samples were collected from WBGmw-005. Extra volume was collected from LNWmw-025 & SCFmw-003 to be designated for matrix spike/matrix spike duplicate analysis at the laboratory. Additionally, a field rinsate was collected by Team #3.

Project	Ravenna Army Ammunition Plant Groundwater Monitorin	Report No.	011911
Job No.	30240.0006	Date:	1/19/2011

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:

NA

TOMORROWS EXPECTATIONS:

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

Date: 20-Jan

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	012011	
		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: EBGmw-123, EBGmw-124, EBGmw-126, EBGmw-129, CBPmw-001, CBPmw-004, CBPmw-007, CPmw-002, CPmw-005, & CPmw-006

Field duplicate and QA split samples were collected from CPmw-006. Extra volume was collected from CPmw-005 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.	012011
Job No.	30240.0006	Date:	1/20/2011

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:

NA

TOMORROWS EXPECTATIONS:

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

Date: 21-Jan

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 x	Rain	Snow
Temp	To 32 x	32-50	50-70	70-85	85 up
Wind	Still X	Moder	High	Report No.	
Humidity	Dry	Moder x	Humid	1-21-11	

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: DA2mw-106, DA2mw-107, DA2mw-110 and the IDW samples (MWPURGE and MWDECON).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.	1-21-11
Job No.	30240.0006	Date:	1/21/2011

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:

NA

TOMORROWS EXPECTATIONS:

NA

APPENDIX D

DATA VERIFICATION REPORTS/LABORATORY DATA SHEETS

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011 **Date:** March 9, 2011
STL Sample Delivery Group: A1A180415 **Revision:** 0

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

QA/QC Summary

On January 17, 2011, the following samples were collected from groundwater-monitoring wells at Ravenna Amy Ammunition Plant and analyzed as part of SDG A1A180415.

Field Sample ID	Analytes	Method
FWGLL1mw-084c-1643-GW	Perchlorate	SW846 6860
FWGLL1mw-DUP2-1693-GW		
FWGEQUIPRinse1-1698-GW/GF		
FWGLL1mw-085c-1644-GW		
FWGLL1mw-067c-1640-GW		
FWGLL1mw-082c-1642-GW		
FWGLL1mw-081c-1641-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 between 0.9 – 2.7 °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

The MS recovered above control limits at 130%, with an MS/MSD RPD of 26%. No qualification was made as the parent sample FWGLL1mw-081c-1641-GF did not have detected perchlorate reported.

SAMPLE SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-11715-1	FWGLL1MW-084C-1643-GF	Water	01/17/2011 1507	01/19/2011 0900
280-11715-2FD	FWGLL1MW-DUP2-1693-GF	Water	01/17/2011 1610	01/19/2011 0900
280-11715-3EB	FWGEQUIPRINSE1-1698-GW/GF	Water	01/17/2011 1720	01/19/2011 0900
280-11715-4	FWGLL1MW-085C-1644-GF	Water	01/17/2011 1425	01/19/2011 0900
280-11715-5	FWGLL1MW-067C-1640-GF	Water	01/17/2011 1530	01/19/2011 0900
280-11715-6	FWGLL1MW-082C-1642-GF	Water	01/17/2011 1650	01/19/2011 0900
280-11715-7	FWGLL1MW-081C-1641-GF	Water	01/17/2011 1510	01/19/2011 0900
280-11715-7MS	FWGLL1MW-081C-1641-GF	Water	01/17/2011 1510	01/19/2011 0900
280-11715-7MSD	FWGLL1MW-081C-1641-GF	Water	01/17/2011 1510	01/19/2011 0900

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: M. Loeb	COC No: Team 1 1/17/11
Address: 1800 Carillon Blvd.	Telephone:	Telephone:	Telephone:	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com			
Phone: 513-825-7500		TAT if different from below Per SOW ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Pick-up			
Project Number: 30240.0006	Shipping/Tracking No: NA			
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	Filtered	Total/NA	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010B/6020/7470	Mercury 7470	Hexavalent 353.2	Perchlorates	Sample Specific Notes / Special Instructions: Cooler ID
FWGLLImw-084C-1643-GW	1/17/11	15:07		X						3	1		9		N	G	X	X	X	X	X	X	X					A291
FWGLLImw-084C-1643-GF	1/17/11	15:07		X					1				1		Y	G								X		1/19/11	X	A291
FWGLLImw-DUP2-1693-GW	1/17/11	16:10		X						3	1		9		N	G	X	X	X	X	X	X	X					A250
FWGLLImw-DUP2-1693-GF	1/17/11	16:10		X					1				1		Y	G								X		EL	X	A250
FWGEQUIPRINSE-1698-GW/GF	1/17/11	17:20		X					1	3	1		10		N	G	X	X	X	X	X	X	X	X			X	Not filtered L820
FWGTeam1-Trip	1/17/11	1300		X						2					N	G	X											A291

EL 1/19/11

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 and perchlorates are field filtered. Temps may not meet requirements if sample collection is close to lab pick-up.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/17/11 17:56	RC Ross	TAL-NC	1/17/11 1756
RC Ross	TA-NC	1/17/11 1804			
			Received in Laboratory by: Claire Schaut	Company: TAL NC	Date/Time: 1/18/11 [illegible]

All VOCs in cooler A291

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 1-17-11	Chain of Custody Number: 000452
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (7495)	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 Ravenna Oh	Carrier/Waybill Number: Lab Pickup		
Contract/Purchase Order/Quote No.: 30240.0006 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	Explo 8330	Propellants	Cyanide 9012	Perchlorate 6850	Metals (6010 or 7470)	Special Instructions/ Conditions of Receipt
FWG Team 2 - Trip	1-17-11	1300		X						2			X									L875
FWGLLI mw-085C-1644-GW	1	1425		X			9			3	1		X	X	X	X	X	X	X	X		A206
FWGLLI mw-085C-1644-GF	1	1		X			1		1											X	X	A206 * Filtered Metals only *
FWGLLI mw-086C-1640-GW	1	1530		X			9			3	1		X	X	X	X	X	X	X	X		L875
FWGLLI mw-086C-1640-GF	1	1		X			1		1											X	X	L875 * Filtered Metals only *
FWGLLI mw-082C-1642-GW	1	1050		X			9			3	1		X	X	X	X	X	X	X			L582
FWGLLI mw-082C-1642-GF	1	1		X			1		1											X	X	L583 Filtered Perch + Metal

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): Perchlorates were not Field Filtered @ 085 or 086 ***

	Date	Time		Date	Time
1. Relinquished By:	1-17-11	1756	1. Received By:	1/17/11	1756
2. Relinquished By:	1/17/11	1854	2. Received By: Alana Schott	1/18/11	700
3. Relinquished By:			3. Received By:		

Comments

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

All VOAs in L875

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	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Erik Corbin	M. Loeb	117201173
Address: 1800 Carillon Blvd	Telephone: 513 825 7500 (Ext 7495)	Telephone: 513 825 7500	Telephone: 330 497 9396	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com			
Phone:				
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Pick UP	TAT if different from below: PER SOW ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 30240.0006	Shipping/Tracking No: N/A			
PO# 116726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered	Analyses: VOC 8260B	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide, 9012	Metals 6010/6020/7470	Perchlorate	Sample Specific Notes / Special Instructions:
FWGTeam3-Trip	1-17-11	1300		X						2					N	X									A286
FWGLIMW-081C-1641-GW	1-17-11	1510		X				3		9	3		27		N	X	X	X	X	X	X	X			1946, 1859, A286
FWGLIMW-081C-1641-GF	1-17-11	1510		X					3				3		Y								X	X	1946, 1859, A286

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

ALL VOAS IN COOLER A286

Temps may not meet requirements if sample time is close to lab pick up.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Lisa M. Schlosser	EQM	1-17-11		TAL-NC	1/17/11 1756
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL-NC	1/17/11 1854			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Diana Ackott	TAL NC	1/18/11 700

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

TAL-0018 (1008)

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 440180415
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 1/18/11 Opened on 1/18/11
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 12 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
084C-1643	<2 >12	1/18/11	
DUP2-1693	<2 >12		
EQUIPRinse1	<2 >12		
085C-1644	<2 >12		
067C-1640	<2 >12		
082C-1642	<2 >12		
081C-1641	<2 <2 <2 2 2 >12 >12 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
A250	1.8	IR	Ice
L820	1.5		
A291	2.4		
A206	1.4		
L875	2.0		
L582	2.6		
A286	0.9		
L946	1.9		
L859	2.7		

Discrepancies Cont'd:

METHOD SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

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

CASE NARRATIVE

A1A180415

The following report contains the analytical results for seven water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received according to documented sample acceptance procedures.

The 6860 Perchlorate analysis was performed at the TestAmerica Denver Laboratory. A copy of their report has been provided.

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 January 19, 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 0.9 to 2.7° 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, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

CASE NARRATIVE

Client: TestAmerica Laboratories, Inc.

Project: EQM - RVAAP

Report Number: 280-11715-1

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

The samples were received on 01/19/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.0 C.

Samples FWGLL1MW-085C-1644-GF (280-11715-4), FWGLL1MW-067C-1640-GF (280-11715-5) were not field filtered upon collection as recommended by the 6860 perchlorate method. These samples were laboratory filtered upon receipt, per client request. It can be noted, all samples are filtered prior to LC/MS/MS analysis. The samples were collected on 1/17/2011 and received at TestAmerica Denver for the 6860 perchlorate analysis on 1/19/11.

No other issues were noted.

PERCHLORATE - METHOD 6660

The matrix spike associated with batch 50263 was performed on sample FWGLL1MW-081C-1641-GF (280-11715-7) and exhibited a recovery outside control limits for perchlorate. In addition, the MS/MSD RPD data was outside control limits. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other difficulties were encountered.

DATA REPORTING QUALIFIERS

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

Lab Section	Qualifier	Description
LCMS		
	F	MS or MSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	F	RPD of the MS and MSD exceeds the control limits

Login Sample Receipt Check List

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
SDG Number: A1A180415

Login Number: 11715
List Source: TestAmerica Denver
Creator: Harrington, Nicholas
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	False	custody seals not signed or dated
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?	True	
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	

North Canton

4,0 IR1
NP 1/19

Laboratory: TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

TestAmerica Laboratories, Inc.
SAMPLE ANALYSIS REQUISTION
Lab Request SR123486

Report Package: Expanded Deliverables
Need Analytical Report 2011-02-01

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A1A180415-1	MDET7	FWGLL1mw-084C-1643-GF	2011-01-17 15:07	WATER, SW846 6860 Perchlorate (Denver)
A1A180415-2	MDET8	FWGLL1mw-DUP2-1693-GF	2011-01-17 16:10	WATER, SW846 6860 Perchlorate (Denver)
A1A180415-3	MDET9	FWGEQUIPRINSE1-1698-GW/GF } Lab to Filter	2011-01-17 17:20	WATER, SW846 6860 Perchlorate (Denver)
A1A180415-3	MDET9	FWGEQUIPRINSE1-1698-GW/GF } Filter	2011-01-17 17:20	WATER, In-house filtration (Denver)
A1A180415-4	MDEVA	FWGLL1mw-085C-1644-GF } Lab to Filter	2011-01-17 14:25	WATER, SW846 6860 Perchlorate (Denver)
A1A180415-4	MDEVA	FWGLL1mw-085C-1644-GF } Filter	2011-01-17 14:25	WATER, In-house filtration (Denver)
A1A180415-5	MDEVD	FWGLL1mw-067C-1640-GF } Lab to Filter	2011-01-17 15:30	WATER, SW846 6860 Perchlorate (Denver)
A1A180415-5	MDEVD	FWGLL1mw-067C-1640-GF } Filter	2011-01-17 15:30	WATER, In-house filtration (Denver)
A1A180415-6	MDEVE	FWGLL1mw-082C-1642-GF	2011-01-17 16:50	WATER, SW846 6860 Perchlorate (Denver)
A1A180415-7	MDEVF	FWGLL1mw-081C-1641-GF } MS/MSD	2011-01-17 15:10	WATER, SW846 6860 Perchlorate (Denver)
A1A180415-7 S	MDEVF	FWGLL1mw-081C-1641-GF	2011-01-17 15:10	WATER, SW846 6860 Perchlorate (Denver)

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: 1/18/11 1030

Relinquished by: _____ Date/Time: _____

Received for lab by: _____ Date/Time: 1/19/11 0900

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

North Canton

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Laboratory: TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Lab Request: SR123486

Report Package: Expanded Deliverables

Need Analytical Report: 2011-02-01

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A1A180415-7 D	MDEVF	FWGLL1mw-081C-1641-GF	2011-01-17 15:10	WATER, SW846 6860 Perchlorate (Denver)

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: 1/18/11 1030

Relinquished by: _____ Date/Time: _____

Received for lab by: _____ Date/Time: 1/19/11 0900

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

Method 6860

Perchlorate (IC/MS) by Method 6860

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/March 9, 2011

SDG: A1A180415 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 between 0.9 – 2.7 °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 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?	✓			12/20/2010 @1817	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: January 2011
Data Reviewer/Date: Angye Dragotta/March 9, 2011

SDG: A1A180415 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?	✓			FWGEQUIPRINSE1-1698-GW/GF	
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?	✓			Sample FWGLL1mw-081c-1641-GF was the parent for the MS/MSD evaluation.	
30. Were MS/MSD recoveries 75-125% and RPD values ≤20%?		✓		Checked by ADR. The MS recovered above control limits at 130%, with an MS/MSD RPD of 26%. No qualification was made as the parent sample FWGLL1mw-081c-1641-GF did not have detected perchlorate reported.	>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%?	✓			Sample FWGLL1mw-DUP2-1693-GF was the field duplicate for sample FWGLL1mw-084c-1643-GF.	RPD >30=J
38. Was the Isotope ratio between 101 and 85 monitored and fell between 2.3 and 3.08?	✓				J/UJ

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/March 9, 2011

SDG: A1A180415 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: 280-11715-1
Sdg Number: A1A180415

Client Sample ID: **FWGLL1MW-084C-1643-GF**

Lab Sample ID: 280-11715-1
Client Matrix: Water

Date Sampled: 01/17/2011 1507
Date Received: 01/19/2011 0900

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50263		Instrument ID:	LC_LCMS1
Preparation:	N/A			Lab File ID:	IC11A2519.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	01/25/2011 1522			Final Weight/Volume:	1.0 mL
Date Prepared:				Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.083		0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

Client Sample ID: **FWGLL1MW-DUP2-1693-GF**

Lab Sample ID: 280-11715-2FD
Client Matrix: Water

Date Sampled: 01/17/2011 1610
Date Received: 01/19/2011 0900

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50263		Instrument ID:	LC_LCMS1
Preparation:	N/A			Lab File ID:	IC11A2520.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	01/25/2011 1550			Final Weight/Volume:	1.0 mL
Date Prepared:				Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.098		0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

Client Sample ID: **FWGEQUIPRINSE1-1698-GW/GF**

Lab Sample ID: 280-11715-3EB
Client Matrix: Water

Date Sampled: 01/17/2011 1720
Date Received: 01/19/2011 0900

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50263		Instrument ID:	LC_LCMS1
Preparation:	N/A			Lab File ID:	IC11A2524.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	01/25/2011 1744			Final Weight/Volume:	1.0 mL
Date Prepared:				Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	ND		0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

Client Sample ID: FWGLL1MW-085C-1644-GF

Lab Sample ID: 280-11715-4
Client Matrix: Water

Date Sampled: 01/17/2011 1425
Date Received: 01/19/2011 0900

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50263	Instrument ID:	LC_LCMS1
Preparation:	N/A		Lab File ID:	IC11A2525.d
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	01/25/2011 1812		Final Weight/Volume:	1.0 mL
Date Prepared:			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	ND		0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

Client Sample ID: **FWGLL1MW-067C-1640-GF**

Lab Sample ID: 280-11715-5
Client Matrix: Water

Date Sampled: 01/17/2011 1530
Date Received: 01/19/2011 0900

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50263		Instrument ID:	LC_LCMS1
Preparation:	N/A			Lab File ID:	IC11A2526.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	01/25/2011 1841			Final Weight/Volume:	1.0 mL
Date Prepared:				Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.020	J	0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

Client Sample ID: **FWGLL1MW-082C-1642-GF**

Lab Sample ID: 280-11715-6
Client Matrix: Water

Date Sampled: 01/17/2011 1650
Date Received: 01/19/2011 0900

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50263		Instrument ID:	LC_LCMS1
Preparation:	N/A			Lab File ID:	IC11A2527.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	01/25/2011 1909			Final Weight/Volume:	1.0 mL
Date Prepared:				Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.041	J	0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

Client Sample ID: **FWGLL1MW-081C-1641-GF**

Lab Sample ID: 280-11715-7
Client Matrix: Water

Date Sampled: 01/17/2011 1510
Date Received: 01/19/2011 0900

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50263	Instrument ID: LC_LCMS1
Preparation:	N/A		Lab File ID: IC11A2528.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	01/25/2011 1937		Final Weight/Volume: 1.0 mL
Date Prepared:			Injection Volume: 250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	ND		0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

Detection Limit Check Standard - Batch: 280-46104

Method: 6860
Preparation: N/A

Lab Sample ID:	DLCK 280-46104/10	Analysis Batch:	280-46104	Instrument ID:	LC_LCMS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	IC10L2010.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	12/20/2010 1845			Final Weight/Volume:	1.0 mL
Date Prepared:	N/A			Injection Volume:	250 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Perchlorate	0.0500	0.0521	104	70 - 130	

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

Method Blank - Batch: 280-50263

Method: 6860
Preparation: N/A

Lab Sample ID: MB 280-50263/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/25/2011 1300
Date Prepared: N/A

Analysis Batch: 280-50263
Prep Batch: N/A
Units: ug/L

Instrument ID: LC_LCMS1
Lab File ID: IC11A2514.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 1.0 mL
Injection Volume: 250 uL

Analyte	Result	Qual	MDL	RL
Perchlorate	ND		0.0088	0.050

Lab Control Sample - Batch: 280-50263

Method: 6860
Preparation: N/A

Lab Sample ID: LCS 280-50263/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/25/2011 1328
Date Prepared: N/A

Analysis Batch: 280-50263
Prep Batch: N/A
Units: ug/L

Instrument ID: LC_LCMS1
Lab File ID: IC11A2515.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 1.0 mL
Injection Volume: 250 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Perchlorate	0.0500	0.0468	94	80 - 120	J

LC Interference Check Standard - Batch: 280-50263

Method: 6860
Preparation: N/A

Lab Sample ID: INF 280-50263/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/25/2011 1357
Date Prepared: N/A

Analysis Batch: 280-50263
Prep Batch: N/A
Units: ug/L

Instrument ID: LC_LCMS1
Lab File ID: IC11A2516.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 1.0 mL
Injection Volume: 250 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Perchlorate	0.0500	0.0470	94	70 - 130	J

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11715-1
Sdg Number: A1A180415

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-50263

Method: 6860
Preparation: N/A

MS Lab Sample ID:	280-11715-7	Analysis Batch: 280-50263	Instrument ID: LC_LCMS1
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: IC11A2529.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	01/25/2011 2006		Final Weight/Volume: 1.0 mL
Date Prepared:	N/A		Injection Volume: 250 uL

MSD Lab Sample ID:	280-11715-7	Analysis Batch: 280-50263	Instrument ID: LC_LCMS1
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: IC11A2530.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	01/25/2011 2034		Final Weight/Volume: 1.0 mL
Date Prepared:	N/A		Injection Volume: 250 uL

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Perchlorate	130	99	80 - 120	26	15	F	J F

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-50263

Method: 6860
Preparation: N/A

MS Lab Sample ID:	280-11715-7	Units: ug/L	MSD Lab Sample ID: 280-11715-7
Client Matrix:	Water		Client Matrix: Water
Dilution:	1.0		Dilution: 1.0
Date Analyzed:	01/25/2011 2006		Date Analyzed: 01/25/2011 2034
Date Prepared:	N/A		Date Prepared: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Perchlorate	ND	0.0500	0.0500	0.0649	F	0.0497	J F

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 automatically adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A180415										
6860	FWGLL1MW-067C-1640-GF	AQ	N							
				PERCHLORATE	0.050	0.020J		J	ug/L	L
6860	FWGLL1MW-082C-1642-GF	AQ	N							
				PERCHLORATE	0.050	0.041J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1MW-067C-1640-GF
Lab Report Batch : A1A180415
Lab ID : TA DEN
Sample Date : 01/17/2011
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 280-11715-5

Reviewed By / Date : asd 3/9/2011
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 : 6860						**Dilution: 1**															
PERCHLORATE	0.020		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1MW-082C-1642-GF
Lab Report Batch : A1A180415
Lab ID : TA DEN
Sample Date : 01/17/2011
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 280-11715-6

Reviewed By / Date : asd 3/9/2011
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 : 6860						**Dilution: 1**															
PERCHLORATE	0.041		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 : 280-50263 **Analysis Method :** 6860 **Analysis Date :** 01/25/2011

Preparation Batch : 280-50263 **Preparation Type :** Gen Prep **Preparation Date :** 01/25/2011

Lab Reporting Batch : A1A180415 **Lab ID:** TA DEN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
FWGLL1MW-081C-1641-	280-11715-7MS	AQ	PERCHLORATE	130		30.00	80.00	120.00	15.00
FWGLL1MW-081C-1641-	280-11715-7MSD		PERCHLORATE		26	30.00	80.00	120.00	15.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL1MW-081C-1641-GF	280-11715-7

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 30240.0006 - RVAAP (OH)

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A1A180415 **Lab ID:** TA DEN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL1MW-067C-1640-	280-11715-5	6860	AQ	PERCHLORATE	J	0.020	0.050	ug/L
FWGLL1MW-082C-1642-	280-11715-6			PERCHLORATE	J	0.041	0.050	ug/L

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011
TA Sample Delivery Group: A1A190406

Date: March 14, 2011
Revision: 0

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

QA/QC Summary

On January 18, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1A190406.

Field Sample ID	Analytes	Method
FWGMBSmw-001c-1681-GW	Explosives	SW846 8330
FWGNTAmw-112c-1679-GW	Nitroguanidine	SW846 M8330
FWGNTAmw-113c-1680-GW	Nitrocellulose	TAL- SOP WS-WC-0050
FWGFBQmw-169c-1670-GW		
FWGFBQmw-172c-1671-GW		
FWGFBQmw-173c-1672-GW		
FWGSCFmw-001-1682-GW		
FWGSCFmw-002-1683-GW		
FWGSCFmw-004-1685-GW		
FWGSCFmw-DUP1-1697-GW		
FWGLL3mw-237c-1649-GW		
FWGEQUIPRinse2-1699-GW		
FWGLL2mw-266c-1645-GW		
FWGLL2mw-267c-1646-GW		
FWGLL2mw-DUP3-1694-GW		
FWGLL2mw-269c-1647-GW		
FWGLL3mw-236c-1648-GW		
FWGLL3mw-242c-1652-GW		
FWGLL3mw-243c-1703-GW		

The data presented in this report were evaluated according to the *Final Quality Assurance Project Plan Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant Ravenna, OH, Portage Environmental, September 2004.* The following documents will be used as needed to supplement the project documentation: *Louisville Chemistry Guidelines, USACE, June 2002 version 5, EPA National Functional Guidelines (NFG) for Organic Data Review, EPA-540/R-99-008, October 1999, NFG for Inorganic Data Review, EPA-540/R-04-004, October 2004, Analytical Methods, and Laboratory Standard Operating Procedures.* These objectives represent accuracy and precision performance goals for each analytical method.

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 100%. Limitations, if any, on the data are indicated with qualifiers detailed below.

All analytical results have been verified against compliance requirements specified in the project QAP, LCG, associated analytical methods and/or SOPs, as appropriate. Checklists used in review of the data have been inserted in the SDGs by parameter. Outliers have been noted below and results requiring qualification, as a result of this verification process, have been summarized in Appendix 1.

<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

LC12- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC12 was used as confirmation.

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011
TA Sample Delivery Group: A1A190406

Date: March 14, 2011
Revision: 0

MRL Recovery
LC10- the following outliers were noted:

- The MRL analyzed 1/25/11 @1844 recovered above control limits with a %D of 40% for RDX.
- The MRL analyzed 1/26/11 @0259 recovered above control limits with a %D of 34% for RDX.
- The MRL analyzed 1/26/11 @2058 recovered above control limits with a %D of 34% for RDX.

The RDX results for samples FWGLL2mw-267c-1646-GW, FWGLL2mw-DUP3-1694-GW and FWGLL3mw-237c-1649-GW were qualified as estimated, "J".

CCV
LC10- The CCV analyzed 1/25/11 @1759 recovered above limits for tetryl with a %D of 16%. No qualifications were made as the samples were reanalyzed with passing CCVs for tetryl.

Blanks
Due to excessive particulates, samples FWGNTAmw-112c-1679-GW, FWGNTAmw-113c-1680-GW, FWGLL2mw-266c-1645-GW and FWGLL2mw-267c-1646-GW required filtration. A filter blank was prepared and analyzed.

Second Column Confirmation
The second column confirmation analyzed on sample FWGLL3mw-237c-1649-GW had an RPD above control limits for RDX. The RDX result for sample FWGLL3mw-237c-1649-GW 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 - 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

No QC outliers were noted.

SAMPLE SUMMARY

A1A190406

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDF5J	001	FWGMBSmw-001C-1681-GW	01/18/11	09:34
MDF5P	002	FWGNTAmw-112C-1679-GW	01/18/11	10:58
MDF5Q	003	FWGNTAmw-113C-1680-GW	01/18/11	12:12
MDF5R	004	FWGFBQmw-169C-1670-GW	01/18/11	13:43
MDF5T	005	FWGFBQmw-172C-1671-GW	01/18/11	14:54
MDF5V	006	FWGFBQmw-173C-1672-GW	01/18/11	16:17
MDF5W	007	FWGSCFmw-001-1682-GW	01/18/11	09:30
MDF5X	008	FWGSCFmw-002-1683-GW	01/18/11	11:25
MDF50	009	FWGSCFmw-004-1685-GW	01/18/11	13:10
MDF51	010	FWGSCFmw-DUP1-1697-GW	01/18/11	14:00
MDF52	011	FWGLL3mw-237C-1649-GW	01/18/11	15:20
MDF53	012	FWGEQUIPRINSE2-1699-GW	01/18/11	16:30
MDF54	013	FWGLL2mw-266C-1645-GW	01/18/11	09:10
MDF55	014	FWGLL2mw-267C-1646-GW	01/18/11	10:20
MDF56	015	FWGLL2mw-DUP3-1694-GW	01/18/11	11:20
MDF57	016	FWGLL2mw-269C-1647-GW	01/18/11	12:05
MDF58	017	FWGLL3mw-236C-1648-GW	01/18/11	14:20
MDF59	018	FWGLL3mw-242C-1652-GW	01/18/11	15:25
MDF6A	019	FWGLL3mw-243C-1703-GW	01/18/11	16:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica Laboratory location: North Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: Team 1-1/18/11-1
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone:	1 of 2 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com			
Phone: 513-825-7500		TAT if different from below: ref SOW ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	Analyses	
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Courier			
Project Number: 030240.0006	Shipping/Tracking No: NA			
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Ascorbic Acid	Other:	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/6020 7470	Sample Specific Notes / Special Instructions:
FWG Team 1 - Trip	1/18/11	08:00		X						2					N	G	X								A328
FWGMBSmw-001C-1681-GW	1/18/11	09:34		X						3	1		9		N	G	X	X	X	X	X	X	X		L397
FWGMBSmw-001C-1681-GF	1/18/11	09:34		X					1						Y	G								X	L397
FWGNTAmw-112C-1679-GW	1/18/11	10:58		X						3	1		9		N	G	X	X	X	X	X	X	X		L903
FWGNTAmw-112C-1679-GF	1/18/11	10:58		X					1						Y	G								X	L903
FWGNTAmw-113C-1680-GW	1/18/11	12:12		X						3	1		9		N	G	X	X	X	X	X	X	X		A313
FWGNTAmw-113C-1680-GF	1/18/11	12:12		X					1						Y	G								X	A313
FWGFBQmw-169C-1670-GW	1/18/11	13:43		X						3	1		9		N	G	X	X	X	X	X	X	X		A328
FWGFBQmw-169C-1670-GF	1/18/11	13:43		X					1						Y	G								X	A328
FWGFBQmw-172C-1671-GW	1/18/11	14:54		X						3	1		9		N	G	X	X	X	X	X	X	X		A323

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Metals are field filtered. Temps may not meet requirements if sample collection time is close to lab pick-up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/18/11 18:00	NC Fedex	TALNC	1/18/11 1800
RC Fedex	TAL-NC	1/18/11 1912	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Darry Burns	TA	1/19/11 7:1

©2008, TestAmerica Laboratories, Inc. All rights reserved. TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

TAL-0018 (1008)

All VOCs in cooler A328

North Canton

Chain of Custody Record

TestAmerica Laboratory location: North Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Erik Corbin	Mark Loeb	Team1-1/18/11-2
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone:	2 of 2 COCs
City/State/Zip: Cincinnati, OH 45240	Email: ecorbin@eqm.com	Analysis Turnaround Time (CALENDAR days or WORKING days)	Analyses	For Lab Use Only: Walk-in client ☐ Lab sampling ☐
Phone: 513-825-7500		TAT if different from below Per SOW		
Project Name: RVARF (6th)	Method of Shipment/Carrier: Lab courier	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 080224.6.8006	Shipping/Tracking No: NA			
PO # 26726				

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)	VOCs 8260	SVOCs 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/6020/7470	Sample Specific Notes / Special Instructions:
EWGFBGmw-1726-1671-GF	1/18/11	14:54		X					1						Y	G								X	A323
EWGFBGmw-1736-1672-GW	1/18/11	16:17		X						3	1		9		N	G	X	X	X	X	X	X	X		L467
EWGFBGmw-1736-1672-GF	1/18/11	16:17		X					1						Y	G								X	L467
							EC		1/18/11																

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 are field filtered. Temps may not meet requirements if sample collection time is close to lab pick-up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/18/11 18:00	TC Fabian	TALNC	1/18/11 1800
TC Fabian	TAL-NC	1/18/11 1912			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Terry Burris	TA	1/19/11 7:0

©2008, TestAmerica Laboratories, Inc. All rights reserved. TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

TAL-0018 (1008)

All VOCs in cooler A328

NorthCanton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 1-18-11	Chain of Custody Number: 000453
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (7495)	Lab Number: 330497396	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 Ohio	Carrier/Waybill Number: LAB PICKUP		
Contract/Purchase Order/Quote No.: PN30240.0006 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	Zn Ac/ NaOH	Analysis: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	DRO 8330	Propellants	Cyanide 9012	NO2 NO3 353.2	Metals (unfiltered) 7470	Special Instructions/ Conditions of Receipt
FWG Team 2 - Trip	1-18-11	0800		X						2			X									~~LL776~~ ~~A183~~
FWGSCFmw-001-11682-GW		0930		X			9	1		3	1		X	X	X	X	X	X	X	X		A183
FWGSCFmw-001-11682-GF				X					1												X	A183
FWGSCFmw-002-11683-GW		1125		X			9	1		3	1		X	X	X	X	X	X	X	X		A192
FWGSCFmw-002-11683-GF				X					1												X	A192
FWGSCFmw-004-11685-GW		1310		X			9	1		3	1		X	X	X	X	X	X	X	X		L499
FWGSCFmw-004-11685-GF				X					1												X	L499
FWGSCFmw-DUP1-11697-GW		1400		X			9	1		3	1		X	X	X	X	X	X	X	X		L917
FWGSCFmw-DUP1-11697-GF				X					1												X	L917
FWG LL3mw-237C-11649-GW		1520		X			9			3	1		X	X	X	X	X	X	X			LT76
FWG LL3mw-237C-11649-GF				X					1												X	LT76
FWG EQUIPBlnse 2-11699-GW		1630		X			9	1	1	3	1		X	X	X	X	X	X	X	X	X	NOT FILTERED L899

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per sow

QC Requirements (Specify): GA Metals were field filtered.

	Date	Time		Date	Time
1. Relinquished By	1/18/11	1800	1. Received By	1/18/11	1800
2. Relinquished By	1/18/11	1912	2. Received By	1/19/11	710
3. Relinquished By			3. Received By		

Comments: All VOAs in LT76

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

18

Page 2 CoC 3148

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	1/18/11	003149
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page**
1800 Carillon Blvd	513 825 7500	330497 (1/18/11)	1 of 2
City / State / Zip Code	**Site Contact / Lab Contact**	**Analysis (Attach list if more space is needed)**	
Cincinnati OH 45240	Erik Corbin / M. Loeb		
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP (OH)	Lab Pick UP		
Contract/Purchase Order/Quote No.			
30240.0006 PO # 167216			

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	8260 VOC	8270 SVOC	4081 Pest	8082 PCB	6020 Explo	6020 Explosives	6010 Cyanide	9012 Metals (unfiltered)	6850 Metals (filtered)	6850 Perchlorates	Special Instructions/ Conditions of Receipt
EWG Team 3 - Trip	1/18/11	0800		X						2			X										Cooler ID
EWGLL2-2166C-11045-GW	1/18/11	0910		X			9	X		3	1		X	X	X	X	X	X	X				L872
EWGLL2-2166C-11045-GF	1/18/11	0910		X			1		1											X	X		L872
EWGLL2-2167C-11046-GW	1/18/11	1020		X			9	X		3	1		X	X	X	X	X	X	X				L165
EWGLL2-2167C-11046-GF	1/18/11	1020		X			1		1											X	X		L165
EWGLL2-DUP3-11094-GW	1/18/11	1120		X			9	X		3	1		X	X	X	X	X	X	X				A45
EWGLL2-DUP3-11094-GF	1/18/11	1120		X			1		1											X	X		A45
EWGLL2-2169C-11047-GW	1/18/11	1205		X			27			9	3		X	X	X	X	X	X	X				L890, L685, L461
EWGLL2-2169C-11047-GF	1/18/11	1205		X			3[15]		3[15]											X	X		L890, L685, L461
EWGLL3-2320C-11048-GW	1/18/11	1420		X			9			3	1		X	X	X	X	X	X	X				A28
EWGLL3-2321C-11048-GF	1/18/11	1420		X			1		1											X	X		A28
						EC		1/18/11															

MS/MSD

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)

	Relinquished By	Date	Time	Received By	Date	Time
1	Erik Corbin EQ	1/18/11	18:00	YC	1/18/11	1800
2	YC	1/18/11	1912	Danny Burns	1/19/11	7:06
3						

Comments
Metals + Perchlorates field filtered * ALL VOAS IN COOLER L872 *
• Temps may not meet requirements if Sample Collection time is close to Lab Pick UP •

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

19

TAL-4142 (0408)

Pg 1 COC 003149

Client	Project Manager	Date	Chain of Custody Number
EQM	John Muller	1/18/11	003148
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 2**
1800 Carillon Blvd	513 825 7500	330-497-9396	
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.			
030240.0001p PO# 167216			

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	EXPD 8330	Propellants	Cyanide 9012	Metals 6010/7470	Perchlorates	Special Instructions/ Conditions of Receipt
FWGLL3MW-242C-11652-GW	1/18/11	1525		X			9			3	1		X	X	X	X	X	X	X			° COOLER ID ° L539
FWGLL3MW-242B-11652-GF	1/18/11	1525		X					1											X		L539
FWGLL3MW-243C-1703-GW	1/18/11	1080		X			9			3	1		X	X	X	X	X	X	X			A5
FWGLL3MW-243C-1703-GF	1/18/11	1080		X					1											X		A5
			EC			1/18/11																

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 PER SOW ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Emily Corbin EQ	1/18/11	18:00	T C Fabian	1/19/11	1800
2.	T C Fabian	1/18/11	1912	Denny Burns	1/19/11	7:00
3.						

Comments
Metals + Perchlorates field filtered
* ALL VOAS IN COOLER L872 *

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

North Canton

° Temps may not meet requirements if Sample Collection is close to Lab Pick Up °

TestAmerica Cooler Receipt Form/Narrative Lot Number: 410190406
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 1/19/11 Opened on 1/19/11
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: 23 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 ☒ SEE Attached
   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:

COC ID = FWGLL3-236C-1648-GW 1x40 vial ID = FWGLL3mw-236C-1658-GW
COC ID = FWGLL2-266C-1645-GW/GF Label IDs = FWGLL2mw-266C-1645-GW/GF
COC ID = FWGLL2-267C-1646-GW/GF Label IDs = FWGLL2mw-267C-1646-GW/GF
COC ID = FWGLL2-DUP3-1694-GW/GF Label IDs = FWGLL2mw-DUP3-1694-GW/GF
COC ID = FWGLL2-269C-1647-GW/GF Label IDs = FWGLL2mw-269C-1647-GW/GF
COC ID = FWGLL3-236C-1648-GW/GF Label IDs = FWGLL3mw-236C-1648-GW/GF OVER

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
001C-1681	<2 >12	1/19/11	
112C-1679	<2 >12		
113C-1680	<2 >12		
169C-1670	<2 >12		
172C-1671	<2 >12		
173C-1672	<2 >12		
001-1682	<2 <2 >12		
002-1683	<2 <2 >12		

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: A1A190406
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
L397	2.9	IR	Ice	
L903	3.8			
A313	2.9			
A328	2.9			
A323	2.2			
L467	2.8			
A183	2.6			
A192	2.1			
L499	3.7			
L917	3.4			
L776	3.1			
L899	2.4			
L872	1.7			
L165	2.0			
A45	3.8			
L685	4.0			
A28	2.1			
L539	3.9			
A5	3.6			
L461	2.1			
L890	2.4			

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
004-1685	<2 <2 >12	1/19/11	gm
DUP1-1697	<2 <2 >12		
237C-1649	<2 >12		
EquipRinse2-1699	<2 <2 >12		
266C-1645	<2 >12		
267C-1646	<2 >12		
DUP3-1694	<2 >12		
269C-1647	<2 <2 <2 >12 >12 >12		
236C-1648	<2 >12		
242C-1652	<2 >12		
243C-1703	<2 >12		

Cooler #	Temp. °C	Method	Coolant

Discrepancies Cont'd:

Will log IDs per Label IDs

ANALYTICAL METHODS SUMMARY

A1A190406

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

A1A190406

The following report contains the analytical results for nineteen 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 January 19, 2011, according to documented sample acceptance procedures.

The 8330 Explosives, Nitroguanidine, and Nitrocellulose as N analyses were performed at the TestAmerica West Sacramento laboratory. Refer to TestAmerica West Sacramento narrative included in their data package for additional information.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Angye Dragotta, Erik Corbin, and Jackie Doan on February 01, 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 1.7 to 4.0°C.

See TestAmerica's Cooler Receipt Form for additional information.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

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 ageney specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet aeceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

Case Narrative

TestAmerica West Sacramento Project Number A1A190406R

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 integrations being performed. The following samples and analytes required a manual integration:

Instrument LC10
MRL Standard (analyzed @18:44) - 3,4-Dinitrotoluene & 4-Amino-2,6-dinitrotoluene
Sample 6 - 3,4-Dinitrotoluene & 2-Amino-4,6-dinitrotoluene
MRL Standard (analyzed @13:04) – tetryl
MRL Standard (analyzed @21:20) – tetryl

WATER, 8330, Explosives
Sample(s): 1, 2, 3, 4, 5, 6, 7, 7MS, 7MSD
The percent difference values for RDX are above the project specific acceptance limit in the MRL standard, indicating a high bias. This standard was analyzed prior to and after the associated samples. For corrective action a standard at approximately 2X the MDL was analyzed and the analyte was detected.

Sample(s): 2, 3, 13, 14
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.

8330 EXPLOSIVES DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A190406 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.7 and 4.0 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓				LCG Table 5 R
8. Was a MRL Level verification run at the beginning and end of every daily sequence or every 12 hours? Was the %D < 30%?		✓		LC10- the following outliers were noted: • The MRL analyzed 1/25/11 @1844 recovered above control limits with a %D of 40% for RDX. • The MRL analyzed 1/26/11 @0259 recovered above control limits with a %D of 34% for RDX. • The MRL analyzed 1/26/11 @2058 recovered above control limits with a %D of 34% for RDX. The RDX results for samples FWGLL2mw-267c-1646-GW, FWGLL2mw-DUP3-1694-GW and FWGLL3mw-237c-1649-GW were qualified as estimated, "J".	LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			LC10 1/9/11 , LC12 12/17/10, 12/27/10	STL SOP Section 10.2, LCG R
10. Were all target analytes %RSD ≤ 20%? OR was the average RSD ≤ 20%?	✓				LCG Table 5 >20% RSD=J/R
11. If a linear regression curve was used, was the correlation coefficient r≥0.995? (0.990 for Quadratic curve).			✓		STL SOP Section 10.4, LCG R<0.99=-J/R
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			LC10 1/9/11@1027 , LC12 12/17/10@ 0417, 12/30/10 @ 0242 LC12 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC12 was used as confirmation.	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A190406 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%?	✓			LC10- The CCV analyzed 1/25/11 @1759 recovered above limits for tetryl with a %D of 16%. No qualifications were made as the samples were reanalyzed with passing CCVs for tetryl. LC12- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC12 was used as confirmation.	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓			Due to excessive particulates, samples FWGNTAmw-112c-1679-GW, FWGNTAmw-113c-1680-GW, FWGLL2mw-266c-1645-GW and FWGLL2mw-267c-1646-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.	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?	✓			Checked by ADR.	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Were the RPDs ≤ 40%?		✓		The second column confirmation analyzed on sample FWGLL3mw-237c-1649-GW had an RPD above control limits for RDX. The RDX result for sample FWGLL3mw-237c-1649-GW 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%?	✓			Checked by ADR.	QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If	✓			See narrative.	

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A190406 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
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-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGMBSmw-001C-1681-GW

HPLC

Lot-Sample #...: A1A190406-001 Work Order #...: MDF5J1AA Matrix.....: WG
Date Sampled...: 01/18/11 09:34 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/25/11
Prep Batch #...: 1024166
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGMBSmw-001C-1681-GW

HPLC

Lot-Sample #...:	A1A190406-001	Work Order #...:	MDF5J2AA	Matrix.....: WG
Date Sampled...:	01/18/11 09:34	Date Received..:	01/19/11	
Prep Date.....:	01/24/11	Analysis Date..:	02/09/11	
Prep Batch #...:	1024166			
Dilution Factor:	0.96	Method.....:	SW846 8330	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-112C-1679-GW

HPLC

Lot-Sample #...: A1A190406-002 Work Order #...: MDF5P1AA Matrix.....: WG
Date Sampled...: 01/18/11 10:58 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/25/11
Prep Batch #...: 1024166
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-112C-1679-GW

HPLC

Lot-Sample #...: A1A190406-002 Work Order #...: MDF5P2AA Matrix.....: WG
Date Sampled...: 01/18/11 10:58 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 02/09/11
Prep Batch #...: 1024166
Dilution Factor: 0.97 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-113C-1680-GW

HPLC

Lot-Sample #...: A1A190406-003 Work Order #...: MDF5Q1AA Matrix.....: WG
Date Sampled...: 01/18/11 12:12 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/25/11
Prep Batch #...: 1024166
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-113C-1680-GW

HPLC

Lot-Sample #...: A1A190406-003 Work Order #...: MDF5Q2AA Matrix.....: WG
Date Sampled...: 01/18/11 12:12 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 02/09/11
Prep Batch #...: 1024166
Dilution Factor: 0.98 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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: FWGFBQmw-169C-1670-GW

HPLC

Lot-Sample #...: A1A190406-004 Work Order #...: MDF5R1AA Matrix.....: WG
Date Sampled...: 01/18/11 13:43 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-169C-1670-GW

HPLC

Lot-Sample #...: A1A190406-004 Work Order #...: MDF5R2AA Matrix.....: WG
Date Sampled...: 01/18/11 13:43 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 02/09/11
Prep Batch #...: 1024166
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GW

HPLC

Lot-Sample #...: A1A190406-005 Work Order #...: MDF5T1AA Matrix.....: WG
Date Sampled...: 01/18/11 14:54 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GW

HPLC

Lot-Sample #...: A1A190406-005 Work Order #...: MDF5T2AA Matrix.....: WG
Date Sampled...: 01/18/11 14:54 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 02/09/11
Prep Batch #...: 1024166
Dilution Factor: 0.97 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-173C-1672-GW

HPLC

Lot-Sample #...: A1A190406-006 Work Order #...: MDF5V1AA Matrix.....: WG
Date Sampled...: 01/18/11 16:17 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	**0.19**	**0.096**	**ug/L**	**0.096**
2,4,6-Trinitrotoluene	**0.048 J**	0.096	**ug/L**	**0.048**
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	**0.15**	**0.096**	**ug/L**	**0.048**
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1682-GW

HPLC

Lot-Sample #...: A1A190406-007 Work Order #...: MDF5W1AA Matrix.....: WG
Date Sampled...: 01/18/11 09:30 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
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	0.54 J	0.64	ug/L	0.33
RDX	ND	0.099	ug/L	0.036
PETN	ND	0.64	ug/L	0.30
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1683-GW

HPLC

Lot-Sample #...: A1A190406-008 Work Order #...: MDF5X1AA Matrix.....: WG
Date Sampled...: 01/18/11 11:25 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
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	0.42 J	0.70	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.054

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: FWGSCFmw-004-1685-GW

HPLC

Lot-Sample #...: A1A190406-009 Work Order #...: MDF501AA Matrix.....: WG
Date Sampled...: 01/18/11 13:10 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
Dilution Factor: 1.18 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.12	ug/L	0.035
1,3-Dinitrobenzene	ND	0.12	ug/L	0.059
2-Amino-4,6-dinitrotoluene	ND	0.12	ug/L	0.12
2,4,6-Trinitrotoluene	ND	0.12	ug/L	0.059
2,4-Dinitrotoluene	ND	0.12	ug/L	0.059
2,6-Dinitrotoluene	ND	0.12	ug/L	0.059
2-Nitrotoluene	ND	0.59	ug/L	0.10
3-Nitrotoluene	ND	0.59	ug/L	0.067
4-Amino-2,6-dinitrotoluene	ND	0.12	ug/L	0.059
4-Nitrotoluene	ND	0.59	ug/L	0.10
HMX	ND	0.12	ug/L	0.042
Nitrobenzene	ND	0.12	ug/L	0.059
Nitroglycerin	ND	0.77	ug/L	0.39
RDX	ND	0.12	ug/L	0.042
PETN	ND	0.77	ug/L	0.35
Tetryl	ND	0.12	ug/L	0.059

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1697-GW

HPLC

Lot-Sample #...: A1A190406-010 Work Order #...: MDF511AA Matrix.....: WG
Date Sampled...: 01/18/11 14:00 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
Dilution Factor: 1.05 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.10	ug/L	0.032
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	ND	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	ND	0.10	ug/L	0.052
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.092
3-Nitrotoluene	ND	0.52	ug/L	0.060
4-Amino-2,6-dinitrotoluene	ND	0.10	ug/L	0.052
4-Nitrotoluene	ND	0.52	ug/L	0.092
HMX	ND	0.10	ug/L	0.038
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.68	ug/L	0.35
RDX	ND	0.10	ug/L	0.038
PETN	ND	0.68	ug/L	0.32
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-237C-1649-GW

HPLC

Lot-Sample #...: A1A190406-011 Work Order #...: MDF521AA Matrix.....: WG
Date Sampled...: 01/18/11 15:20 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
Dilution Factor: 1.03 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	0.21	0.10	ug/L	0.031
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	5.7	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	2.0	0.10	ug/L	0.052
2,4-Dinitrotoluene	0.068 J	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	10	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	0.32 PG	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	114	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1699-GW

HPLC

Lot-Sample #...: A1A190406-012 Work Order #...: MDF531AA Matrix.....: WQ
Date Sampled...: 01/18/11 16:30 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
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: FWGLL2mw-266C-1645-GW

HPLC

Lot-Sample #...: A1A190406-013 Work Order #...: MDF541AA Matrix.....: WG
Date Sampled...: 01/18/11 09:10 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
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	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1646-GW

HPLC

Lot-Sample #...: A1A190406-014 Work Order #...: MDF551AA Matrix.....: WG
Date Sampled...: 01/18/11 10:20 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
Dilution Factor: 0.97 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	0.066 J	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	2.1	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	0.67	0.097	ug/L	0.048
2,4-Dinitrotoluene	0.36	0.097	ug/L	0.048
2,6-Dinitrotoluene	ND	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	2.0	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	1.7	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	1.7	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.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1694-GW

HPLC

Lot-Sample #...: A1A190406-015 Work Order #...: MDF561AA Matrix.....: WG
Date Sampled...: 01/18/11 11:20 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
Dilution Factor: 0.97 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	0.056 J	0.097	ug/L	0.029
1,3-Dinitrobenzene	ND	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	1.8	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	0.56	0.097	ug/L	0.048
2,4-Dinitrotoluene	0.32	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	1.7	0.097	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	1.4	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	1.5	0.097	ug/L	0.035
PETN	ND	0.63	ug/L	0.29
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1647-GW

HPLC

Lot-Sample #...: A1A190406-016 Work Order #...: MDF571AA Matrix.....: WG
Date Sampled...: 01/18/11 12:05 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
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: FWGLL3mw-236C-1648-GW

HPLC

Lot-Sample #...: A1A190406-017 Work Order #...: MDF581AA Matrix.....: WG
Date Sampled...: 01/18/11 14:20 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
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	**0.084 J**	**0.10**	**ug/L**	**0.052**
2,4-Dinitrotoluene	ND	0.10	ug/L	0.052
2,6-Dinitrotoluene	ND	0.10	ug/L	0.052
2-Nitrotoluene	ND	0.52	ug/L	0.092
3-Nitrotoluene	ND	0.52	ug/L	0.060
4-Amino-2,6-dinitrotoluene	**0.060 J**	**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	99	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GW

HPLC

Lot-Sample #...: A1A190406-018 Work Order #...: MDF591AA Matrix.....: WG
Date Sampled...: 01/18/11 15:25 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
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	101	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GW

HPLC

Lot-Sample #...: A1A190406-019 Work Order #...: MDF6A1AA Matrix.....: WG
Date Sampled...: 01/18/11 16:30 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
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	0.077 J	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	98	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A190406 Work Order #...: MDMF81AA Matrix.....: WATER
MB Lot-Sample #: G1A240000-166

Prep Date.....: 01/24/11
Analysis Date..: 01/25/11 Prep Batch #...: 1024166
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

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 #...: A1A190406 Work Order #...: MDMF81AD Matrix.....: WATER
MB Lot-Sample #: G1A240000-166

Prep Date.....: 01/24/11
Analysis Date..: 01/25/11 Prep Batch #...: 1024166
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

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 #...: A1A190406 Work Order #...: MDMF81AE Matrix.....: WATER
MB Lot-Sample #: G1A240000-166

Prep Date.....: 01/24/11
Analysis Date..: 02/09/11 Prep Batch #...: 1024166
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
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.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A190406 Work Order #...: MDMF81AG Matrix.....: WATER
MB Lot-Sample #: G1A240000-166

Prep Date.....: 01/24/11
Analysis Date..: 02/09/11 Prep Batch #...: 1024166
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A190406 Work Order #...: MDMF81AC Matrix.....: WATER
LCS Lot-Sample#: G1A240000-166
Prep Date.....: 01/24/11 Analysis Date..: 01/25/11
Prep Batch #...: 1024166
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	107	(53 - 135)	SW846 8330
1,3-Dinitrobenzene	110	(54 - 120)	SW846 8330
2-Amino-4,6-dinitrotoluene	108	(53 - 120)	SW846 8330
2,4,6-Trinitrotoluene	96	(37 - 120)	SW846 8330
2,4-Dinitrotoluene	107	(58 - 136)	SW846 8330
2,6-Dinitrotoluene	107	(52 - 144)	SW846 8330
2-Nitrotoluene	104	(52 - 120)	SW846 8330
3-Nitrotoluene	105	(48 - 136)	SW846 8330
4-Amino-2,6-dinitrotoluene	106	(58 - 159)	SW846 8330
4-Nitrotoluene	106	(46 - 136)	SW846 8330
HMX	100	(45 - 140)	SW846 8330
Nitrobenzene	109	(49 - 120)	SW846 8330
Nitroglycerin	100	(60 - 120)	SW846 8330
RDX	110	(39 - 120)	SW846 8330
PETN	101	(60 - 120)	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.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A190406 Work Order #...: MDMF81AF Matrix.....: WATER
LCS Lot-Sample#: G1A240000-166
Prep Date.....: 01/24/11 Analysis Date..: 02/09/11
Prep Batch #...: 1024166
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetryl	100	(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 #...: A1A190406 Work Order #...: MDF571AC-MS Matrix.....: WG
MS Lot-Sample #: A1A190406-016 MDF571AD-MSD
Date Sampled...: 01/18/11 12:05 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024166
Dilution Factor: 1.03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	100	(50 - 150)			SW846 8330
	102	(50 - 150)	0.48	(0-50)	SW846 8330
1,3-Dinitrobenzene	107	(50 - 150)			SW846 8330
	108	(50 - 150)	0.09	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	109	(50 - 150)			SW846 8330
	109	(50 - 150)	0.89	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	93	(50 - 150)			SW846 8330
	94	(50 - 150)	0.05	(0-50)	SW846 8330
2,4-Dinitrotoluene	106	(50 - 150)			SW846 8330
	107	(50 - 150)	0.36	(0-50)	SW846 8330
2,6-Dinitrotoluene	107	(50 - 150)			SW846 8330
	107	(50 - 150)	1.4	(0-50)	SW846 8330
2-Nitrotoluene	102	(50 - 150)			SW846 8330
	102	(50 - 150)	1.5	(0-50)	SW846 8330
3-Nitrotoluene	105	(50 - 150)			SW846 8330
	106	(50 - 150)	0.09	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	107	(50 - 150)			SW846 8330
	106	(50 - 150)	1.2	(0-50)	SW846 8330
4-Nitrotoluene	107	(50 - 150)			SW846 8330
	107	(50 - 150)	0.91	(0-50)	SW846 8330
HMX	98	(50 - 150)			SW846 8330
	98	(50 - 150)	1.6	(0-50)	SW846 8330
Nitrobenzene	103	(50 - 150)			SW846 8330
	103	(50 - 150)	0.94	(0-50)	SW846 8330
Nitroglycerin	101	(50 - 150)			SW846 8330
	101	(50 - 150)	1.2	(0-50)	SW846 8330
RDX	104	(50 - 150)			SW846 8330
	106	(50 - 150)	0.93	(0-50)	SW846 8330
PETN	104	(50 - 150)			SW846 8330
	103	(50 - 150)	1.7	(0-50)	SW846 8330
Tetryl	101	(50 - 150)			SW846 8330
	101	(50 - 150)	1.2	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A190406 Work Order #...: MDF571AC-MS Matrix.....: WG
MS Lot-Sample #: A1A190406-016 MDF571AD-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

A-000002.D

Chromatography Summary

Injection Date: 1/25/2011 17:59 Operator: RN

DataFile: LC10.I\01252011.B\A-000002.D Vial Num: 2

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_06 10GCSV0523 8330 L6 200ng/mL**

Method File: LC10.I\01252011.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: CAL.sub SpikeList:

Samp. Info: STD_06 10GCSV0523 8330 L6 200ng/mL;2

Misc. Info: ,6, ; ; ;3;CAL.sub, ,0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.11	11318	205.0000<	200	3%	Acceptable		16.11	21011	199.4000	200	0%	Acceptable		(±15)	
HMX	5.23	26104	201.7000<	200	1%	Acceptable					200	-100%	Fails		(±15)	45
RDX	7.41	18471	202.8000<	200	1%	Acceptable					200	-100%	Fails		(±15)	45
Picric ACID	8.40	42935	533.4000	500	7%	Acceptable					500	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.63	32839	207.4000<	200	4%	Acceptable					200	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.17	32166	207.7000<	200	4%	Acceptable					200	-100%	Fails		(±15)	45
TETRYL	13.11	21462	231.0000<	200	16%	Fails	Hi(4)				200	-100%	Fails		(±15)	45
Nitrobenzene	13.72	14973	209.1000<	200	5%	Acceptable					200	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.14	19488	206.8000<	200	3%	Acceptable					200	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.64	15917	209.1000<	200	5%	Acceptable					200	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.61	17509	208.7000<	200	4%	Acceptable					200	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.03	12355	209.5000<	200	5%	Acceptable					200	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.74	19950	210.1000<	200	5%	Acceptable					200	-100%	Fails		(±15)	45
2-Nitrotoluene	21.68	8450	203.8000<	200	2%	Acceptable					200	-100%	Fails		(±15)	45
4-Nitrotoluene	23.36	10537	211.0000<	200	6%	Acceptable					200	-100%	Fails		(±15)	45
3-Nitrotoluene	25.06	10390	209.0000<	200	5%	Acceptable					200	-100%	Fails		(±15)	45
Nitroglycerin				200	-100%	Fails		14.21	13914	202.2000<	200	1%	Acceptable		(±15)	45
PETN				200	-100%	Fails		26.84	7717	205.9000<	200	3%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.87	21206	209.1000<	200	5%	Acceptable					200	-100%	Fails		(±15)	45
EGDN				200	-100%	Fails	LA	8.40	63668	0.0000	200	-100%	Fails		(±15)	

1/31/11

Notes:

M = Manually Integrated

D = Operator Disabled Result

O = Over Calibration Range

< = Primary Value

4 = Signals Differ by More Than 40%

5 = Signals Differ by More Than 50%

Printed: 1/26/2011 7:50 AM

TestAmerica West Sacramento

A-000003.D

Chromatography Summary

Injection Date: 1/25/2011 18:44 Operator: RN

DataFile: LC10.I\01252011.B\A-000003.D Vial Num: 4

Method 8330 Target Analyte Results

Instrument ID: LC10

Sample : **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.I\01252011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1;;;3;CAL.sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.15	319	5.7790<	5	16%	Fails	M	16.13	559	5.3040	5	6%	Acceptable		(±15)	
HMX	5.25	678	5.2390<	5	5%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.41	639	7.0160<	5	40%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.48	832	10.3400	5	107%	Fails NA		8.48	1218	10.2600<	5	105%	Fails NA		(±15)	
1,3,5-Trinitrobenzene	9.64	831	5.2490<	5	5%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.19	832	5.3730<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.12	566	6.0920<	5	22%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	13.78	402	5.6150<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.17	486	5.1580<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.66	424	5.5690<	5	11%	Acceptable	M				5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.65	460	5.4830<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.08	334	5.6640<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.74	515	5.4250<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.74	243	5.8620<	5	17%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.37	281	5.6280<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.10	316	6.3580<	5	27%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.27	387	5.6240<	5	12%	Acceptable	NA	(±15)	45
PETN				5	-100%	Fails		26.87	260	6.9380<	5	39%	Fails	NA	(±15)	45
3,5-Dinitroaniline	12.90	545	5.3740<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails					5	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

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

1/31/11

Printed: 1/31/2011 1:58 PM

TestAmerica West Sacramento

A-000014.D

Chromatography Summary

Injection Date: 1/26/2011 2:59 Operator: RN

DataFile: LC10.B\01252011.B\A-000014.D Vial Num: 4

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.B\01252011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1;;;;3;CAL.sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.09	315	5.7060<	5	14%	Acceptable		16.13	616	5.8450	5	17%	Fails		(±15)	
HMX	5.24	694	5.3620<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.41	608	6.6760<	5	34%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.49	849	10.5500	5	111%	Fails	NA	8.48	1228	10.3400<	5	107%	Fails	NA	(±15)	
1,3,5-Trinitrobenzene	9.63	812	5.1290<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.16	821	5.3020<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.12	545	5.8660<	5	17%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	13.73	391	5.4610<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.16	552	5.8590<	5	17%	Fails					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.65	436	5.7270<	5	15%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.62	465	5.5430<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.05	339	5.7480<	5	15%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.71	507	5.3410<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.64	235	5.6690<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.32	275	5.5080<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.02	281	5.6530<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.22	457	6.6410<	5	33%	Fails	NA	(±15)	45
PETN				5	-100%	Fails		26.74	147	3.9230<	5	-22%	Fails	NA	(±15)	45
3,5-Dinitroaniline	12.88	568	5.6010<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails	NA				5	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

Printed: 1/26/2011 7:57 AM

TestAmerica West Sacramento

A-000038.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 1/26/2011 20:58 Operator: RN

DataFile: LC10\01252011.B\A-000038.D Vial Num: 7

Instrument ID: LC10

Sample: **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10\01252011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1;;;;3,CAL.sub,;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.15	323	5.8510<	5	17%	Fails		16.12	500	4.7440	5	-5%	Acceptable		(±15)	
HMX	5.24	714	5.5170<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.41	611	6.7090<	5	34%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.49	810	10.0600	5	101%	Fails		8.51	1218	10.2600<	5	105%	Fails		(±15)	
1,3,5-Trinitrobenzene	9.64	818	5.1670<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.18	826	5.3340<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.13	554	5.9630<	5	19%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	13.72	389	5.4340<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.18	519	5.5090<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.66	415	5.4510<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.66	486	5.7930<	5	16%	Fails					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.07	365	6.1890<	5	24%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.74	528	5.5620<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.70	238	5.7410<	5	15%	Acceptable					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.34	292	5.8490<	5	17%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.03	324	6.5180<	5	30%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.23	319	4.6360<	5	-7%	Acceptable		(±15)	45
PETN				5	-100%	Fails		26.80	179	4.7770<	5	-4%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.92	569	5.6110<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails					5	-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: 1/27/2011 10:05 AM

TestAmerica West Sacramento

A-000021.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 1/26/2011 8:14 Operator: RN
DataFile: LC10\01252011.B\A-000021.D Vial Num: 24
Instrument ID: LC10

Sample: **MDF521AA 1024166 A1A190406-11 1X**

Method File: LC10\01252011.B\8330AB.M
Start Cal Date: 1/9/2011 2:11 End Cal Date: 1/9/2011 7:27

Matrix: WATER SubList: WATER.sub SpikeList:
Samp. Info: MDF521AA 1024166 A1A190406-11 1X;0;
Misc. Info: ,,962.78,,20;1;WATER.sub;,0;1;MDF521AA

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	962.78 mL	0 g

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	16.15	0.039	7895	2.9710<		16.15	0.035	15244	3.0050		0.0000	0.00	
HMX	5.23	-0.005	1178	0.1891<	not conf						0.0280	0.10	45
RDX	7.44	0.045	1414	0.3225<	conf Pos.						0.0675	0.10	45
Picric ACID											0 1298	1.04	
1,3,5-Trinitrobenzene	9.65	0.025	1621	0.2127<	conf						0.0322	0.10	45
1,3-Dinitrobenzene	12.04	-0.115	1721	0.2309<	not conf						0.0519	0.10	45
TETRYL											0 0519	0.10	
Nitrobenzene											0 0519	0 10	
2,4,6-Trinitrotoluene	15.18	0.042	8874	1.9560<	conf.						0.0249	0.10	45
4-AM-2,6-DNT	15.70	0.059	36500	9.9600<							0.0229	0.10	45
2-AM-4,6-DNT	16.67	0.065	22827	5.6530<							0.1039	0.21	45
2,6-Dinitrotoluene											0.0519	0.10	
2,4-Dinitrotoluene	18.78	0.042	311	0.0681<	(J)						0.0519	0.10	45
2-Nitrotoluene											0.0748	0 52	
4-Nitrotoluene											0.0748	0.52	
3-Nitrotoluene											0.0644	0.52	
Nitroglycerin											0 3428	0 68	
PETN											0.3116	0.68	
3,5-Dinitroaniline	12.91	0.049	2328	0.4769<	NA						0.0260	1 04	45

01/31/11

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.5966	2.9710	114	✓	2.5966	3.0050	116	(79-111)

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: 1/26/2011 1:38 PM

TestAmerica West Sacramento

C-000010.D

Chromatography Summary

Injection Date: 1/27/2011 21:26 Operator: RN

DataFile: LC12_M01272011.B\C-000010.D Vial Num: 77

Method 8330 Target Analyte Results

Instrument ID: LC12

Sample: **MDF521AA 1024166 A1A190406-11 1X**

Method File: LC12 M01272011.B\8330CNAB.M

Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	962.78 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDF521AA 1024166 A1A190406-11 1X;0;

Misc. Info: ,;962.78;;20;1;WATER.sub;,0;1;MDF521AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.43	0.092	7194	2.5790<							0.0000	0.00	45
HMX											0 0280	0.10	
RDX	33.20	0.065	450	0.2089<	conf. PC.						0.0675	0.10	45
Picric ACID											0.1298	1 04	
1,3,5-Trinitrobenzene	29.14	0.052	799	0.2066<	conf.						0.0322	0.10	45
1,3-Dinitrobenzene											0.0519	0 10	
TETRYL											0.0519	0.10	
Nitrobenzene											0 0519	0.10	
2,4,6-Trinitrotoluene	41.71	0.102	8803	1.8200<							0.0249	0.10	45
4-AM-2,6-DNT	37.97	0.109	35535	9.1580<	conf.						0.0229	0.10	45
2-AM-4,6-DNT	37.46	0.099	22549	5.2350<							0.1039	0.21	45
2,6-Dinitrotoluene											0.0519	0.10	
2,4-Dinitrotoluene	34 02	-0 035	347	0.0855<							0.0519	0.10	45
2-Nitrotoluene											0.0748	0.52	
4-Nitrotoluene											0.0748	0 52	
3-Nitrotoluene											0.0644	0.52	
Nitroglycerin											0.3428	0.68	
PETN											0.3116	0.68	
3,5-Dinitroaniline	32 46	0.062	2099	0 5817<							0 0260	1.04	45

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.5966	2.5790	99	2.5966		0	(48-143)

1/31/11

Notes:

M = Manually Integrated

D = Operator Disabled Result

O = Over Calibration Range

Signals Differ by More Than 40%

Signals Differ by More Than 50%

8330MOD
NITROGUANIDINE
DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A190406R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.7 and 4.0 °C.	QAPP Table 4-2
3. Were holding times met?	✓			Checked by ADR.	QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓				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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A190406R0
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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A190406R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.7 and 4.0 °C.	QAPP Table 4-2
3. Were holding times met?	✓			Checked by ADR.	QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Tale 3-7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-7
7. Was a MDL Level Verification analyzed once per quarter with all target analytes detected?	✓				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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A190406R0
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: FWGMBSmw-001C-1681-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-001 Work Order #...: MDF5J1AD Matrix.....: WG
Date Sampled...: 01/18/11 09:34 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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: FWGNTAmw-112C-1679-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-002 Work Order #...: MDF5P1AD Matrix.....: WG
Date Sampled...: 01/18/11 10:58 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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: FWGNTAmw-113C-1680-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-003 Work Order #...: MDF5Q1AD Matrix.....: WG
Date Sampled...: 01/18/11 12:12 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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: FWGFBQmw-169C-1670-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-004 Work Order #...: MDF5R1AD Matrix.....: WG
Date Sampled...: 01/18/11 13:43 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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: FWGFBQmw-172C-1671-GW

Dissolved HPLC

Lot-Sample #...:	A1A190406-005	Work Order #...:	MDF5T1AD	Matrix.....:	WG
Date Sampled...:	01/18/11 14:54	Date Received..:	01/19/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/26/11		
Prep Batch #...:	1024217				
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: FWGFBQmw-173C-1672-GW

Dissolved HPLC

Lot-Sample #...:	A1A190406-006	Work Order #...:	MDF5V1AD	Matrix.....:	WG
Date Sampled...:	01/18/11 16:17	Date Received..:	01/19/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/26/11		
Prep Batch #...:	1024217				
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-001-1682-GW

Dissolved HPLC

Lot-Sample #...:	A1A190406-007	Work Order #...:	MDF5W1AD	Matrix.....:	WG
Date Sampled...:	01/18/11 09:30	Date Received..:	01/19/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/26/11		
Prep Batch #...:	1024217				
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-002-1683-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-008 Work Order #...: MDF5X1AD Matrix.....: WG
Date Sampled...: 01/18/11 11:25 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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-004-1685-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-009 Work Order #...: MDF501AD Matrix.....: WG
Date Sampled...: 01/18/11 13:10 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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-DUP1-1697-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-010 Work Order #...: MDF511AD Matrix.....: WG
Date Sampled...: 01/18/11 14:00 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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-237C-1649-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-011 Work Order #...: MDF521AD Matrix.....: WG
Date Sampled...: 01/18/11 15:20 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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: FWGEQUIPRINSE2-1699-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-012 Work Order #...: MDF531AD Matrix.....: WQ
Date Sampled...: 01/18/11 16:30 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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-1645-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-013 Work Order #...: MDF541AD Matrix.....: WG
Date Sampled...: 01/18/11 09:10 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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-1646-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-014 Work Order #...: MDF551AD Matrix.....: WG
Date Sampled...: 01/18/11 10:20 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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-DUP3-1694-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-015 Work Order #...: MDF561AD Matrix.....: WG
Date Sampled...: 01/18/11 11:20 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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-1647-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-016 Work Order #...: MDF571AH Matrix.....: WG
Date Sampled...: 01/18/11 12:05 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
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-1648-GW

Dissolved HPLC

Lot-Sample #...:	A1A190406-017	Work Order #...:	MDF581AD	Matrix.....:	WG
Date Sampled...:	01/18/11 14:20	Date Received..:	01/19/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1024217				
Dilution Factor:	1	Method.....:	SW846 8330 (Modif		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Nitroguanidine	8.5 J	20	ug/L	2.4

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-018 Work Order #...: MDF591AD Matrix.....: WG
Date Sampled...: 01/18/11 15:25 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024217
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-243C-1703-GW

Dissolved HPLC

Lot-Sample #...: A1A190406-019 Work Order #...: MDF6A1AD Matrix.....: WG
Date Sampled...: 01/18/11 16:30 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024217
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 #...: A1A190406 Work Order #...: MDMLM1AA Matrix.....: WATER
MB Lot-Sample #: G1A240000-217

Prep Date.....: 01/24/11
Analysis Date..: 01/26/11 Prep Batch #...: 1024217
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 #...: A1A190406 Work Order #...: MDMLM1AC Matrix.....: WATER
LCS Lot-Sample#: G1A240000-217
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	104	(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 #...: A1A190406 Work Order #...: MDF571AJ-MS Matrix.....: WG
MS Lot-Sample #: A1A190406-016 MDF571AK-MSD
Date Sampled...: 01/18/11 12:05 Date Received..: 01/19/11
Prep Date.....: 01/24/11 Analysis Date..: 01/26/11
Prep Batch #...: 1024217
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	107	(73 - 117)			SW846 8330 (Modified
	109	(73 - 117)	1.3	(0-15)	SW846 8330 (Modified

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A190406 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 coolers were received between 1.7 and 4.0 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.7
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3.7
7. Was Acetone used to extract the samples? Was the Acetone evaporated using Nitrogen?	✓				STL SOP Sections 11.4
8. Does the initial calibration curve consist of 5 concentration levels with the low standard near but > MDL?	✓			Instrument FS4; ICAL 1/26/11 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

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A190406 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

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGMBSmw-001C-1681-GW

General Chemistry

Lot-Sample #...: A1A190406-001 Work Order #...: MDF5J Matrix.....: WG
Date Sampled...: 01/18/11 09:34 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-112C-1679-GW

General Chemistry

Lot-Sample #...: A1A190406-002 Work Order #...: MDF5P Matrix.....: WG
Date Sampled...: 01/18/11 10:58 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-113C-1680-GW

General Chemistry

Lot-Sample #...: A1A190406-003 Work Order #...: MDF5Q Matrix.....: WG
Date Sampled...: 01/18/11 12:12 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-169C-1670-GW

General Chemistry

Lot-Sample #...: A1A190406-004 Work Order #...: MDF5R Matrix.....: WG
Date Sampled...: 01/18/11 13:43 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GW

General Chemistry

Lot-Sample #...: A1A190406-005 Work Order #...: MDF5T Matrix.....: WG
Date Sampled...: 01/18/11 14:54 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-173C-1672-GW

General Chemistry

Lot-Sample #...: A1A190406-006 Work Order #...: MDF5V Matrix.....: WG
Date Sampled...: 01/18/11 16:17 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCEmw-001-1682-GW

General Chemistry

Lot-Sample #...: A1A190406-007 Work Order #...: MDF5W Matrix.....: WG
Date Sampled...: 01/18/11 09:30 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1683-GW

General Chemistry

Lot-Sample #...: A1A190406-008 Work Order #...: MDF5X Matrix.....: WG
Date Sampled...: 01/18/11 11:25 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1685-GW

General Chemistry

Lot-Sample #...: A1A190406-009 Work Order #...: MDF50 Matrix.....: WG
Date Sampled...: 01/18/11 13:10 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1697-GW

General Chemistry

Lot-Sample #...: A1A190406-010 Work Order #...: MDF51 Matrix.....: WG
Date Sampled...: 01/18/11 14:00 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-237C-1649-GW

General Chemistry

Lot-Sample #...: A1A190406-011 Work Order #...: MDF52 Matrix.....: WG
Date Sampled...: 01/18/11 15:20 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1699-GW

General Chemistry

Lot-Sample #...: A1A190406-012 Work Order #...: MDF53 Matrix.....: WQ
Date Sampled...: 01/18/11 16:30 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1645-GW

General Chemistry

Lot-Sample #...: A1A190406-013 Work Order #...: MDF54 Matrix.....: WG
Date Sampled...: 01/18/11 09:10 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1646-GW

General Chemistry

Lot-Sample #...: A1A190406-014 Work Order #...: MDF55 Matrix.....: WG
Date Sampled...: 01/18/11 10:20 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1694-GW

General Chemistry

Lot-Sample #...: A1A190406-015 Work Order #...: MDF56 Matrix.....: WG
Date Sampled...: 01/18/11 11:20 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1647-GW

General Chemistry

Lot-Sample #...: A1A190406-016 Work Order #...: MDF57 Matrix.....: WG
Date Sampled...: 01/18/11 12:05 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1648-GW

General Chemistry

Lot-Sample #...: A1A190406-017 Work Order #...: MDF58 Matrix.....: WG
Date Sampled...: 01/18/11 14:20 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GW

General Chemistry

Lot-Sample #...: A1A190406-018 Work Order #...: MDF59 Matrix.....: WG
Date Sampled...: 01/18/11 15:25 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GW

General Chemistry

Lot-Sample #...: A1A190406-019 Work Order #...: MDF6A Matrix.....: WG
Date Sampled...: 01/18/11 16:30 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064

Dilution Factor: 1 MDL.....: 0.48

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1A190406 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MDL511AA		MB Lot-Sample #:	G1A240000-064	
	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/24-01/26/11	1024064
		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 #...: A1A190406 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MDL511AC LCS Lot-Sample#: G1A240000-064			
	83	(26 - 144)	TAL-SOP WS-WC-005	01/24-01/26/11	1024064
		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 #...: A1A190406 Matrix.....: WG
Date Sampled...: 01/18/11 12:05 Date Received..: 01/19/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: MDF571AF-MS/MDF571AG-MSD			MS Lot-Sample #: A1A190406-016		
	79	(26 - 144)			TAL-SOP WS-WC-005	01/24-01/26/11	1024064
	79	(26 - 144)	0.49	(0-45)	TAL-SOP WS-WC-005	01/24-01/26/11	1024064
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

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

Category	Code
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-roview categories not assessed by automated data review are manually entered by the user. The application automatically adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A190406										
8330	FWGFBQmw-173C-1672-GW	AQ	N							
				2,4,6-TNT	0.096	0.048J		J	ug/L	L
8330	FWGLL2mw-267C-1646-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.097	0.066J		J	ug/L	L
				RDX	0.097	1.7		J	ug/L	Pj
8330	FWGLL2mw-DUP3-1694-GW	AQ	FD							
				1,3,5-Trinitrobenzene	0.097	0.056J		J	ug/L	L
				RDX	0.097	1.5		J	ug/L	Pj
8330	FWGLL3mw-236C-1648-GW	AQ	N							
				2,4,6-TNT	0.10	0.084J		J	ug/L	L
				4-Amino-2,6-Dinitrotoluene	0.10	0.060J		J	ug/L	L
8330	FWGLL3mw-237C-1649-GW	AQ	N							
				2,4-Dinitrotoluene	0.10	0.068J		J	ug/L	L
				RDX	0.10	0.32PG		J	ug/L	Pj
8330	FWGLL3mw-243C-1703-GW	AQ	N							
				2,6-Dinitrotoluene	0.11	0.077J		J	ug/L	L
8330	FWGSCFmw-001-1682-GW	AQ	N							
				NITROGLYCERINE	0.64	0.54J		J	ug/L	L
8330	FWGSCFmw-002-1683-GW	AQ	N							
				Pentaerythritol Tetranitrate (PETN)	0.70	0.42J		J	ug/L	L
SW8330 Modified	FWGLL3mw-236C-1648-GW	AQ	N							
				Nitroguanidine	20	8.5J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGFBQmw-173C-1672-GW **Lab Report Batch :** A1A190406 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A190406006

Reviewed By / Date : Angye Dragotta 3/14/2011 **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 : 8330						**Dilution: 0.96**															
2,4,6-TNT	0.048		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-267C-1646-GW **Lab Report Batch :** A1A190406 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A190406014

Reviewed By / Date : Angye Dragotta 3/14/2011 **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 : 8330						**Dilution: 0.97**															
1,3,5-Trinitrobenzene	0.066		ug/L	J	YES	J								J							L
RDX	1.7		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-DUP3-1694-GW **Lab Report Batch :** A1A190406 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A190406015

Reviewed By / Date : Angye Dragotta 3/14/2011 **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 : 8330						**Dilution: 0.97**															
1,3,5-Trinitrobenzene	0.056		ug/L	J	YES	J								J							L
RDX	1.5		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-236C-1648-GW **Lab Report Batch :** A1A190406 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A190406017

Reviewed By / Date : Angye Dragotta 3/14/2011 **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 : 8330						**Dilution: 1.05**															
2,4,6-TNT	0.084		ug/L	J	YES	J								J							L
4-Amino-2,6-Dinitrotoluene	0.060		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 : FWGLL3mw-236C-1648-GW
Lab Report Batch : A1A190406
Lab ID : TALCAN
Sample Date : 01/18/2011
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A1A190406017

Reviewed By / Date : Angye Dragotta 3/14/2011
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 : SW8330 Modified						**Dilution: 1**															
Nitroguanidine	8.5		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 : FWGLL3mw-237C-1649-GW **Lab Report Batch :** A1A190406 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A190406011

Reviewed By / Date : Angye Dragotta 3/14/2011 **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 : 8330						**Dilution: 1.03**															
2,4-Dinitrotoluene	0.068		ug/L	J	YES	J								J							L
RDX	0.32		ug/L	PG	YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-243C-1703-GW **Lab Report Batch :** A1A190406 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A190406019

Reviewed By / Date : Angye Dragotta 3/14/2011 **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 : 8330						**Dilution: 1.06**															
2,6-Dinitrotoluene	0.077		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 : FWGSCFmw-001-1682-GW **Lab Report Batch :** A1A190406 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A190406007

Reviewed By / Date : Angye Dragotta 3/14/2011 **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 : 8330						**Dilution: 0.99**															
NITROGLYCERINE	0.54		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 : FWGSCFmw-002-1683-GW
Lab Report Batch : A1A190406
Lab ID : TALCAN
Sample Date : 01/18/2011
Analysis Type: DL
Sample Matrix : AQ
Lab Sample ID: A1A190406008

Reviewed By / Date : Angye Dragotta 3/14/2011
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 : 8330						**Dilution: 1.07**															
Pentaerythritol Tetranitrate (PETN)	0.42		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A1A190406 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE2-1699	A1A190406012	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.54	0.21	ug/L
				3-Nitrotoluene	U	0.54	0.21	ug/L
				4-Nitrotoluene	U	0.54	0.21	ug/L
FWGFBQmw-169C-1670-	A1A190406004	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGFBQmw-172C-1671-	A1A190406005	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGFBQmw-173C-1672-	A1A190406006	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL2mw-266C-1645-G	A1A190406013	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.54	0.21	ug/L
				3-Nitrotoluene	U	0.54	0.21	ug/L
				4-Nitrotoluene	U	0.54	0.21	ug/L
FWGLL2mw-267C-1646-G	A1A190406014	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL2mw-269C-1647-G	A1A190406016	8330	AQ	2-Nitrotoluene	U	0.51	0.20	ug/L
				3-Nitrotoluene	U	0.51	0.20	ug/L
				4-Nitrotoluene	U	0.51	0.20	ug/L
FWGLL2mw-DUP3-1694-	A1A190406015	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **030240.0006 - RVAAP (OH)**

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A1A190406 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGLL3mw-236C-1648-G	A1A190406017	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGLL3mw-237C-1649-G	A1A190406011	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGLL3mw-242C-1652-G	A1A190406018	8330	AQ	2-Nitrotoluene	U	0.56	0.22	ug/L
				3-Nitrotoluene	U	0.56	0.22	ug/L
				4-Nitrotoluene	U	0.56	0.22	ug/L
FWGLL3mw-243C-1703-G	A1A190406019	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.53	0.21	ug/L
				3-Nitrotoluene	U	0.53	0.21	ug/L
				4-Nitrotoluene	U	0.53	0.21	ug/L
FWGMBSmw-001C-1681-	A1A190406001	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGNTAmw-112C-1679-	A1A190406002	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGNTAmw-113C-1680-	A1A190406003	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGSCFmw-001-1682-G	A1A190406007	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGSCFmw-002-1683-G	A1A190406008	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: 030240.0006 - RVAAP (OH)

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A1A190406 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGSCFmw-002-1683-G	A1A190406008	8330	AQ	2-Nitrotoluene	U	0.54	0.21	ug/L
				3-Nitrotoluene	U	0.54	0.21	ug/L
				4-Nitrotoluene	U	0.54	0.21	ug/L
FWGSCFmw-004-1685-G	A1A190406009	8330	AQ	2,4-Dinitrotoluene	U	0.12	0.12	ug/L
				2,6-Dinitrotoluene	U	0.12	0.12	ug/L
				2-Nitrotoluene	U	0.59	0.24	ug/L
				3-Nitrotoluene	U	0.59	0.24	ug/L
				4-Nitrotoluene	U	0.59	0.24	ug/L
FWGSCFmw-DUP1-1697-	A1A190406010	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **030240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A1A190406 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGFBQmw-173C-1672-	A1A190406006	8330	AQ	2,4,6-TNT	J	0.048	0.096	ug/L
FWGLL2mw-267C-1646-G	A1A190406014			1,3,5-Trinitrobenzene	J	0.066	0.097	ug/L
FWGLL2mw-DUP3-1694-	A1A190406015			1,3,5-Trinitrobenzene	J	0.056	0.097	ug/L
FWGLL3mw-236C-1648-G	A1A190406017			2,4,6-TNT	J	0.084	0.10	ug/L
				4-Amino-2,6-Dinitrotoluene	J	0.060	0.10	ug/L
		SW8330 Modif		Nitroguanidine	J	8.5	20	ug/L
FWGLL3mw-237C-1649-G	A1A190406011	8330		2,4-Dinitrotoluene	J	0.068	0.10	ug/L
FWGLL3mw-243C-1703-G	A1A190406019			2,6-Dinitrotoluene	J	0.077	0.11	ug/L
FWGSCFmw-001-1682-G	A1A190406007			NITROGLYCERINE	J	0.54	0.64	ug/L
FWGSCFmw-002-1683-G	A1A190406008			Pentaerythritol Tetranitrate (PETN)	J	0.42	0.70	ug/L

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011 **Date:** March 9, 2011
STL Sample Delivery Group: A1A190407 **Revision:** 0

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

QA/QC Summary

On January 18, 2011, the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1A190407.

Field Sample ID	Analytes	Method
FWGLL2mw-266c-1645-GW	Perchlorate	SW846 6860
FWGLL2mw-267c-1646-GW		
FWGLL2mw-DUP3-1694-GW		
FWGLL2mw-269c-1647-GW		
FWGLL3mw-236c-1648-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 between 0.9 – 2.7 °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: 280-11779-1
Sdg Number: A1A190407

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-11779-1	FWGLL2mw-266C-1645-GF	Water	01/18/2011 0910	01/20/2011 1000
280-11779-2	FWGLL2mw-267C-1646-GF	Water	01/18/2011 1020	01/20/2011 1000
280-11779-3FD	FWGLL2mw-DUP3-1694-GF	Water	01/18/2011 1120	01/20/2011 1000
280-11779-4	FWGLL2mw-269C-1647-GF	Water	01/18/2011 1205	01/20/2011 1000
280-11779-4MS	FWGLL2mw-269C-1647-GF	Water	01/18/2011 1205	01/20/2011 1000
280-11779-4MSD	FWGLL2mw-269C-1647-GF	Water	01/18/2011 1205	01/20/2011 1000
280-11779-5	FWGLL3mw-236C-1648-GF	Water	01/18/2011 1420	01/20/2011 1000

CASE NARRATIVE

Client: TestAmerica Laboratories, Inc.

Project: EQM - RVAAP

Report Number: 280-11779-1

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

The samples were received on 01/20/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.2 C.

PERCHLORATE - METHOD 6860

The matrix spike associated with batch 50263 exhibited a recovery outside control limits for perchlorate. In addition, the MS/MSD RPD data was outside control limits. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other difficulties were encountered.

Chain of Custody Record

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact			
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone:
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com		
Phone: 513-825-7500		TAT if different from below: 1 per SDG ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Courier		
Project Number: 030240.0006	Shipping/Tracking No: NA		
PO# 16726			

COC No: 62 11/19/11 Team 1-1/18/11-1
1 of 2 COCs

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Field Filtered	Perform MS/MSD	Analyses: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/6020 Hg 7470			Sample Specific Notes / Special Instructions:
FWG Team 1 - Trip	1/18/11	08:00		X						2					N	G	X										A328
FWGMBSmw-001C-1681-GW	1/18/11	09:34		X						3	1		9		N	G	X	X	X	X	X	X	X				L397
FWGMBSmw-001C-1681-GF	1/18/11	09:34		X					1						Y	G								X			L397
FWGNTAmw-112C-1679-GW	1/18/11	10:58		X						3	1		9		N	G	X	X	X	X	X	X	X				L903
FWGNTAmw-112C-1679-GF	1/18/11	10:58		X					1						Y	G								X			L903
FWGNTAmw-113C-1680-GW	1/18/11	12:12		X						3	1		9		N	G	X	X	X	X	X	X	X				A313
FWGNTAmw-113C-1680-GF	1/18/11	12:12		X					1						Y	G								X			A313
FWGFBQmw-169C-1670-GW	1/18/11	13:43		X						3	1		9		N	G	X	X	X	X	X	X	X				A328
FWGFBQmw-169C-1670-GF	1/18/11	13:43		X					1						Y	G								X			A328
FWGFBQmw-172C-1671-GW	1/18/11	14:54		X						3	1		9		N	G	X	X	X	X	X	X	X				A323

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Metals are field filtered. Temps may not meet requirements if sample collection time is close to lab pick-up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/18/11 18:00	NC Fedex	TALK	1/18/11 18:00
NC Fedex	TAL-NC	1/18/11 1912	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Tony Bruno	TA	1/19/11 7:1

©2008, TestAmerica Laboratories, Inc. All rights reserved
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

TAL-0018 (1008)

All VOCs in cooler A328

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact:	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: Team 1-1/18/11-2
Company Name: EQM	Telephone:	Telephone:	Telephone:	2 of 2 COCs
Address: 1800 Carillon Blvd	Email: erorbin@eqm.com	Analysis Turnaround Time	Analyses	
City/State/Zip: Cincinnati, OH 45240		TAT if different from below for 5th		
Phone: 513-825-7540		☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVSAP (2nd)	Method of Shipment/Carrier: Lab courier			
Project Number: 030WV.0006	Shipping/Tracking No: NA			
PO #: 12226				

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)	VOCs 8260	SVOCs 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/6020/7470		Sample Specific Notes / Special Instructions:
FWGFBQmw-173C-1671-GF	1/18/11	14:54		X					1						Y	G								X			A323
FWGFBQmw-173C-1672-GW	1/18/11	16:17		X						3	1		9		N	G	X	X	X	X	X	X	X				L467
FWGFBQmw-173C-1672-GF	1/18/11	16:17		X					1						Y	G								X			L467

E.C 1/18/11

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 are field filtered. Temps may not meet requirements if sample collection time is close to lab pick-up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/18/11 18:00	TC Fobian	TALNC	1/18/11 1800
TC Fobian	TAL-NC	1/18/11 1912	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Debra Burris	TA	1/19/11 7:[illegible]

TAL-0018 (1008)

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

All VOCs in cooler A328

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 1-18-11	Chain of Custody Number: 000453
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825-7500 (7495)	Lab Number: 330497939G	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 Ohio	Carrier/Waybill Number: LAB PICKUP		
Contract/Purchase Order/Quote No.: PN 30240.0006 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	Explo 8330	Propellents	Cyanide 9012	NO2_NO3 353.2	Metals (complete) 6010	Special Instructions/ Conditions of Receipt
FWG Team 2 - Trip	1-18-11	0800		X						2			X									L776
FWGSCFmw-001-1682-GW		0930		X			9	1		3	1		X	X	X	X	X	X	X	X		A183
FWGSCFmw-001-1682-GF				X					1												X	A183
FWGSCFmw-002-1683-GW		1125		X			9	1		3	1		X	X	X	X	X	X	X	X		A192
FWGSCFmw002-1683-GF				X					1												X	A192
FWGSCFmw004-1685-GW		1310		X			9	1		3	1		X	X	X	X	X	X	X	X		L499
FWGSCFmw-004-1685-GF				X					1												X	L499
FWGSCFmw-DUP1-1697-GW		1400		X			9	1		3	1		X	X	X	X	X	X	X	X		L917
FWGSCFmw-DUP1-1697-GF				X					1												X	L917
FWG LL3mw-2376-1649-GW		1520		X			9			3	1		X	X	X	X	X	X	X			L776
FWG LL3mw-2376-1649-GF				X					1												X	L776
FWGEQUIPBlnk2-1699-GW		1630		X			9	1	1	3	1		X	X	X	X	X	X	X	X	X	NOT FILTERED L899

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify): GFMetals were field filtered.

	Date	Time		Date	Time
1. Relinquished By	1/18/11	1800	1. Received By	1/18/11	1850
2. Relinquished By	1/18/11	1912	2. Received By	1/19/11	7:10
3. Relinquished By			3. Received By		

Comments: All VOAs in L776

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

Page 2 CoC 3148

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 1/18/11	Chain of Custody Number: 003149
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500	Lab Number: 330497 (1/18/11)	Page 1 of 2
City: Cincinnati / State: OH / Zip Code: 45240	Site Contact: Erik Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP (OH)	Carrier/Waybill Number: Lab Pick UP		
Contract/Purchase Order/Quote No.: 30240.0006 PO # 167216			

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): 8260 VOC	8270 SVOC	8081 Pest	8082 PCB	8330 Explosives	Cyanide 9012	Metals 6010/7470/7471	Perchlorates 6850	Special Instructions/ Conditions of Receipt
FWG Team 3 - Trip	1/18/11	0800		X						2			X								Cooler ID
FWGLL2-2616C-1645-GW	1/18/11	0910		X			9	X		3	1		X	X	X	X	X	X	X		L872
FWGLL2-2616C-1645-GF	1/18/11	0910		X			1			1										X X	L872
FWGLL2-2617C-1646-GW	1/18/11	1020		X			9	X		3	1		X	X	X	X	X	X	X		L165
FWGLL2-2617C-1646-GF	1/18/11	1020		X			1			1										X X	L165
FWGLL2-DUP3-1694-GW	1/18/11	1120		X			9	X		3	1		X	X	X	X	X	X	X		A45
FWGLL2-DUP3-1694-GF	1/18/11	1120		X			1			1										X X	A45
FWGLL2-2619C-1647-GW	1/18/11	1205		X			27			9	3		X	X	X	X	X	X	X		L890, L685, L461 MS/MSD
FWGLL2-2619C-1647-GF	1/18/11	1205		X			3		3											X X	L890, L685, L461
FWGLL3-2320C-1648-GW	1/18/11	1420		X			9			3	1		X	X	X	X	X	X	X		A28
FWGLL3-2321C-1648-GF	1/18/11	1420		X			1			1										X X	A28
							EC		1/18/11												

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)

	Date	Time
1. Relinquished By: Erik Corbin EQ	1/18/11	18:00
2. Relinquished By: FC	1/15/11	1912
3. Relinquished By:		
1. Received By: FC	1/15/11	1800
2. Received By: Danny Burns	1/19/11	7:06
3. Received By:		

Comments: Metals + Perchlorates Field Filtered * ALL VOAS IN COOLER L872 *
• Temps may not meet requirements if Sample Collection time is close to Lab Pick UP

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)

COC 003149

Client: EQM	Project Manager: John Muller	Date: 1/18/11	Chain of Custody Number: 003148
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500	Lab Number: 330-497-9376	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 Pick UP		
Contract/Purchase Order/Quote No.: 030240.0001.0 PO# 167216			

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	EXPL 8330	Propellants 8095	Cyanide 9012	Metals 6010/7470	Perchlorates 6850	Special Instructions/ Conditions of Receipt: Cooler ID
FWGLL3MW-242C-1652-GW	1/18/11	1525		X			9			3	1		X	X	X	X	X	X	X			L539
FWGLL3MW-242C-1652-GF	1/18/11	1525		X					1											X		L539
FWGLL3MW-243C-1703-GW	1/18/11	1680		X			9			3	1		X	X	X	X	X	X	X			A5
FWGLL3MW-243C-1703-GF	1/18/11	1680		X					1											X		A5
			EC		1/18/11																	

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 PER SOW [ ] Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	1/18/11	18:00	1. Received By: TC Fabian	1/18/11	1800
2. Relinquished By: TC Fabian	1/18/11	1912	2. Received By: Denny Burns	1/19/11	7:10
3. Relinquished By:			3. Received By:		

Comments: Metals + Perchlorates field filtered

* ALL VOAS IN COOLER L872 *

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

• Temps may not meet requirements if Sample Collection is close to Lab Pick Up •

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A1A190407
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 1/19/11 Opened on 1/19/11
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 23 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 ☒ SEE Attached
   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:

COC ID = FWGLL3-236C-1648-GW 1x40 vial ID = FWGLL3mw-236C-1658-GW
COC ID = FWGLL2-266C-1645-GW/GF Label IDs = FWGLL2mw-266C-1645-GW/GF
COC ID = FWGLL2-267C-1646-GW/GF Label IDs = FWGLL2mw-267C-1646-GW/GF
COC ID = FWGLL2-DUP3-1694-GW/GF Label IDs = FWGLL2mw-DUP3-1694-GW/GF
COC ID = FWGLL2-269C-1647-GW/GF Label IDs = FWGLL2mw-269C-1647-GW/GF
COC ID = FWGLL3-236C-1648-GW/GF Label IDs = FWGLL3mw-236C-1648-GW/GF OVER

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
001C-1681	<2 >12	1/19/11	gm
112C-1679	<2 >12		
113C-1680	<2 >12		
169C-1670	<2 >12		
172C-1671	<2 >12		
173C-1672	<2 >12		
001-1682	<2 <2 >12		
002-1683	<2 <2 >12		

TestAmerica Multiple Cooler Receipt Form/Narrative — Lot Number: A1A190407
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
L397	2.9	IR	Ice	
L903	3.8			
A313	2.9			
A328	2.9			
A323	2.2			
L467	2.8			
A183	2.6			
A192	2.1			
L499	3.7			
L917	3.4			
L776	3.1			
L899	2.4			
L872	1.7			
L165	2.0			
A95	3.8			
L685	4.0			
A28	2.1			
L539	3.9			
A5	3.6			
L461	2.1			
L890	2.4			

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
004-1685	<2 <2 >12	1/19/11	gm
DUP1-1697	<2 <2 >12		
237C-1649	<2 >12		
Equip Rinse 2-1699	<2 <2 <2 >12		
266C-1645	<2 >12		
267C-1646	<2 >12		
DUP3-1694	<2 >12		
269C-1647	<2 <2 <2 >12 >12 >12 >12		
236C-1648	<2 >12		
242C-1652	<2 >12		
243C-1703	<2 >12		

Cooler #	Temp. °C	Method	Coolant

Discrepancies Cont'd:

Will log IDs per Label IDs

CASE NARRATIVE

A1A190407

The following report contains the analytical results for five 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 according to documented sample acceptance procedures.

The 6860 Perchlorate analysis was performed at the TestAmerica Denver Laboratory. A copy of their report has been provided.

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 January 20, 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 1.7 to 3.9° C.

See TestAmerica's Cooler Receipt Form for additional information.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

DATA REPORTING QUALIFIERS

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11779-1
Sdg Number: A1A190407

Lab Section	Qualifier	Description
LCMS		
	F	MS or MSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	F	RPD of the MS and MSD exceeds the control limits

Method 6860

Perchlorate (IC/MS) by Method 6860

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/March 9, 2011

SDG: A1A190407 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 between 1.7-3.9°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 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?	✓			12/20/2010 @1817	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: January 2011
Data Reviewer/Date: Angye Dragotta/March 9, 2011

SDG: A1A190407 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?	✓			Sample FWGLL2mw-269c-1674-GF was the parent for the MS/MSD evaluation.	
30. Were MS/MSD recoveries 75-125% and RPD values ≤20%?	✓			Checked by ADR	>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%?	✓			Sample FWGLL2mw-DUP3-1694-GF was the field duplicate for sample FWGLL2mw-267c-1646-GF.	RPD >30=J
38. Was the Isotope ratio between 101 and 85 monitored and fell between 2.3 and 3.08?	✓				J/UJ

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/March 9, 2011

SDG: A1A190407 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: 280-11779-1
Sdg Number: A1A190407

Client Sample ID: **FWGLL2mw-266C-1645-GF**

Lab Sample ID: 280-11779-1
Client Matrix: Water

Date Sampled: 01/18/2011 0910
Date Received: 01/20/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50263		Instrument ID:	LC_LCMS1
Preparation:	N/A			Lab File ID:	IC11A2534.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	01/25/2011 2228			Final Weight/Volume:	1.0 mL
Date Prepared:				Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.023	J	0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11779-1
Sdg Number: A1A190407

Client Sample ID: **FWGLL2mw-267C-1646-GF**

Lab Sample ID: 280-11779-2
Client Matrix: Water

Date Sampled: 01/18/2011 1020
Date Received: 01/20/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50263		Instrument ID:	LC_LCMS1
Preparation:	N/A			Lab File ID:	IC11A2535.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	01/25/2011 2256			Final Weight/Volume:	1.0 mL
Date Prepared:				Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	ND		0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11779-1
Sdg Number: A1A190407

Client Sample ID: **FWGLL2mw-DUP3-1694-GF**

Lab Sample ID: 280-11779-3FD
Client Matrix: Water

Date Sampled: 01/18/2011 1120
Date Received: 01/20/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50263	Instrument ID: LC_LCMS1
Preparation:	N/A		Lab File ID: IC11A2536.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	01/25/2011 2325		Final Weight/Volume: 1.0 mL
Date Prepared:			Injection Volume: 250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.018	J	0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11779-1
Sdg Number: A1A190407

Client Sample ID: **FWGLL2mw-269C-1647-GF**

Lab Sample ID: 280-11779-4
Client Matrix: Water

Date Sampled: 01/18/2011 1205
Date Received: 01/20/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50513		Instrument ID:	LC_LCMS1
Preparation:	N/A			Lab File ID:	IC11A2620.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	01/26/2011 1910			Final Weight/Volume:	1.0 mL
Date Prepared:				Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	ND		0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11779-1
Sdg Number: A1A190407

Client Sample ID: **FWGLL3mw-236C-1648-GF**

Lab Sample ID: 280-11779-5
Client Matrix: Water

Date Sampled: 01/18/2011 1420
Date Received: 01/20/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Method:	6860	Analysis Batch: 280-50263		Instrument ID:	LC_LCMS1
Preparation:	N/A			Lab File ID:	IC11A2538.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	01/26/2011 0021			Final Weight/Volume:	1.0 mL
Date Prepared:				Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.023	J	0.0088	0.050

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11779-1
Sdg Number: A1A190407

Detection Limit Check Standard - Batch: 280-46104

Method: 6860
Preparation: N/A

Lab Sample ID:	DLCK 280-46104/10	Analysis Batch:	280-46104	Instrument ID:	LC_LCMS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	IC10L2010.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	12/20/2010 1845			Final Weight/Volume:	1.0 mL
Date Prepared:	N/A			Injection Volume:	250 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Perchlorate	0.0500	0.0521	104	70 - 130	

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11779-1
Sdg Number: A1A190407

Method Blank - Batch: 280-50263

Method: 6860
Preparation: N/A

Lab Sample ID:	MB 280-50263/4	Analysis Batch:	280-50263	Instrument ID:	LC_LCMS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	IC11A2514.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	01/25/2011 1300			Final Weight/Volume:	1.0 mL
Date Prepared:	N/A			Injection Volume:	250 uL

Analyte	Result	Qual	MDL	RL
Perchlorate	ND		0.0088	0.050

Lab Control Sample - Batch: 280-50263

Method: 6860
Preparation: N/A

Lab Sample ID:	LCS 280-50263/5	Analysis Batch:	280-50263	Instrument ID:	LC_LCMS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	IC11A2515.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	01/25/2011 1328			Final Weight/Volume:	1.0 mL
Date Prepared:	N/A			Injection Volume:	250 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Perchlorate	0.0500	0.0468	94	80 - 120	J

LC Interference Check Standard - Batch: 280-50263

Method: 6860
Preparation: N/A

Lab Sample ID:	INF 280-50263/6	Analysis Batch:	280-50263	Instrument ID:	LC_LCMS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	IC11A2516.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	01/25/2011 1357			Final Weight/Volume:	1.0 mL
Date Prepared:	N/A			Injection Volume:	250 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Perchlorate	0.0500	0.0470	94	70 - 130	J

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11779-1
Sdg Number: A1A190407

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-50263

Method: 6860
Preparation: N/A

MS Lab Sample ID:	280-11715-B-7 MS	Analysis Batch: 280-50263	Instrument ID: LC_LCMS1
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: IC11A2529.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	01/25/2011 2006		Final Weight/Volume: 1.0 mL
Date Prepared:	N/A		Injection Volume: 250 uL

MSD Lab Sample ID:	280-11715-C-7 MSD	Analysis Batch: 280-50263	Instrument ID: LC_LCMS1
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: IC11A2530.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	01/25/2011 2034		Final Weight/Volume: 1.0 mL
Date Prepared:	N/A		Injection Volume: 250 uL

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Perchlorate	130	99	80 - 120	26	15	F	J F

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-50263

Method: 6860
Preparation: N/A

MS Lab Sample ID:	280-11715-B-7 MS	Units: ug/L	MSD Lab Sample ID: 280-11715-C-7 MSD
Client Matrix:	Water		Client Matrix: Water
Dilution:	1.0		Dilution: 1.0
Date Analyzed:	01/25/2011 2006		Date Analyzed: 01/25/2011 2034
Date Prepared:	N/A		Date Prepared: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Perchlorate	ND	0.0500	0.0500	0.0649	F	0.0497	J F

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11779-1
Sdg Number: A1A190407

Method Blank - Batch: 280-50513

Method: 6860
Preparation: N/A

Lab Sample ID: MB 280-50513/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/26/2011 1620
Date Prepared: N/A

Analysis Batch: 280-50513
Prep Batch: N/A
Units: ug/L

Instrument ID: LC_LCMS1
Lab File ID: IC11A2614.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 1.0 mL
Injection Volume: 250 uL

Analyte	Result	Qual	MDL	RL
Perchlorate	ND		0.0088	0.050

Lab Control Sample - Batch: 280-50513

Method: 6860
Preparation: N/A

Lab Sample ID: LCS 280-50513/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/26/2011 1648
Date Prepared: N/A

Analysis Batch: 280-50513
Prep Batch: N/A
Units: ug/L

Instrument ID: LC_LCMS1
Lab File ID: IC11A2615.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 1.0 mL
Injection Volume: 250 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Perchlorate	0.0500	0.0453	91	80 - 120	J

LC Interference Check Standard - Batch: 280-50513

Method: 6860
Preparation: N/A

Lab Sample ID: INF 280-50513/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/26/2011 1717
Date Prepared: N/A

Analysis Batch: 280-50513
Prep Batch: N/A
Units: ug/L

Instrument ID: LC_LCMS1
Lab File ID: IC11A2616.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 1.0 mL
Injection Volume: 250 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Perchlorate	0.0500	0.0457	91	70 - 130	J

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11779-1
Sdg Number: A1A190407

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-50513

Method: 6860
Preparation: N/A

MS Lab Sample ID:	280-11779-4	Analysis Batch: 280-50513	Instrument ID: LC_LCMS1
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: IC11A2621.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	01/26/2011 1938		Final Weight/Volume: 1.0 mL
Date Prepared:	N/A		Injection Volume: 250 uL

MSD Lab Sample ID:	280-11779-4	Analysis Batch: 280-50513	Instrument ID: LC_LCMS1
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: IC11A2622.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	01/26/2011 2007		Final Weight/Volume: 1.0 mL
Date Prepared:	N/A		Injection Volume: 250 uL

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Perchlorate	107	103	80 - 120	4	15		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-50513

Method: 6860
Preparation: N/A

MS Lab Sample ID:	280-11779-4	Units: ug/L	MSD Lab Sample ID: 280-11779-4
Client Matrix:	Water		Client Matrix: Water
Dilution:	1.0		Dilution: 1.0
Date Analyzed:	01/26/2011 1938		Date Analyzed: 01/26/2011 2007
Date Prepared:	N/A		Date Prepared: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Perchlorate	ND	0.0500	0.0500	0.0535	0.0517

Client: TestAmerica Laboratories, Inc.

Job Number: 280-11779-1
Sdg Number: A1A190407

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
LCMS					
Analysis Batch:280-46104					
DLCK 280-46104/10	Detection Limit Check Standard	T	Water	6860	
Analysis Batch:280-50263					
LCS 280-50263/5	Lab Control Sample	T	Water	6860	
MB 280-50263/4	Method Blank	T	Water	6860	
280-11715-B-7 MS	Matrix Spike	T	Water	6860	
280-11715-C-7 MSD	Matrix Spike Duplicate	T	Water	6860	
280-11779-1	FWGLL2mw-266C-1645-GF	T	Water	6860	
280-11779-2	FWGLL2mw-267C-1646-GF	T	Water	6860	
280-11779-3FD	FWGLL2mw-DUP3-1694-GF	T	Water	6860	
280-11779-5	FWGLL3mw-236C-1648-GF	T	Water	6860	
Analysis Batch:280-50513					
LCS 280-50513/5	Lab Control Sample	T	Water	6860	
MB 280-50513/4	Method Blank	T	Water	6860	
280-11779-4	FWGLL2mw-269C-1647-GF	T	Water	6860	
280-11779-4MS	Matrix Spike	T	Water	6860	
280-11779-4MSD	Matrix Spike Duplicate	T	Water	6860	

Report Basis
T = Total

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 automatically adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A190407										
6860	FWGLL2mw-266C-1645-GF	AQ	N							
				PERCHLORATE	0.050	0.023J		J	ug/L	L
6860	FWGLL2mw-DUP3-1694-GF	AQ	FD							
				PERCHLORATE	0.050	0.018J		J	ug/L	L
6860	FWGLL3mw-236C-1648-GF	AQ	N							
				PERCHLORATE	0.050	0.023J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-266C-1645-GF
Lab Report Batch : A1A190407
Lab ID : TA DEN
Sample Date : 01/18/2011
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 280-11779-1

Reviewed By / Date : asd 3/9/2011
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 : 6860						**Dilution: 1**															
PERCHLORATE	0.023		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 : FWGLL3mw-236C-1648-GF
Lab Report Batch : A1A190407
Lab ID : TA DEN
Sample Date : 01/18/2011
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 280-11779-5

Reviewed By / Date : asd 3/9/2011
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 : 6860						**Dilution: 1**															
PERCHLORATE	0.023		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A1A190407 **Lab ID:** TA DEN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL2mw-266C-1645-G	280-11779-1	6860	AQ	PERCHLORATE	J	0.023	0.050	ug/L
FWGLL2mw-DUP3-1694-	280-11779-3			PERCHLORATE	J	0.018	0.050	ug/L
FWGLL3mw-236C-1648-G	280-11779-5			PERCHLORATE	J	0.023	0.050	ug/L

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011
TA Sample Delivery Group: A1A210540

Date: March 15, 2011
Revision: 0

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

QA/QC Summary

On January 21, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1A210540.

Field Sample ID	Analytes	Method
FWGDA2mw-106c-1663-GW	Explosives	SW846 8330
FWGDA2mw-106c-1663-GW	Nitroguanidine	SW846 M8330
FWGDA2mw-106c-1663-GW	Nitrocellulose	TAL- SOP WS-WC-0050
FWGEQUIPRinse5-1702-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 1.2°C – 2.3°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 1/29/11 @1628 recovered above control limits with a %D of 31% for tetryl.
- The MRL analyzed 1/29/11 @ 0513 recovered above control limits with a %D of 46% for RDX.
- The MRL analyzed 1/30/11 @0127 recovered above control limits with a %D of 49% for RDX.

No qualifications were made for the tetryl outliers as the samples were reanalyzed with passing MRL recoveries for tetryl. No qualification was made for the RDX outliers as there were no detected RDX concentrations in bracketed field samples.

CCV

LC10-

- The CCV analyzed 1/29/11 @0428 and 1543 recovered above limits for tetryl with a %D of 22%.
- The CCV analyzed 1/30/11 @0042 recovered above limits for tetryl with a %D of 21%.

No qualifications were made as the samples were reanalyzed with passing CCVs for tetryl.

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011 **Date:** March 15, 2011
TA Sample Delivery Group: A1A210540 **Revision:** 0

Blanks
Due to excessive particulates, sample FWGDA2mw-106-1663-GW required filtration. A filter blank was prepared and analyzed.

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 - 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

MRL Recovery
The bracketing MRL checks analyzed on 1/27/11 recovered above control limits at 171% and 160%. No qualifications were made as there were no detected nitrocellulose concentrations reported in the bracketed field samples.

SAMPLE SUMMARY

A1A210540

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDK1H	001	FWGDA2mw-106C-1663-GW	01/21/11	09:17
MDK1T	002	FWGDA2mw-107C-1664-GW	01/21/11	09:15
MDK1X	003	FWGDA2mw-110C-1665-GW	01/21/11	09:15
MDK10	004	FWGEQUIPRINSE5-1702-GW	01/21/11	10:05

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica Laboratory location: North Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Eric Corbin	Mark Loeb	Team 1 - 1/21/11
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone:	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com	Analysis Turnaround Time (CALENDAR DAYS or WORKING DAYS)	Analyses	For lab use only:
Phone: 513-825-7500		TAT if different from below 7 DAY		Walk-in client: ☐
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Carrier	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab pickup: ☐
Project Number: 030240.0006	Shipping/Tracking No: NA			Lab sampling: ☐
PO# 16726				Job/SDG No.:

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) or Grab (G)	VOCs 8260	SVOCs 8270	Nest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010C/7470	Sample Specific Notes / Special Instructions:
FWGTeam 1-Trip	1/21/11	08:00		X						2					N	G	X								Cooler ID
FWGDA2ow-106C-1663-GW	1/21/11	09:17		X						3	1		4		N	G	X	X	X	X	X	X	X		L943
FWGDA2ow-106C-1663-GF	1/21/11	09:17		X					1						Y	G								X	L943
																									L943

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
metals are field filtered. Temperatures may not meet requirements if collection time is close to lab pick-up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Steph Stringer	EQM	1-21-11 1300	TC	TAL-NC	1/21/11 13
Relinquished by: KC Corbin	Company: TAL-NC	Date/Time: 1/21/11 1353	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Terry Burns	Company: TA	Date/Time: 1/21/11 135

All VOCs in cooler L943

©2009, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

North Canton

Chain of Custody Record

TestAmerica Laboratory location: Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

15

TestAmerica Laboratories, Inc.

Client Contact			
Company Name: EQM	Client Project Manager: J Miller	Site Contact: E Corbin	Lab Contact: M Loeb
Address: 1800 Carillon Blvd	Telephone: 513 825 7500	Telephone: →	Telephone: 330
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com	Analysis Turnaround Time	
Phone: 513 825 7500		TAT if different from below _____	
Project Name: RVAAP	Method of Shipment/Carrier: Lab pickup	☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	
Project Number: 30240.0006	Shipping/Tracking No:		
PO# 16726			

COC No: EQTeam2-1

1 of 1 COCs

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analyses: VOC 8260	SVOC 8270	PCB 8082	PCB 8082	LEAD 8330	Perchlorate	Hydrazines 6012	Metals 6010 6020	Sample Specific Notes / Special Instructions:
EQTeam2-Trip	1-21-11	0500		X											N	N	X								
EQMDA2MW-10K-1664-GW	1	0915		X						3	1		9		N	N	X	X	X	X	X	X	X		A638
EQMDA2MW-10C-1144-GF	1	1		X					1						N	N								X	A638
																									A638

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:

6-F Metals were field filtered

ALL VOAs in A638.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Stephen Stenger	EQM	1-21-11 1300	FC Fabic	TAL-NIC	1/21/11 1300
Relinquished by: FC Fabic	Company: TAL-NC	Date/Time: 1/21/11 1353	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Gary Burns	Company: TA	Date/Time: 1/21/11 1355

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design™ are trademarks of TestAmerica Laboratories, Inc.

TAL-0018 (1008)

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

16

TAL-4142 (0408)

Client: EQ	Project Manager: John Miller	Date: 1/21/11	Chain of Custody Number: 000462
Address: 800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (Fax 7495)	Lab Number: 330-497-9396	Page 1 of 1
City: Cincinnati / State: OH / Zip Code: 45240	Site Contact: Erik Corbin	Lab Contact: M. Lock	
Project Name and Location (State): RVAAP (OH)	Carrier/Waybill Number: Lab Pick Up		
Contract/Purchase Order/Quote No.: PW# 030240.0001 PO# 167216			

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	ExPlo 8330	Propellants	Cyanide 9012	Metals 6010/7470
FWGTeam3-Trip	1/21/11	0800		X						2			X							
FWGDA2MW-110C-11005-GW		0915		X			9			3	1		X	X	X	X	X	X	X	
FWGDA2MW-110C-11005-GF		0915		X					1											X
FWGEQUIPRINSE5-1702-GW	1/21/11	1005		X			9		1	3	1		X	X	X	X	X	X	X	X

Special Instructions/ Conditions of Receipt

6 COOLER ID:
L4168
L4168
L4168
K592

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other ____ RUSH 50%

QC Requirements (Specify)

1. Relinquished By: Stephen Shuger	Date: 1-21-11	Time: 1360	1. Received By:	Date: 1/21/11	Time: 1300
2. Relinquished By:	Date: 1/21/11	Time: 1353	2. Received By: Gerry Burns	Date: 1/21/11	Time: 1353
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: Metals field filtered — ALL VOAS IN COOLER

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

Temps may not meet requirements if Lab Pick up is close to collection time.

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number: A1A210540**
North Canton Facility

Client EQM Project RVAAP (OH) By: Jerry Burns
Cooler Received on 1/21/11 Opened on 1/21/11 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other ____
TestAmerica Cooler # ____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other ____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 1 each 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
1663-GW	≥12	1/21/11	TB
GF	<2		
1664-GW	≥12		
GF	<2		
1665-GW	≥12		
GF	<2		
Rinse5-1702-GW	<2, ≥12	—	—

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
L943	1.3°C	IR	wet ice
A638	2.3°C	"	"
L468	1.2°C	"	"
K592	2.2°C	"	"

Discrepancies Cont'd:

ANALYTICAL METHODS SUMMARY

A1A210540

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

A1A210540

The following report contains the analytical results for four 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 January 21, 2011, according to documented sample acceptance procedures.

All analysis was performed at the TestAmerica West Sacramento Laboratory. Refer to the TestAmerica West Sacramento narrative provided 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 February 03, 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 temperatures of the coolers upon sample receipt were 1.3, 1.3, 2.2 and 2.3°C.

NITROAROMATICS AND NITRAMINES-8330

The analytical results met the requirements of the laboratory's QA/QC program.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

Case Narrative

TestAmerica West Sacramento Project Number A1A210540

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 integrations being performed. The following samples and analytes required a manual integration:

LC10 instrument:
8330 MRL (analyzed on 1/29/11 @ 05:13) – Tetryl
8330 MRL (analyzed on 1/30/11 @ 01:27) – 3,4-Dinitrotoluene & 4-Amino-2,6-dinitrotoluene
8330 MRL (analyzed on 2/10/11 @15:22) – Tetryl
8330 MRL (analyzed on 2/11/11 @ 00:22) – Tetryl

LC12 instrument:
8330 CCV (analyzed on 1/30/11 @ 06:31) – 1,3,5-Trinitrobenzene
8330 MRL (analyzed on 1/30/11 @ 18:35) – 1,3,5-Trinitrobenzene, 2-Nitrotoluene, & 3-Nitrotoluene
8330 MRL (analyzed on 1/31/11 @ 03:22) – 1,3,5-Trinitrobenzene, 4-Amino-2,6-dinitrotoluene, & 2-Amino-4,6-dinitrotoluene

WATER, 8330, Explosives
Sample(s): 1, 2, 3, 4
The percent difference values for analytes listed below are above the method acceptance limits in the MRL standard. This standard was analyzed prior to and after the associated samples. A standard at approximately 2X the method detection limit was analyzed and the affected analytes were detected.

LC10, 01/29/11, 05:13
RDX, Project Criteria 30%D, Actual 46%D
LC10, 01/29/11, 16:28
Tetryl, Project Criteria 30%D, Actual 31%D
LC10, 01/30/11, 01:27
RDX, Project Criteria 30%D, Actual 49%D

Case Narrative

TestAmerica West Sacramento Project Number A1A210540

Sample(s): 1
This sample was filtered prior to extraction since it contained excessive sediment/particulates. A filtered blank was included with the batch.

WATER, Nitrocellulose
Sample(s): 1, 2, 3, 4
The bracketing continuing calibration standards and bracketing MRL standards had high percent difference values. Since the associated sample results were all non-detect, no corrective action was performed.

There were no other anomalies associated with this project.

WATER, 8330, Explosives

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A210540 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 1.2°C – 2.3°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 1/29/11 @1628 recovered above control limits with a %D of 31% for tetryl. • The MRL analyzed 1/29/11 @ 0513 recovered above control limits with a %D of 46% for RDX. • The MRL analyzed 1/30/11 @0127 recovered above control limits with a %D of 49% for RDX. No qualifications were made for the tetryl outliers as the samples were reanalyzed with passing MRL recoveries for tetryl. No qualification was made for the RDX outliers as there were no detected RDX concentrations in 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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A210540 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%?	✓			LC10- • The CCV analyzed 1/29/11 @0428 and 1543 recovered above limits for tetryl with a %D of 22%. • The CCV analyzed 1/30/11 @0042 recovered above limits for tetryl with a %D of 21%. No qualifications were made as the samples were reanalyzed with passing CCVs for tetryl.	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 FWGDA2mw-106-1663-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.	<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%?	✓			Checked by ADR.	QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A210540 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.

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-106C-1663-GW

HPLC

Lot-Sample #...: A1A210540-001 Work Order #...: MDK1H1AA Matrix.....: WG
Date Sampled...: 01/21/11 09:17 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-106C-1663-GW

HPLC

Lot-Sample #...:	A1A210540-001	Work Order #...:	MDK1H2AA	Matrix.....:	WG
Date Sampled...:	01/21/11 09:17	Date Received..:	01/21/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/11/11		
Prep Batch #...:	1026163				
Dilution Factor:	0.99	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GW

HPLC

Lot-Sample #...: A1A210540-002 Work Order #...: MDK1T1AA Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GW

HPLC

Lot-Sample #...:	A1A210540-002	Work Order #...:	MDK1T2AA	Matrix.....:	WG
Date Sampled...:	01/21/11 09:15	Date Received..:	01/21/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/11/11		
Prep Batch #...:	1026163				
Dilution Factor:	1.03	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GW

HPLC

Lot-Sample #...: A1A210540-003 Work Order #...: MDK1X1AA Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GW

HPLC

Lot-Sample #...: A1A210540-003 Work Order #...: MDK1X2AA Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 02/11/11
Prep Batch #...: 1026163
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

HPLC

Lot-Sample #...: A1A210540-004 Work Order #...: MDK101AA Matrix.....: WQ
Date Sampled...: 01/21/11 10:05 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

HPLC

Lot-Sample #...: A1A210540-004	Work Order #...: MDK102AA	Matrix.....: WQ	
Date Sampled...: 01/21/11 10:05	Date Received..: 01/21/11		
Prep Date.....: 01/26/11	Analysis Date..: 02/11/11		
Prep Batch #...: 1026163			
Dilution Factor: 0.97	Method.....: SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.097	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

QC DATA ASSOCIATION SUMMARY

A1A210540

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	SW846 8330		1026163	1026089
	WG	SW846 8330 (Modif		1026279	1026128
	WG	TAL-SOP WS-WC-005		1026078	1026045
002	WG	SW846 8330		1026163	1026089
	WG	SW846 8330 (Modif		1026279	1026128
	WG	TAL-SOP WS-WC-005		1026078	1026045
003	WG	SW846 8330		1026163	1026089
	WG	SW846 8330 (Modif		1026279	1026128
	WG	TAL-SOP WS-WC-005		1026078	1026045
004	WQ	SW846 8330		1026163	1026089
	WQ	SW846 8330 (Modif		1026279	1026128
	WQ	TAL-SOP WS-WC-005		1026078	1026045

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A210540 Work Order #...: MDP3J1AA Matrix.....: WATER
MB Lot-Sample #: G1A260000-163

Prep Date.....: 01/26/11
Analysis Date..: 01/29/11 Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A210540 **Work Order #...:** MDP3J1AD **Matrix.....:** WATER
MB Lot-Sample #: G1A260000-163

Prep Date.....: 01/26/11
Analysis Date..: 01/29/11 **Prep Batch #...:** 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A210540 Work Order #...: MDP3J1AE Matrix.....: WATER
MB Lot-Sample #: G1A260000-163

Prep Date.....: 01/26/11
Analysis Date..: 02/10/11 Prep Batch #...: 1026163
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A210540 **Work Order #...:** MDP3J1AG **Matrix.....:** WATER
MB Lot-Sample #: G1A260000-163

Prep Date.....: 01/26/11
Analysis Date..: 02/10/11 **Prep Batch #...:** 1026163
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(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 #...: A1A210540 Work Order #...: MDP3J1AC Matrix.....: WATER
LCS Lot-Sample#: G1A260000-163
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	105	(53 - 135)	SW846 8330
1,3-Dinitrobenzene	108	(54 - 120)	SW846 8330
2-Amino-4,6-dinitrotoluene	106	(53 - 120)	SW846 8330
2,4,6-Trinitrotoluene	94	(37 - 120)	SW846 8330
2,4-Dinitrotoluene	105	(58 - 136)	SW846 8330
2,6-Dinitrotoluene	105	(52 - 144)	SW846 8330
2-Nitrotoluene	106	(52 - 120)	SW846 8330
3-Nitrotoluene	104	(48 - 136)	SW846 8330
4-Amino-2,6-dinitrotoluene	105	(58 - 159)	SW846 8330
4-Nitrotoluene	105	(46 - 136)	SW846 8330
HMX	99	(45 - 140)	SW846 8330
Nitrobenzene	107	(49 - 120)	SW846 8330
Nitroglycerin	99	(60 - 120)	SW846 8330
RDX	108	(39 - 120)	SW846 8330
PETN	101	(60 - 120)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A210540 **Work Order #...:** MDP3J1AF **Matrix.....:** WATER
LCS Lot-Sample#: G1A260000-163
Prep Date.....: 01/26/11 **Analysis Date..:** 02/10/11
Prep Batch #...: 1026163
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetryl	**97**	**(30 - 120)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A210540 Work Order #...: MDJPP1AE-MS Matrix.....: WATER
MS Lot-Sample #: A1A200534-010 MDJPP1AF-MSD
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
Dilution Factor: 1.12

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	105	(50 - 150)			SW846 8330
	103	(50 - 150)	5.8	(0-50)	SW846 8330
1,3-Dinitrobenzene	109	(50 - 150)			SW846 8330
	107	(50 - 150)	5.4	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	108	(50 - 150)			SW846 8330
	106	(50 - 150)	4.7	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	95	(50 - 150)			SW846 8330
	93	(50 - 150)	5.2	(0-50)	SW846 8330
2,4-Dinitrotoluene	107	(50 - 150)			SW846 8330
	105	(50 - 150)	5.5	(0-50)	SW846 8330
2,6-Dinitrotoluene	106	(50 - 150)			SW846 8330
	105	(50 - 150)	4.2	(0-50)	SW846 8330
2-Nitrotoluene	108	(50 - 150)			SW846 8330
	106	(50 - 150)	6.1	(0-50)	SW846 8330
3-Nitrotoluene	106	(50 - 150)			SW846 8330
	104	(50 - 150)	5.3	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	105	(50 - 150)			SW846 8330
	104	(50 - 150)	4.6	(0-50)	SW846 8330
4-Nitrotoluene	109	(50 - 150)			SW846 8330
	105	(50 - 150)	6.9	(0-50)	SW846 8330
HMX	99	(50 - 150)			SW846 8330
	96	(50 - 150)	5.8	(0-50)	SW846 8330
Nitrobenzene	107	(50 - 150)			SW846 8330
	105	(50 - 150)	5.3	(0-50)	SW846 8330
Nitroglycerin	101	(50 - 150)			SW846 8330
	99	(50 - 150)	6.4	(0-50)	SW846 8330
RDX	108	(50 - 150)			SW846 8330
	105	(50 - 150)	6.2	(0-50)	SW846 8330
PETN	101	(50 - 150)			SW846 8330
	101	(50 - 150)	4.3	(0-50)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)
	98	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A210540 **Work Order #...:** MDJPP1AE-MS **Matrix.....:** WATER
MS Lot-Sample #: A1A200534-010 MDJPP1AF-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS

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 #...: A1A210540 **Work Order #...:** MDJPP1AL-MS **Matrix.....:** WATER
MS Lot-Sample #: A1A200534-010 MDJPP1AM-MSD
Date Sampled...: 01/20/11 09:10 **Date Received..:** 01/20/11
Prep Date.....: 01/26/11 **Analysis Date..:** 02/11/11
Prep Batch #...: 1026163
Dilution Factor: 1.12

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Tetryl	**98**	**(50 - 150)**			**SW846 8330**
	98	**(50 - 150)**	**4.1**	**(0-50)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

WATER, Nitroguanidine

TestAmerica West Sacramento

A-000054.D

Chromatography Summary

Injection Date: 1/29/2011 4:28 Operator: RN

DataFile: LC10\N01272011.B\A-000054.D Vial Num: 3

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_05 10GCSV0524 8330 L5 100ng/mL**

Method File: LC10\N01272011.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: CAL.sub SpikeList:

Samp. Info: STD_05 10GCSV0524 8330 L5 100ng/mL;2

Misc. Info: ;5; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.90	5741	104.0000<	100	4%	Acceptable		15.90	10575	100.3000	100	0%	Acceptable		(±15)	
HMX	5.21	12791	98.8400<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.35	9234	101.4000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	8.39	17256	214.4000	200	7%	Acceptable		8.39	25507	214.8000<	200	7%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.55	16089	101.6000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.06	15685	101.3000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	12.94	11349	122.2000<	100	22%	Fails					100	-100%	Fails		(±15)	45
Nitrobenzene	13.60	7311	102.1000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.97	9410	99.8800<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.45	7839	103.0000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.42	8552	101.9000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.80	5987	101.5000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.51	9619	101.3000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	21.39	4219	101.8000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	23.03	5108	102.3000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	24.70	5048	101.6000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	Fails		14.03	6995	101.6000<	100	2%	Acceptable		(±15)	45
PETN				100	-100%	Fails		26.37	4094	109.2000<	100	9%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.77	10801	106.5000<	100	7%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails					100	-100%	Fails		(±15)	

Notes:

M = Manually Integrated

D = Operator Disabled Result

O = Over Calibration Range

< = Primary Value

4 = Signals Differ by More Than 40%

5 = Signals Differ by More Than 50%

Printed: 1/31/2011 9:48 AM

TestAmerica West Sacramento

A-000055.D

Chromatography Summary

Injection Date: 1/29/2011 5:13 Operator: RN

DataFile: LC10.I\01272011.B\A-000055.D Vial Num: 4

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.I\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm) ✓								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.88	308	5.5800<	5	12%	Acceptable		15.90	510	4.8390	5	-3%	Acceptable		(±15)	
HMX	5.21	701	5.4160<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.35	663	7.2800<	5	46%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.43	857	10.6400	5	113%	Fails	NA				5	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.56	821	5.1860<	5	4%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.05	848	5.4760<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	12.93	603	6.4900<	5	30%	Fails	M				5	-100%	Fails		(±15)	45
Nitrobenzene	13.59	448	6.2580<	5	25%	Fails					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.97	533	5.6570<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.44	436	5.7270<	5	15%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.42	450	5.3640<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.82	346	5.8670<	5	17%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.53	509	5.3620<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.39	262	6.3200<	5	26%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.04	299	5.9890<	5	20%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.72	299	6.0160<	5	20%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.01	376	5.4640<	5	9%	Acceptable	NA	(±15)	45
PETN				5	-100%	Fails					5	-100%	Fails	NA	(±15)	
3,5-Dinitroaniline	12.76	588	5.7980<	5	16%	Fails	M				5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails		8.44	1267	0.0000	5	-100%	Fails		(±15)	

±30% dr

RBM 2/2/11

±30% dr

±30% dr

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
6 "Peak Not Labeled"
0 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

RBM 1/31/11

Printed: 1/31/2011 9:45 AM

TestAmerica West Sacramento

A-000069.D

Chromatography Summary

Injection Date: 1/29/2011 15:43 Operator: RN

DataFile: LC10,I\01272011.B\A-000069.D Vial Num: 3

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_05 10GCSV0524 8330 L5 100ng/mL**

Method File: LC10.I\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_05 10GCSV0524 8330 L5 100ng/mL;2

Misc. Info: ;5; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.90	5705	103.3000<	100	3%	Acceptable		15.91	10750	102.0000	100	2%	Acceptable		(±15)	
HMX	5.21	12835	99.1800<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.35	9158	100.6000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	8.39	17284	214.7000	200	7%	Acceptable		8.39	25656	216.0000<	200	8%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.55	16097	101.7000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.06	15764	101.8000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	12.94	11364	122.3000<	100	22%	Fails					100	-100%	Fails		(±15)	45
Nitrobenzene	13.60	6990	97.6400<	100	-2%	Acceptable					100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.97	9398	99.7500<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.46	7828	102.8000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.43	8534	101.7000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.82	5952	100.9000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.53	9639	101.5000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	21.42	4009	96.7100<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	23.06	4930	98.7500<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	24.74	4803	96.6300<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	Fails		14.03	7114	103.4000<	100	3%	Acceptable		(±15)	45
PETN				100	-100%	Fails		26.41	3973	106.0000<	100	6%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.77	10815	106.6000<	100	7%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails					100	-100%	Fails		(±15)	

2/2/11

Notes:

M = Manually Integrated

D = Operator Disabled Result

O = Over Calibration Range

< = Primary Value

4 = Signals Differ by More Than 40%

5 = Signals Differ by More Than 50%

Printed: 1/31/2011 10:03 AM

TestAmerica West Sacramento

A-000070.D

Chromatography Summary

Injection Date: 1/29/2011 16:28 Operator: RN

DataFile: LC10.B\01272011.B\A-000070.D Vial Num: 4

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.B\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1;;;;3;CAL.sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.91	311	5.6340<	5	13%	Acceptable		15.93	550	5.2190	5	4%	Acceptable		(±15)	
HMX	5.21	713	5.5090<	6	10%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.35	578	6.3470<	5	27%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.43	813	10.1000	5	102%	Fails					5	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.56	818	5.1670<	6	3%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.06	820	5.2950<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	12.94	609	6.5550<	5	31%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	13.60	383	5.3500<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.98	505	5.3600<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.49	430	5.6480<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.45	466	5.5550<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.81	339	5.7480<	6	15%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.50	505	5.3200<	6	6%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.47	252	6.0790<	5	22%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.07	284	5.6880<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.72	277	5.5730<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.05	532	7.7310<	5	55%	Fails		(±15)	45
PETN				5	-100%	Fails		26.26	175	4.6700<	5	-7%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.78	568	5.6010<	6	12%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails		8.43	1231	0.0000	5	-100%	Fails		(±15)	

Notes:

M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

Printed: 1/31/2011 10:03 AM

TestAmerica West Sacramento

A-000081.D

Chromatography Summary

Injection Date: 1/30/2011 0:42 Operator: RN

DataFile: LC10.I\01272011.B\A-000081.D Vial Num: 2

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_05 10GCSV0524 8330 L5 100ng/mL**

Method File: LC10.I\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_05 10GCSV0524 8330 L5 100ng/mL;2

Misc. Info: ;5; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.91	5735	103.9000<	100	4%	Acceptable		15.92	10658	101.1000	100	1%	Acceptable		(±15)	
HMX	5.21	12852	99.3100<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.35	9226	101.3000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	8.39	17266	214.5000	200	7%	Acceptable		8.39	25550	215.1000<	200	8%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.55	16090	101.6000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.06	15696	101.4000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	12.94	11276	121.4000<	100	21%	Fails					100	-100%	Fails		(±15)	45
Nitrobenzene	13.60	7257	101.4000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.98	9375	99.5000<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.47	7798	102.4000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.44	8521	101.6000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.82	5931	100.6000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.53	9622	101.4000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	21.42	4217	101.7000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	23.07	5133	102.8000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	24.74	5025	101.1000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	Fails		14.05	7174	104.2000<	100	4%	Acceptable		(±15)	45
PETN				100	-100%	Fails		26.40	3787	101.0000<	100	1%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.78	10744	105.9000<	100	6%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails					100	-100%	Fails		(±15)	

RAM 2/2/11

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

Printed: 1/31/2011 11:10 AM

TestAmerica West Sacramento

A-000082.D

Chromatography Summary

Injection Date: 1/30/2011 1:27 Operator: RN

DataFile: LC10.I\01272011.B\A-000082.D Vial Num: 9

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample: **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.I\01272011.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: CAL.sub SpikeList: ✓

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1;;;;3;CAL.sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.90	✓ 323	5.8510<	5	17%	Fails	M	15.90	560	5.3140	5	6%	Acceptable		(±15)	
HMX	5.21	690	5.3320<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.34	679	7.4560<	5	49%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.43	849	10.5500	5	111%	Fails					5	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.55	870	5.4950<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.07	829	5.3540<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	12.95	583	6.2750<	5	26%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	13.60	398	5.5590<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.00	507	5.3810<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.49	418	5.4910<	5	10%	Acceptable	M				5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.46	471	5.6150<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.83	341	5.7820<	5	16%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.55	522	5.4990<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.43	252	6.0790<	5	22%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.12	310	6.2090<	5	24%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.73	303	6.0960<	5	22%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.03	428	6.2200<	5	24%	Fails	NA	(±15)	45
PETN				5	-100%	Fails		26.72	176	4.6970<	5	-6%	Acceptable	NA	(±15)	45
3,5-Dinitroaniline	12.79	577	5.6900<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails		8.44	1230	0.0000	5	-100%	Fails		(±15)	

±30% OK

NA

±30% dc

RPM 2/2/11

±30% dc

±30% dc

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

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

TCB 1/31/11

Printed: 1/31/2011 10:56 AM

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A210540 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 1.2°C – 2.3°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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A210540 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: FWGDA2mw-106C-1663-GW

Dissolved HPLC

Lot-Sample #...: A1A210540-001 Work Order #...: MDK1H1AD Matrix.....: WG
Date Sampled...: 01/21/11 09:17 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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: FWGDA2mw-107C-1664-GW

Dissolved HPLC

Lot-Sample #...: A1A210540-002 Work Order #...: MDK1T1AD Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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: FWGDA2mw-110C-1665-GW

Dissolved HPLC

Lot-Sample #...:	A1A210540-003	Work Order #...:	MDK1X1AD	Matrix.....:	WG
Date Sampled...:	01/21/11 09:15	Date Received..:	01/21/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/01/11		
Prep Batch #...:	1026279				
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: FWGEQUIPRINSE5-1702-GW

Dissolved HPLC

Lot-Sample #...: A1A210540-004	Work Order #...: MDK101AD	Matrix.....: WQ	
Date Sampled...: 01/21/11 10:05	Date Received..: 01/21/11		
Prep Date.....: 01/26/11	Analysis Date..: 02/01/11		
Prep Batch #...: 1026279			
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 #...: A1A210540 **Work Order #...:** MDQLM1AA **Matrix.....:** WATER
MB Lot-Sample #: G1A260000-279

Prep Date.....: 01/26/11
Analysis Date..: 02/01/11 **Prep Batch #...:** 1026279
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 #...: A1A210540 **Work Order #...:** MDQLM1AC **Matrix.....:** WATER
LCS Lot-Sample#: G1A260000-279
Prep Date.....: 01/26/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1026279
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	**105**	**(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 #...: A1A210540 **Work Order #...:** MDJPP1AJ-MS **Matrix.....:** WATER
MS Lot-Sample #: A1A200534-010 MDJPP1AK-MSD
Date Sampled...: 01/20/11 09:10 **Date Received..:** 01/20/11
Prep Date.....: 01/26/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1026279
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**106**	**(73 - 117)**			**SW846 8330 (Modified**
	106	**(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

WATER, Nitrocellulose

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A210540 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 1.2°C – 2.3°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 1/27/11 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%?		✓		The bracketing MRL checks analyzed on 1/27/11 recovered above control limits at 171% and 160%. No qualifications were made as there were no detected nitrocellulose concentrations reported in the bracketed field samples.	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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A210540 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: FWGDA2mw-106C-1663-GW

General Chemistry

Lot-Sample #...: A1A210540-001 Work Order #...: MDK1H Matrix.....: WG
Date Sampled...: 01/21/11 09:17 Date Received..: 01/21/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GW

General Chemistry

Lot-Sample #...: A1A210540-002 Work Order #...: MDK1T Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GW

General Chemistry

Lot-Sample #...: A1A210540-003 Work Order #...: MDK1X Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

General Chemistry

Lot-Sample #...: A1A210540-004 Work Order #...: MDK10 Matrix.....: WQ
Date Sampled...: 01/21/11 10:05 Date Received..: 01/21/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

QC DATA ASSOCIATION SUMMARY

A1A210540

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	TAL-SOP WS-WC-005		1026078	1026045
002	WG	TAL-SOP WS-WC-005		1026078	1026045
003	WG	TAL-SOP WS-WC-005		1026078	1026045
004	WQ	TAL-SOP WS-WC-005		1026078	1026045

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1A210540 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MDPPD1AA		MB Lot-Sample #:	G1A260000-078	
	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078
		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 #...: A1A210540 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MDPPD1AC LCS Lot-Sample#: G1A260000-078			
	110	(26 - 144)	TAL-SOP WS-WC-005	01/26-01/27/11	1026078
		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 #...: A1A210540 **Matrix.....:** WATER
Date Sampled...: 01/20/11 09:10 **Date Received..:** 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: MDJPP1AG-MS/MDJPP1AH-MSD MS Lot-Sample #: A1A200534-010					
	95	(26 - 144)			TAL-SOP WS-WC-005	01/26-01/27/11	1026078
	98	(26 - 144)	3.1	(0-45)	TAL-SOP WS-WC-005	01/26-01/27/11	1026078
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Appendix 1

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: A1A210540 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGDA2mw-106C-1663-	A1A210540001	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGDA2mw-107C-1664-	A1A210540002	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGDA2mw-110C-1665-	A1A210540003	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGEQUIPRINSE5-1702	A1A210540004	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L

* 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)**

SECTION E: Services Provided (cont.)

Subcontracting
Does your company procure services from 3rd parties for project support? [X] Yes [ ] No If yes, what percentage of work is subcontracted? 25 %
List the types or services below UT TOOLS AND CHARTS. ENVIRONMENTAL DECONTAMINATION FOR CONFINED ENTRY

Equipment
Does your company own major construction/remediation equipment? [X] Yes [ ] No
If yes, list below
HAULERS, BACKHOES, DOZERS, SIDE BOOMS, ETC..

SECTION F: Project History and References

Provide an individual summary for 5 major projects completed in the **last three years** using the following tables. Include work with federal clients if applicable. **Projects performed for EQM should be included in the projects described below.** By providing the following information, it is understood and accepted that EQ at its discretion may contact the indicated client references.

Project # 1 Client Name: BRAZOS ELECTRIC Location: JACKSBORO, TX POC Name: KANE BAISLY Phone#: 480-737-6519	Contract No. C203 Contract Value $ 9.1 MM Start Date 09/04/2010 End Date 03/31/2011	Type of Work Performed (refer to Section E for work descriptions)
Project # 2 Client Name: Location: POC Name: Phone#:	Contract No. Contract Value $ Start Date / / End Date / /	Type of Work Performed (refer to Section E for work descriptions)
Project # 3 Client Name: Location: POC Name: Phone#:	Contract No. Contract Value $ Start Date / / End Date / /	Type of Work Performed (refer to Section E for work descriptions)
Project # 4 Client Name: Location: POC Name: Phone#:	Contract No. Contract Value $ Start Date / / End Date / /	Type of Work Performed (refer to Section E for work descriptions)
Project # 5 Client Name: Location: POC Name: Phone#:	Contract No. Contract Value $ Start Date / / End Date / /	Type of Work Performed (refer to Section E for work descriptions)

Environmental Quality Management, Inc. will use this document as part of its subcontractor qualification and rating process. By submitting this form, signer (sender) represents the information provided is complete and accurate as of the date of this submission.

Authorized Company Representative

JEFF WHELAN	SR. PROJECT MANAGER	11-MAR-11
Please Print Name	Title	Date

Signature (if mailed)

Return Completed Form to:

Environmental Quality Management, Inc.
1800 Carillon Blvd
Cincinnati, OH 45240

Attn: Brenda Reid
E-mail: breid@eqm.com

This page was intentionally left blank as there were no data points requiring qualifications as a result of the data review process.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011
TA Sample Delivery Group: A1A200403

Date: March 15, 2011
Revision: 0

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

QA/QC Summary

On January 19, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1A200403.

Field Sample ID	Analytes	Method
FWGLNWmw-025c-1674-GW	Explosives	SW846 8330
FWGWBGmw-007c-1677-GW	Nitroguanidine	SW846 M8330
FWGFBQmw-174c-1673-GW	Nitrocellulose	TAL- SOP WS-WC-0050
FWGLL4mw-197c-1654-GW		
FWGLL4mw-196c-1653-GW		
FWGSCFmw-005-1686-GW		
FWGSCFmw-006-1687-GW		
FWGSCFmw-003-1684-GW		
FWGLL3mw-238c-1650-GW		
FWGWBGmw-005c-1675-GW		
FWGWBGmw-DUP5-1696-GW		
FWGWBGmw-006c-1676-GW		
FWGWBGmw-009c-1678-GW		
FWGEQUIPRinse3-1700-GW		
FWGLL3mw-239c-1651-GW		
FWGCBPmw-005c-1657-GW		
FWGCBPmw-008c-1659-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 – 2.8°C. The samples received for FWGCBP-005C-1658-GW were marked on the COC as FWGCBP-007C-1664-GW and on the labels as FWGCBP-005C-1658-GW. Samples were logged per labels.

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

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011 **Date:** March 15, 2011
TA Sample Delivery Group: A1A200403 **Revision:** 0

LC12- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC12 was used as confirmation.

MRL Recovery
LC10- the following outliers were noted:

- The MRL analyzed 1/27/11 @1523 recovered above control limits with a %D of 31% for 2-nitrotoluene.
- The MRL analyzed 1/28/11 @1223 recovered above control limits with a %D of 39% for RDX.
- The MRL analyzed 1/28/11 @1308 recovered above control limits with a %D of 31% for PETN.
- The MRL analyzed 1/28/11 @1843 recovered above control limits with a %D of 34% for tetryl and a %D of 33% for 2-nitrotoluene.
- The MRL analyzed 1/28/11 @1928 recovered above control limits with a %D of 33% for PETN.
- The MRL analyzed 1/29/11 @0513 recovered above control limits with a %D of 46% for RDX.

No qualifications were made for the 2-nitrotoluene, tetryl or PETN outliers as there were no detected 2-nitrotoluene, tetryl or PETN concentrations in the bracketed field samples. The RDX results for samples FWGLL3mw-238c-1650-GW, FWGWBGmw-006c-1676-GW, FWGWBGmw-009c-1678-GW and FWGLL3mw-239c-1651-GW were qualified as estimated, "J".

CCV
LC10-

- The CCV analyzed 1/27/11 @1438 recovered above limits for tetryl with a %D of 21%.
- The CCV analyzed 1/28/11 @01528 recovered above limits for tetryl with a %D of 16%, at 1137 with a %D of 17% and at 1758 with a %D of 22%.
- The CCV analyzed 1/29/11 @ 0428 recovered above limits for tetryl with a %D of 22%.

No qualifications were made as the samples were reanalyzed with passing CCVs for tetryl.

Blanks
Due to excessive particulates, samples FWGLNWmw-025c-1674-GW, FWGLL4mw-197c-1654-GW, FWGLL3mw-238c-1650-GW, FWGWBGmw-005c-1675-GW and FWGCBPmw-005c-1657-GW required filtration. A filter blank was prepared and analyzed.

Field Duplicate RPD
The RPD for the field duplicate FWGWBGmw-DUP5-1696-GW and FWGWGmw-005c-1675-GW was above control limits for 2,4,6-TNT and tetryl at 200%. The tetryl and 2,4,6-TNT results for sample FWGWGmw-005c-1675-GW were qualified as estimated, "J".

Second Column Confirmation
The second column confirmation analyzed on sample FWGLL3mw-238c-1650-GW had an RPD above control limits for RDX and nitrobenzene. The RDX and nitrobenzene results for sample FWGLL3mw-238c-1650-GW were qualified as estimated, "J".

Surrogate
The surrogate recoveries for samples FWGFBQmw-174c-1673-GW and FWGLL3mw-238c-1650-GW were reported from the confirmation column due to inference in the primary column.

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.

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011
TA Sample Delivery Group: A1A200403

Date: March 15, 2011
Revision: 0

Nitrocellulose - 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

No QC outliers were noted.

SAMPLE SUMMARY

A1A200403

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDHMN	001	FWGLNWmw-025C-1674-GW	01/19/11	09:03
MDHMP	002	FWGWBGmw-007C-1677-GW	01/19/11	11:19
MDHMQ	003	FWGFBQmw-174C-1673-GW	01/19/11	13:21
MDHMR	004	FWGLL4mw-197C-1654-GW	01/19/11	15:04
MDHMT	005	FWGLL4mw-196C-1653-GW	01/19/11	16:29
MDHMV	006	FWGSCFmw-005-1686-GW	01/19/11	09:15
MDHMW	007	FWGSCFmw-006-1687-GW	01/19/11	11:20
MDHMX	008	FWGSCFmw-003-1684-GW	01/19/11	12:50
MDHM0	009	FWGLL3mw-238C-1650-GW	01/19/11	15:25
MDHM1	010	FWGWBGmw-005C-1675-GW	01/19/11	09:05
MDHM2	011	FWGWBGmw-DUP5-1696-GW	01/19/11	10:05
MDHM3	012	FWGWBGmw-006C-1676-GW	01/19/11	11:15
MDHM4	013	FWGWBGmw-009C-1678-GW	01/19/11	12:30
MDHM6	014	FWGEQUIPRINSE3-1700-GW	01/19/11	13:30
MDHM7	015	FWGLL3mw-239C-1651-GW	01/19/11	15:00
MDHM8	016	FWGCBPmw-005C-1657-GW	01/19/11	16:10
MDHNA	017	FWGCBPmw-008C-1659-GW	01/19/11	17:05

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact			
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone:
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com		
Phone: 513-825-7500			
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Courier		
Project Number: 030240.0006	Shipping/Tracking No: NA		
PO #: 116726			

COC No: Team 1 - 1/19/11 - 1
1 of 1 COCs

Analysis Turnaround Time (CALENDAR DAYS or WORKING DAYS)
TAT if different from below: Per SOW
☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Analyses: VOC 8260	SVOC 8270	PEST 8081	PCB 8082	Explosives 8330	Propellants 8015	Cyanide 9012	Metals 6020/7470			Sample Specific Notes / Special Instructions: Cooler ID
FWGMW-025C-1674-GW	1/19/11	0903		X						9	3		27		N	G	X	X	X	X	X	X	X				MS/MSD A94, L743, K999
FWGMW-025C-1674-GF	1/19/11	0903		X					3						Y	G							X				MS/MSD A94, L743, K999
FWGTeam1-Trip	1/19/11	0800		X						2					N	G	X										K999
FWGMW-007C-1677-GW	1/19/11	11:19		X					3	3	1		9		N	G	X	X	X	X	X	X	X				A158
FWGMW-007C-1677-GF	1/19/11	11:19		X					1						Y	G							X				A158
FWGMW-174C-1673-GW	1/19/11	1321		X						3	1		9		N	G	X	X	X	X	X	X	X				L414
FWGMW-174C-1673-GF	1/19/11	1321		X					1						Y	G							X				L414
FWGMW-197C-1654-GW	1/19/11	1504		X						3	1		9		N	G	X	X	X	X	X	X	X				L754
FWGMW-197C-1654-GF	1/19/11	1504		X					1						Y	G							X				L754
FWGMW-196C-1653-GW	1/19/11	~~1429~~ 1629 EC 1/19/11		X						3	1		9		N	G	X	X	X	X	X	X	X				L802

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
metals are field filtered. Temperature requirements might not be met if sample collection time is close to lab pick-up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/19/11 1800			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL-NC	1/19/11 1915			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Glenn Burns	Company: TA	Date/Time: 1/20/11 7:00

All VOCs in cooler K999

TAL-0018 (1008)

©2005, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

15

North Canton

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: Team 1-1/19/11-2
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone:	2 of 2 COCs
City/State/Zip: Cincinnati OH 45240	Email: escorbin@eqm.com	Analysis Turnaround Time: CALENDAR DAYS ☒ WORKING DAYS ☐ TAT if different from below Per SOW	Analyses	For Lab Use Only: Walk-in client: Lab sampling: Job / SDG No.:
Phone: 513-825-7500	Method of Shipment/Carrier: Lab Couriers	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP (OH)	Shipping/Tracking No: NA			
Project Number: 030240.0006				
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres.	Other:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOC 8260	SVOC 8270	PAH 8082	PCB 8082	Explosives 8330	Propellants 9012	Cyanide 9012/9020	Metals 6010/7470	Sample Specific Notes / Special Instructions:
FWGLL4mw-196C-1653-GF	1/19/11	1629		X					1						Y	G							X		Cooler ID L802
							EC		1/19/11																

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 are field filtered. Temperature requirements might not be met if sample collection time is close to lab pick-up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/19/11 1800	[signature]	TAL-NC	1/19/11 1800
[signature]	TAL-NC	1/19/11 1925	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TA	Date/Time: 1/20/11 7:00

TAL-0018 (1008)

All VOCs in cooler K999.

©2008, TestAmerica Laboratories, Inc. All rights reserved. TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: JOHN MILLER	Date: 1-19-11	Chain of Custody Number: 000454
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 875 7500 (7495)	Lab Number: 330497 9396	Page 1 of
City: Cincinnati State: OH Zip Code: 45240	Site Contact: E CORBIN	Lab Contact: M LOEB	Analysis (Attach list if more space is needed)
Project Name and Location (State): RVAAP Ravenna OH	Carrier/Waybill Number: LAB PICK UP		
Contract/Purchase Order/Quote No.: M3080700002 22 PO 16726	Matrix / Containers & Preservatives		

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	Alpha 8330	Propellants	Cyanide 9012	NO2/NO3 353.2	Metals 6010B	Special Instructions/ Conditions of Receipt
																						Cooler ID#
FWG-Team2-Trip	1-19-11	0800		X									X									L573
FWGSEFmw-005-1686-GW	"	0915		X			9	1		3	1		X	X	X	X	X	X	X			L901
FWGSEFmw-005-1686-GF	"	"		X					1												X	L901
FWGSEFmw-006-1681-GW	"	1120		X			9	1		3	1		X	X	X	X	X	X	X			A180
FWGSEFmw-006-1681-GF	"	"		X					1												X	A180
FWGSEFmw-003-1684-GW	"	1250		X			27	3		9	3		X	X	X	X	X	X	X	X		MS MSD L520 A107 L981
FWGSEFmw-003-1684-GF	"	"		X					3												X	MS MSD L520 A107, L984
FWGLL3mw-238C-1650-GW	"	1525		X									X	X	X	X	X	X	X			L573
FWGLL3mw-238C-1650-GF	"	"		X																	X	L573
				1/19/11																		

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 [ ] Other per route SOW

QC Requirements (Specify): GF Metals were field filtered.

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	1/19/11	1800	1. Received By: FC Fedex	1/19/11	1800
2. Relinquished By: FC Fedex	1/19/11	1915	2. Received By: Jerry Burns	1/20/11	7:00
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: ALL VOAs in cooler L573

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

North Canton

17

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Page 1 of COC 459

18

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 1/19/11	Chain of Custody Number: 000461
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (7495 fax)	Lab Number: 330 497 9396	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.: AN. 030240.0006 PO # 16726			

Analysis (Attach list if more space is needed): VOC 8260 / SVOC 8270 / PCB 8082 / Explo 8330 / Propellants / Cyanide 9012 / MPdals 6010/7470

Special Instructions/ Conditions of Receipt

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	Special Instructions/ Conditions of Receipt
FWGTRIP3-TRIP	1/19/11	0800		X						2			@ COOLER ID: L244
FWGWGBMW-005C-11675-GW		0905		X			9			3	1		L244
FWGWGBMW-005C-11675-GF		0905		X					1				L244
FWGWGBMW-DUP5-11676-GW		1005		X			9			3	1		A322
FWGWGBMW-DUP5-11676-GF		1005		X					1				A322
FWGWGBMW-006C-11676-GW		1115		X			9			3	1		A229
FWGWGBMW-006C-11676-GF		1115		X					1				A229
FWGWGBMW-009C-11678-GW		1230		X			9			3	1		L274
FWGWGBMW-009C-11678-GF		1230		X					1				L274
FWGEQUIPRINSE3-1700-GW		1330		X			9			3	1		L77
FWGEQUIPRINSE3-1700-GF		1330		X					1				L77

L Sebesta 1/19/11

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 PER SOW [ ] Other ____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Eric Corbin EQ	1/19/11	1800	1. Received By: E C Corbin	1/19/11	1800
2. Relinquished By: E C Corbin	1/19/11	1915	2. Received By: Terry Burns	1/20/11	7:00
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments: Metals are field filtered @ ALL VOAS IN COOLER L244 @

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

North Canton

* Temps May not meet requirements if collection time is close to Pickup time *

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQM	John Miller	1/19/11	000459
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 2**
1800 Carillon Blvd	513-825-7500	330-497-9396	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Cincinnati OH 45240	Erik Corbin	M. Loeb	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP 080240-0004 PO#167216	Lab Pick up		
Contract/Purchase Order/Quote No.			
PO ↗ PO ↗			

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	Explo 8330	Propellants	Cyanide 9012	Metals 6010/7470	Special Instructions/ Conditions of Receipt: COOLER ID
FWGLL3MW-239C-11051-GW	1/19/11	1500		X			9			3	1		X	X	X	X	X	X	X	X	1921
FWGLL3MW-239C-11051-GF		1500		X					1											X	1921
FWGCBPMW-007C-11058-GW		1610		X			9			3	1		X	X	X	X	X	X	X		A648
FWGCBPMW-007C-11058-GF		1610		X					1											X	A648
FWGCBPMW-008C-11059-GW		1705		X									X	X	X	X	X	X	X		L926
FWGCBPMW-008C-11059-GF		1705		X																X	L926

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 PER SOW ☐ Other _____

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
Erik Corbin EQ	1/19/11	1800	K Robison	1/19/11	1800
2. Relinquished By	**Date**	**Time**	**2. Received By**	**Date**	**Time**
K Robison	1/19/11	1915	Greg Burns	1/20/11	7:00
3. Relinquished By	**Date**	**Time**	**3. Received By**	**Date**	**Time**

Comments
Metals field filtered

• ALL VOAS IN COOLER L244 •

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

* Tonins Mail not meet Temp requirements if collection time is close to pick up time.

North Canton

19

TestAmerica Cooler Receipt Form/Narrative **Lot Number: AIA200403**

North Canton Facility

Client EQM Project RVAAP (OH) By: Terry Burns (Signature)

Cooler Received on 1/20/11 Opened on 1/20/11

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 1 each 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 ☒ + sep sheet
   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:

COC = FWGCBPMW-007C-1658-GW 1/19/11 @ 1610, Labels = FWGCPBMW-005C-1659-GW (all bottles) 1/19/11 @ 1610

COC = FWGCBPMW-007C-1658-GF 1/19/11 @ 1610, Label = FWGCPBMW-005C-1657-GF (metals bottle) 1/19/11 @ 1610

COC = FWGEQUIPRINSE3-1700-GF 1/19/11 @ 1300, Label = FWGEQUIPRINSE3-1700-GW 1/19/11 @ 1300 (metals bottle)

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 preserved added to sample(s)? ____

Client ID	pH	Date	Initials
1678-GW	>12	1/20/11	TDB
GF	<2		
1651-GW	>12		
GF	<2		
1657-GW	>12		
GF	<2		
1659-GW	>12		
GF	<2		
Rinse3-1700-GW	<2, 12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1674-GW	>12, >12, >12	1/20/11	TB
GF	<2, <2, <2		
1677-GW	>12		
GF	<2		
1673-GW	>12		
GF	<2		
1654-GW	>12		
GF	<2		
1653-GW	>12		
GF	<2		
1686-GW	<2, >12		
GF	<2		
1687-GW	<2, >12		
GF	<2		
1684-GW	<2, <2, <2, >12, >12, >12		
GF	<2, <2, <2		
1650-GW	>12		
GF	<2		
1675-GW	>12		
GF	<2		
1696-GW	>12		
GF	<2		
1676-GW	>12		
GF	<2		

Cooler #	Temp. °C	Method	Coolant
A94	1.2°C	IR	wet ice
L743	1.4°C		
K999	2.8°C		
A158	2.8°C		
L414	1.6°C		
L754	1.9°C		
L802	1.8°C		
L901	1.6°C		
A180	1.3°C		
L520	1.3°C		
L984	1.2°C		
A109	1.1°C		

Discrepancies Cont'd:

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number: _____
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
L573	1.3°C	IR	wet ice	
L244	1.8°C			
A322	1.8°C			
A229	2.2°C			
L274	2.7°C			
L77	2.7°C			
L921	1.3°C			
A648	2.4°C			
L926	2.6°C			

ANALYTICAL METHODS SUMMARY

A1A200403

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

A1A200403

The following report contains the analytical results for seventeen 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 January 20, 2011, according to documented sample acceptance procedures.

All analysis was performed at the TestAmerica West Sacramento Laboratory. Refer to the TestAmerica West Sacramento narrative provided 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 February 03, 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 2.8° C.

See TestAmerica's Cooler Receipt Form for additional information.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The analyses reported herein were performed using an instrument that has two columns(GC) or detectors(HPLC), one of which is used to confirm the results of the other. Peak interferences may result in some cases, which cause a quantitation difference between the two columns/detectors. If the difference between the two results is greater than 40%, the higher of the two results or the primary column/detector is normally reported. The reported results are flagged with "PG".

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

Case Narrative

TestAmerica West Sacramento Project Number A1A200403

General Comments
Following US EPA Region V guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. The reasons for manual integration have been documented on the affected chromatograms, which are provided in the raw data package. The raw data also includes the original chromatograms prior to any manual integrations being performed. The following samples and analytes required a manual integration:

LC10 instrument:
8330 MRL (analyzed on 1/27/11 @ 15:23) - Tetryl
8330 MRL (analyzed on 1/28/11 @ 02:37) - Tetryl
Sample 10 - HMX
Sample 11 - HMX
Sample 15 - HMX
Sample 16 - HMX
8330 MRL (analyzed on 1/28/11 @ 18:43) - Tetryl
8330 MRL (analyzed on 1/29/11 @ 05:13) – Tetryl
8330 MRL (analyzed on 2/9/11 @13:04) – Tetryl
8330 MRL (analyzed on 2/9/11 @ 21:20) – Tetryl
8330 MRL (analyzed on 2/10/11 @15:22) – Tetryl
8330 MRL (analyzed on 2/11/11 @ 00:22) – Tetryl

WATER, 8330, Explosives
Sample(s): 1, 4, 9, 10, 16
These samples were filtered prior to extraction since they contained excessive sediment/particulates. A filtered blank was included with the batch.

Sample(s): 3, 9
The surrogate recoveries for these samples were reported from the confirmation column due interference from the presence of 4-Amino-2,6-dinitrotoluene on the primary column. The results for the confirmation method blank (93%) and filter blank (92%) demonstrate that the confirmation system was in control.

Sample(s): 1, 1MS, 1MSD, 2, 3, 4, 5, 6, 7, 8, 8MS, 8MSD, 9, 10, 11, 12, 13, 14, 15, 16, 17
The percent difference values for analytes listed below are above the method acceptance limits in the MRL standard. This standard was analyzed prior to and after the associated samples. A standard at approximately 2X the method detection limit was analyzed and the affected analytes were detected.

LC10, 1/27/11, 15:23
2-Nitrotoluene, Method Criteria 30%D, Actual 31%D
LC10, 1/28/11, 12:23
RDX, Method Criteria 30%D, Actual 39%D
LC10, 1/27/11, 15:23
2-Nitrotoluene, Method Criteria 30%D, Actual 31%D
LC10, 1/28/11, 13:08
PETN, Method Criteria 30%D, Actual 31%D
LC10, 1/28/11, 18:43
2-Nitrotoluene, Method Criteria 30%D, Actual 33%D
Tetryl, Method Criteria 30%D, Actual 34%D
LC10, 1/28/11, 19:28
PETN, Method Criteria 30%D, Actual 33%D
LC10, 1/29/11, 05:13
RDX, Method Criteria 30%D, Actual 46%D

Sample(s): 1, 3, 4, 9, 10, 16
These samples have a large interfering peak at the expected retention time for PETN. The samples were run on the confirmation column and PETN was not detected for all of these samples. The PETN results for these samples have been reported as non-detect. Note: The MS/MSD pair for sample 01 was analyzed using an HPLC program that allowed separation of the interfering peak and quantitation of PETN.

WATER, Nitrocellulose
Sample(s): 8, 8MS, 8MSD
The ending continuing calibration standard and bracketing MRL standards had high percent difference values. Since the associated sample results were all non-detect for sample 8, no corrective action was performed.

There were no other anomalies associated with this project.

WATER, 8330, Explosives

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A200403 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.1 and 2.8 °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 1/27/11 @1523 recovered above control limits with a %D of 31% for 2-nitrotoluene. • The MRL analyzed 1/28/11 @1223 recovered above control limits with a %D of 39% for RDX. • The MRL analyzed 1/28/11 @1308 recovered above control limits with a %D of 31% for PETN. • The MRL analyzed 1/28/11 @1843 recovered above control limits with a %D of 34% for tetryl and a %D of 33% for 2-nitrotoluene. • The MRL analyzed 1/28/11 @1928 recovered above control limits with a %D of 33% for PETN. • The MRL analyzed 1/29/11 @0513 recovered above control limits with a %D of 46% for RDX. No qualifications were made for the 2-nitrotoluene, tetryl or PETN outliers as there were no detected 2-nitrotoluene, tetryl or PETN concentrations in the bracketed field samples. The RDX results for samples FWGLL3mw-238c-1650-GW, FWGWBGmw-006c-1676-GW, FWGWBGmw-009c-1678-GW and FWGLL3mw-239c-1651-GW were qualified as estimated, "J".	LCG Table 5 >30%=J
9. Does the initial calibration curve consist of 5 concentration levels? (6 stds for quadratic curves)	✓			LC10 1/9/11, LC11 1/12/11, 1/26/11 LC12 12/17/10, 12/29/10(confirmation)	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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A200403 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
12. Was a second source verification (ICV) analyzed after the ICAL and all analytes 85-115%?	✓			LC10 1/9/11@1027 , LC12 12/17/10@ 0417, 12/30/10 @ 0242, LC11 1/12/11 @ 1/27/11@ 0027 LC12 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC12 was used as confirmation.	STL SOP Section 9.9 >115%=J; 80-85%=J/UJ; <80%=J/R
13. Was a CCV run at least every 10 samples and at the end of the analytical run?	✓				STL SOP Section 10.9
14. Was the average %D (difference or drift) for all target analytes < 15%?	✓			LC10- • The CCV analyzed 1/27/11 @1438 recovered above limits for tetryl with a %D of 21%. • The CCV analyzed 1/28/11 @01528 recovered above limits for tetryl with a %D of 16%, at 1137 with a %D of 17% and at 1758 with a %D of 22%. • The CCV analyzed 1/29/11 @ 0428 recovered above limits for tetryl with a %D of 22%. No qualifications were made as the samples were reanalyzed with passing CCVs for tetryl. LC12- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC12 was used as confirmation.	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓			Due to excessive particulates, samples FWGLNWmw-025c-1674-GW, FWGLL4mw-197c-1654-GW, FWGLL3mw-238c-1650-GW, FWGWBGmw-005c-1675-GW and FWGCBPmw-005c-1657-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.	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?		✓		Checked by ADR. The RPD for the field duplicate FWGWBGmw-DUP5-1696-GW and FWGWGmw-005c-1675-GW was above control limits for 2,4,6-TNT and tetryl at 200%. The tetryl and 2,4,6-TNT results for sample FWGWGmw-005c-1675-GW were qualified as estimated, "J".	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Were the RPDs ≤ 40%?		✓		The second column confirmation analyzed on sample FWGLL3mw-238c-1650-GW had an RPD above control limits for RDX and nitrobenzene. The RDX and nitrobenzene results for sample FWGLL3mw-238c-1650-GW were qualified as estimated, "J".	LCG Table 5 RPD>40%=J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 14, 2011

SDG: A1A200403 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR.	QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments:

The surrogate recoveries for samples FWGFBQmw-174c-1673-GW and FWGLL3mw-238c-1650-GW were reported from the confirmation column due to interfence in the primary column.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLNWmw-025C-1674-GW

HPLC

Lot-Sample #...: A1A200403-001 Work Order #...: MDHMN1AA Matrix.....: WG
Date Sampled...: 01/19/11 09:03 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/27/11
Prep Batch #...: 1025149
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLNWmw-025C-1674-GW

HPLC

Lot-Sample #...:	A1A200403-001	Work Order #...:	MDHMN2AA	Matrix.....:	WG
Date Sampled...:	01/19/11 09:03	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1025149				
Dilution Factor:	0.96	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-007C-1677-GW

HPLC

Lot-Sample #...: A1A200403-002 Work Order #...: MDHMP1AA Matrix.....: WG
Date Sampled...: 01/19/11 11:19 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/27/11
Prep Batch #...: 1025149
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-007C-1677-GW

HPLC

Lot-Sample #...:	A1A200403-002	Work Order #...:	MDHMP2AA	Matrix.....:	WG
Date Sampled...:	01/19/11 11:19	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1025149				
Dilution Factor:	0.99	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GW

HPLC

Lot-Sample #...:	A1A200403-003	Work Order #...:	MDHMQ1AA	Matrix.....:	WG
Date Sampled...:	01/19/11 13:21	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1025149				
Dilution Factor:	0.96	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	0.085 J	0.096	ug/L	0.048
2,4-Dinitrotoluene	0.30	0.096	ug/L	0.048
2,6-Dinitrotoluene	0.14	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	0.44	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98 CON	(50 - 150)

NOTE(S):

CON Confirmation analysis.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GW

HPLC

Lot-Sample #...: A1A200403-003 Work Order #...: MDHMQ2AA Matrix.....: WG
Date Sampled...: 01/19/11 13:21 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/29/11
Prep Batch #...: 1025149
Dilution Factor: 4.82 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Amino-4,6-dinitrotoluene	24 Q	0.48	ug/L	0.48
2,4,6-Trinitrotoluene	44	0.48	ug/L	0.24
4-Amino-2,6-dinitrotoluene	39	0.48	ug/L	0.24

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94 CON	(50 - 150)

NOTE(S):

CON Confirmation analysis.

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GW

HPLC

Lot-Sample #...: A1A200403-003 Work Order #...: MDHMQ3AA Matrix.....: WG
Date Sampled...: 01/19/11 13:21 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 02/10/11
Prep Batch #...: 1025149
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.096	ug/L	0.048

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1654-GW

HPLC

Lot-Sample #...: A1A200403-004 Work Order #...: MDHMR1AA Matrix.....: WG
Date Sampled...: 01/19/11 15:04 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/27/11
Prep Batch #...: 1025149
Dilution Factor: 0.98 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	**0.075 J**	**0.098**	**ug/L**	**0.049**
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1654-GW

HPLC

Lot-Sample #...: A1A200403-004 Work Order #...: MDHMR2AA Matrix.....: WG
Date Sampled...: 01/19/11 15:04 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 02/10/11
Prep Batch #...: 1025149
Dilution Factor: 0.98 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GW

HPLC

Lot-Sample #...: A1A200403-005 Work Order #...: MDHMT1AA Matrix.....: WG
Date Sampled...: 01/19/11 16:29 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/27/11
Prep Batch #...: 1025149
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GW

HPLC

Lot-Sample #...:	A1A200403-005	Work Order #...:	MDHMT2AA	Matrix.....:	WG
Date Sampled...:	01/19/11 16:29	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1025149				
Dilution Factor:	0.96	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1686-GW

HPLC

Lot-Sample #...: A1A200403-006 Work Order #...: MDHMV1AA Matrix.....: WG
Date Sampled...: 01/19/11 09:15 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1686-GW

HPLC

Lot-Sample #...: A1A200403-006 Work Order #...: MDHMV2AA Matrix.....: WG
Date Sampled...: 01/19/11 09:15 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 02/10/11
Prep Batch #...: 1025149
Dilution Factor: 1.02 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1687-GW

HPLC

Lot-Sample #...: A1A200403-007 Work Order #...: MDHMW1AA Matrix.....: WG
Date Sampled...: 01/19/11 11:20 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1687-GW

HPLC

Lot-Sample #...:	A1A200403-007	Work Order #...:	MDHMW2AA	Matrix.....:	WG
Date Sampled...:	01/19/11 11:20	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1025149				
Dilution Factor:	1.08	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.11	ug/L	0.054

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1684-GW

HPLC

Lot-Sample #...: A1A200403-008 Work Order #...: MDHMX1AA Matrix.....: WG
Date Sampled...: 01/19/11 12:50 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1684-GW

HPLC

Lot-Sample #...:	A1A200403-008	Work Order #...:	MDHMX2AA	Matrix.....:	WG
Date Sampled...:	01/19/11 12:50	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1025149				
Dilution Factor:	1.03	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GW

HPLC

Lot-Sample #...: A1A200403-009 Work Order #...: MDHM01AA Matrix.....: WG
Date Sampled...: 01/19/11 15:25 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
Dilution Factor: 1.04 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3-Dinitrobenzene	ND	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	9.3	0.10	ug/L	0.10
2,4-Dinitrotoluene	0.057 J	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	0.36 J	0.52	ug/L	0.059
4-Nitrotoluene	ND	0.52	ug/L	0.092
HMX	1.8	0.10	ug/L	0.037
Nitrobenzene	0.25 PG	0.10	ug/L	0.052
Nitroglycerin	ND	0.68	ug/L	0.34
RDX	11 PG	0.10	ug/L	0.037
PETN	ND	0.68	ug/L	0.31

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98 CON	(50 - 150)

NOTE(S):

CON Confirmation analysis.

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GW

HPLC

Lot-Sample #...:	A1A200403-009	Work Order #...:	MDHM02AA	Matrix.....:	WG
Date Sampled...:	01/19/11 15:25	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	01/29/11		
Prep Batch #...:	1025149				
Dilution Factor:	5.22	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	26 Q	0.52	ug/L	0.16
2,4,6-Trinitrotoluene	69	0.52	ug/L	0.26
4-Amino-2,6-dinitrotoluene	32	0.52	ug/L	0.26

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91 CON	(50 - 150)

NOTE(S):

CON Confirmation analysis.

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GW

HPLC

Lot-Sample #...: A1A200403-009 Work Order #...: MDHM03AA Matrix.....: WG
Date Sampled...: 01/19/11 15:25 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 02/10/11
Prep Batch #...: 1025149
Dilution Factor: 1.04 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.10	ug/L	0.052

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-005C-1675-GW

HPLC

Lot-Sample #...: A1A200403-010 Work Order #...: MDHM11AA Matrix.....: WG
Date Sampled...: 01/19/11 09:05 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
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	**0.062 J**	**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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-005C-1675-GW

HPLC

Lot-Sample #...:	A1A200403-010	Work Order #...:	MDHM12AA	Matrix.....:	WG
Date Sampled...:	01/19/11 09:05	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1025149				
Dilution Factor:	1	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	0.057 J	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-DUP5-1696-GW

HPLC

Lot-Sample #...: A1A200403-011 Work Order #...: MDHM21AA Matrix.....: WG
Date Sampled...: 01/19/11 10:05 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-DUP5-1696-GW

HPLC

Lot-Sample #...:	A1A200403-011	Work Order #...:	MDHM22AA	Matrix.....:	WG
Date Sampled...:	01/19/11 10:05	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1025149				
Dilution Factor:	1.03	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GW

HPLC

Lot-Sample #...: A1A200403-012 Work Order #...: MDHM31AA Matrix.....: WG
Date Sampled...: 01/19/11 11:15 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
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	7.5	0.11	ug/L	0.039
Nitrobenzene	ND	0.11	ug/L	0.054
Nitroglycerin	ND	0.70	ug/L	0.35
PETN	ND	0.70	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GW

HPLC

Lot-Sample #...:	A1A200403-012	Work Order #...:	MDHM32AA	Matrix.....:	WG
Date Sampled...:	01/19/11 11:15	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	01/29/11		
Prep Batch #...:	1025149				
Dilution Factor:	5.35	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
RDX	29 Q	0.54	ug/L	0.19

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

NOTE(S):

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GW

HPLC

Lot-Sample #...:	A1A200403-012	Work Order #...:	MDHM33AA	Matrix.....:	WG
Date Sampled...:	01/19/11 11:15	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1025149				
Dilution Factor:	1.07	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.11	ug/L	0.054

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-009C-1678-GW

HPLC

Lot-Sample #...: A1A200403-013 Work Order #...: MDRM41AA Matrix.....: WG
Date Sampled...: 01/19/11 12:30 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
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	**1.0**	**0.10**	**ug/L**	**0.038**
Nitrobenzene	ND	0.10	ug/L	0.052
Nitroglycerin	ND	0.68	ug/L	0.35
RDX	**3.5**	**0.10**	**ug/L**	**0.038**
PETN	ND	0.68	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: PWGWBGmw-009C-1678-GW

HPLC

Lot-Sample #...: A1A200403-013 Work Order #...: MDHM42AA Matrix.....: WG
Date Sampled...: 01/19/11 12:30 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 02/10/11
Prep Batch #...: 1025149
Dilution Factor: 1.05 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

HPLC

Lot-Sample #...: A1A200403-014 Work Order #...: MDHM61AA Matrix.....: WQ
Date Sampled...: 01/19/11 13:30 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

HPLC

Lot-Sample #...: A1A200403-014 Work Order #...: MDHM62AA Matrix.....: WQ
Date Sampled...: 01/19/11 13:30 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 02/10/11
Prep Batch #...: 1025149
Dilution Factor: 0.99 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GW

HPLC

Lot-Sample #...: A1A200403-015 Work Order #...: MDHM71AA Matrix.....: WG
Date Sampled...: 01/19/11 15:00 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
Dilution Factor: 0.99 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	0.13	0.099	ug/L	0.030
1,3-Dinitrobenzene	ND	0.099	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.56	0.099	ug/L	0.099
2,4,6-Trinitrotoluene	0.15	0.099	ug/L	0.050
2,4-Dinitrotoluene	0.096 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	0.74	0.099	ug/L	0.050
4-Nitrotoluene	ND	0.50	ug/L	0.087
HMX	0.23	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

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: FWGLL3mw-239C-1651-GW

HPLC

Lot-Sample #...:	A1A200403-015	Work Order #...:	MDHM72AA	Matrix.....:	WG
Date Sampled...:	01/19/11 15:00	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1025149				
Dilution Factor:	0.99	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.099	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-005C-1657-GW

HPLC

Lot-Sample #...: A1A200403-016 Work Order #...: MDHM81AA Matrix.....: WG
Date Sampled...: 01/19/11 16:10 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	**0.049 J**	**0.096**	**ug/L**	**0.035**
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29

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: FWGCBPmw-005C-1657-GW

HPLC

Lot-Sample #...:	A1A200403-016	Work Order #...:	MDHM82AA	Matrix.....:	WG
Date Sampled...:	01/19/11 16:10	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1025149				
Dilution Factor:	0.96	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-008C-1659-GW

HPLC

Lot-Sample #...: A1A200403-017 Work Order #...: MDHNA1AA Matrix.....: WG
Date Sampled...: 01/19/11 17:05 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-008C-1659-GW

HPLC

Lot-Sample #...: A1A200403-017 Work Order #...: MDHNA2AA Matrix.....: WG
Date Sampled...: 01/19/11 17:05 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 02/10/11
Prep Batch #...: 1025149
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A200403 Work Order #...: MDNKC1AA Matrix.....: WATER
MB Lot-Sample #: G1A250000-149

Prep Date.....: 01/25/11
Analysis Date..: 01/27/11 Prep Batch #...: 1025149
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A200403 Work Order #...: MDNKC1AD Matrix.....: WATER
MB Lot-Sample #: G1A250000-149

Prep Date.....: 01/25/11
Analysis Date..: 01/27/11 Prep Batch #...: 1025149
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A200403 Work Order #...: MDNKC1AE Matrix.....: WATER
MB Lot-Sample #: G1A250000-149

Prep Date.....: 01/25/11
Analysis Date..: 02/09/11 Prep Batch #...: 1025149
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
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.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A200403 Work Order #...: MDNKC1AG Matrix.....: WATER
MB Lot-Sample #: G1A250000-149

Prep Date.....: 01/25/11
Analysis Date..: 02/09/11 Prep Batch #...: 1025149
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(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 #...: A1A200403 Work Order #...: MDNKC1AC Matrix.....: WATER
LCS Lot-Sample#: G1A250000-149
Prep Date.....: 01/25/11 Analysis Date..: 01/27/11
Prep Batch #...: 1025149
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	108	(53 - 135)	SW846 8330
1,3-Dinitrobenzene	110	(54 - 120)	SW846 8330
2-Amino-4,6-dinitrotoluene	106	(53 - 120)	SW846 8330
2,4,6-Trinitrotoluene	95	(37 - 120)	SW846 8330
2,4-Dinitrotoluene	107	(58 - 136)	SW846 8330
2,6-Dinitrotoluene	106	(52 - 144)	SW846 8330
2-Nitrotoluene	106	(52 - 120)	SW846 8330
3-Nitrotoluene	105	(48 - 136)	SW846 8330
4-Amino-2,6-dinitrotoluene	105	(58 - 159)	SW846 8330
4-Nitrotoluene	108	(46 - 136)	SW846 8330
HMX	101	(45 - 140)	SW846 8330
Nitrobenzene	109	(49 - 120)	SW846 8330
Nitroglycerin	102	(60 - 120)	SW846 8330
RDX	110	(39 - 120)	SW846 8330
PETN	102	(60 - 120)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A200403 Work Order #...: MDNKC1AF Matrix.....: WATER
LCS Lot-Sample#: G1A250000-149
Prep Date.....: 01/25/11 Analysis Date..: 02/09/11
Prep Batch #...: 1025149
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetryl	101	(30 - 120)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A200403 Work Order #...: MDHMN1AC-MS Matrix.....: WG
MS Lot-Sample #: A1A200403-001 MDHMN1AD-MSD
Date Sampled...: 01/19/11 09:03 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 02/01/11
Prep Batch #...: 1025149
Dilution Factor: 0.97

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	99	(50 - 150)			SW846 8330
	102	(50 - 150)	3.0	(0-50)	SW846 8330
1,3-Dinitrobenzene	101	(50 - 150)			SW846 8330
	102	(50 - 150)	1.7	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	96	(50 - 150)			SW846 8330
	98	(50 - 150)	1.6	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	88	(50 - 150)			SW846 8330
	90	(50 - 150)	2.3	(0-50)	SW846 8330
2,4-Dinitrotoluene	97	(50 - 150)			SW846 8330
	101	(50 - 150)	3.4	(0-50)	SW846 8330
2,6-Dinitrotoluene	98	(50 - 150)			SW846 8330
	99	(50 - 150)	1.7	(0-50)	SW846 8330
2-Nitrotoluene	92	(50 - 150)			SW846 8330
	96	(50 - 150)	3.6	(0-50)	SW846 8330
3-Nitrotoluene	93	(50 - 150)			SW846 8330
	98	(50 - 150)	5.4	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	98	(50 - 150)			SW846 8330
	99	(50 - 150)	1.0	(0-50)	SW846 8330
4-Nitrotoluene	90	(50 - 150)			SW846 8330
	94	(50 - 150)	4.6	(0-50)	SW846 8330
HMX	95	(50 - 150)			SW846 8330
	97	(50 - 150)	2.1	(0-50)	SW846 8330
Nitrobenzene	97	(50 - 150)			SW846 8330
	99	(50 - 150)	2.2	(0-50)	SW846 8330
Nitroglycerin	96	(50 - 150)			SW846 8330
	95	(50 - 150)	1.1	(0-50)	SW846 8330
RDX	101	(50 - 150)			SW846 8330
	103	(50 - 150)	1.4	(0-50)	SW846 8330
PETN	94	(50 - 150)			SW846 8330
	94	(50 - 150)	0.39	(0-50)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	97	(50 - 150)
	95	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A200403 Work Order #...: MDHMN1AC-MS Matrix.....: WG
MS Lot-Sample #: A1A200403-001 MDHMN1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS

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 #...: A1A200403 Work Order #...: MDHMN1AL-MS Matrix.....: WG
MS Lot-Sample #: A1A200403-001 MDHMN1AM-MSD
Date Sampled...: 01/19/11 09:03 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 02/10/11
Prep Batch #...: 1025149
Dilution Factor: 0.97

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Tetryl	93	(50 - 150)			SW846 8330
	96	(50 - 150)	3.4	(0-50)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A200403 Work Order #...: MDHMX1AC-MS Matrix.....: WG
MS Lot-Sample #: A1A200403-008 MDHMX1AD-MSD
Date Sampled...: 01/19/11 12:50 Date Received..: 01/20/11
Prep Date.....: 01/25/11 Analysis Date..: 01/28/11
Prep Batch #...: 1025149
Dilution Factor: 1.01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	105	(50 - 150)			SW846 8330
	103	(50 - 150)	7.4	(0-50)	SW846 8330
1,3-Dinitrobenzene	108	(50 - 150)			SW846 8330
	107	(50 - 150)	7.5	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	108	(50 - 150)			SW846 8330
	106	(50 - 150)	7.2	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	96	(50 - 150)			SW846 8330
	94	(50 - 150)	7.0	(0-50)	SW846 8330
2,4-Dinitrotoluene	107	(50 - 150)			SW846 8330
	105	(50 - 150)	6.8	(0-50)	SW846 8330
2,6-Dinitrotoluene	107	(50 - 150)			SW846 8330
	105	(50 - 150)	6.9	(0-50)	SW846 8330
2-Nitrotoluene	107	(50 - 150)			SW846 8330
	105	(50 - 150)	7.3	(0-50)	SW846 8330
3-Nitrotoluene	105	(50 - 150)			SW846 8330
	104	(50 - 150)	7.8	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	106	(50 - 150)			SW846 8330
	104	(50 - 150)	7.2	(0-50)	SW846 8330
4-Nitrotoluene	108	(50 - 150)			SW846 8330
	107	(50 - 150)	8.0	(0-50)	SW846 8330
HMX	98	(50 - 150)			SW846 8330
	97	(50 - 150)	8.1	(0-50)	SW846 8330
Nitrobenzene	106	(50 - 150)			SW846 8330
	105	(50 - 150)	7.7	(0-50)	SW846 8330
Nitroglycerin	101	(50 - 150)			SW846 8330
	99	(50 - 150)	7.0	(0-50)	SW846 8330
RDX	106	(50 - 150)			SW846 8330
	105	(50 - 150)	7.5	(0-50)	SW846 8330
PETN	102	(50 - 150)			SW846 8330
	99	(50 - 150)	5.9	(0-50)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(50 - 150)
	97	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A200403 Work Order #...: MDHMX1AC-MS Matrix.....: WG
MS Lot-Sample #: A1A200403-008 MDHMX1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS

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 #...:	A1A200403	Work Order #...:	MDHMX1AN-MS	Matrix.....:	WG
MS Lot-Sample #:	A1A200403-008		MDHMX1AP-MSD		
Date Sampled...:	01/19/11 12:50	Date Received..:	01/20/11		
Prep Date.....:	01/25/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1025149				
Dilution Factor:	1.01				

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Tetryl	**100**	**(50 - 150)**			**SW846 8330**
	97	**(50 - 150)**	**5.8**	**(0-50)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica West Sacramento

A-000006.D

Chromatography Summary

Injection Date: 1/27/2011 15:23 Operator: RN

DataFile: LC10.I\01272011.B\A-000006.D Vial Num: 4

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample: **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.I\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1, , ; ;3;CAL.sub, ;0,1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.95	319	5.7790<	5	16%	Fails	± 30% ok	16.01	635	6.0250	5	21%	Fails		(±15)	
HMX	5.22	681	5.2620<	5	5%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.37	542	5.9510<	5	19%	Fails	± 30% ok				5	-100%	Fails		(±15)	45
Picric ACID	8.42	846	10.5100	5	110%	Fails	NA				5	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.58	825	5.2110<	5	4%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.09	834	5.3860<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	12.99	553	5.9520<	5	19%	Fails	M ± 30% ok				5	-100%	Fails		(±15)	45
Nitrobenzene	13.64	408	5.6990<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.05	524	5.5620<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.51	447	5.8720<	5	17%	Fails	± 30% ok				5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.50	468	5.5790<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.91	328	5.5620<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.60	539	5.6780<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.51	272	6.5610<	5	31%	Fails	- HIGH ± 30% ok				5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.19	295	5.9090<	5	18%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.86	301	6.0560<	5	21%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.10	415	6.0310<	5	21%	Fails	NA	(±15)	45
PETN				5	-100%	Fails		26.44	209	5.5770<	5	12%	Acceptable	NA	(±15)	45
3,5-Dinitroaniline	12.79	551	5.4330<	5	9%	Acceptable	M-NA				5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails	NA	8.44	1257	0.0000	5	-100%	Fails		(±15)	

1/31/11

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

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

1/28/11

Printed: 1/28/2011 8:47 AM

TestAmerica West Sacramento

A-000034.D

Chromatography Summary

Injection Date: 1/28/2011 12:23 Operator: RN

DataFile: LC10.M\01272011.B\A-000034.D Vial Num: 7

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample: **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.M\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1;;;;3;CAL.sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.03	297	5.3800<	5	8%	Acceptable		16.04	561	5.3230	5	6%	Acceptable		(±15)	
HMX	5.22	677	5.2310<	5	5%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.37	631	6.9280<	5	39%	Fails	High				5	-100%	Fails		(±15)	45
Picric ACID	8.47	839	10.4200	5	108%	Fails	NA				5	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.60	843	5.3250<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.13	832	5.3730<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.03	588	6.3290<	5	27%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	13.66	416	5.8110<	5	16%	Fails					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.09	507	5.3810<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.59	409	5.3720<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.57	457	5.4480<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.91	334	5.6640<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.64	522	5.4990<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.57	234	5.6450<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.26	288	5.7680<	5	15%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.93	281	5.6530<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.11	409	5.9440<	5	19%	Fails	NA	(±15)	45
PETN				5	-100%	Fails		26.67	222	5.9240<	5	18%	Fails	NA	(±15)	45
3,5-Dinitroaniline	12.85	599	5.9070<	5	18%	Fails					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails	NA	8.47	1273	0.0000	5	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

TestAmerica West Sacramento

A-000035.D

Chromatography Summary

Injection Date: 1/28/2011 13:08 Operator: RN

DataFile: LC10.\01272011.B\A-000035.D Vial Num: 8

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0526 8330 L3 20ng/mL**

Method File: LC10.\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0526 8330 L3 20ng/mL;2

Misc. Info: ;3;;;;3;CAL.sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.00	1173	21.2500<	20	6%	Acceptable		16.02	2352	22.3200	20	12%	Acceptable		(±15)	
HMX	5.22	2593	20.0400<	20	0%	Acceptable					20	-100%	Fails		(±15)	45
RDX	7.38	1967	21.6000<	20	8%	Acceptable					20	-100%	Fails		(±15)	45
Picric ACID	8.44	4408	54.7600	50	10%	Acceptable					50	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.59	3255	20.5600<	20	3%	Acceptable					20	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.11	3171	20.4800<	20	2%	Acceptable					20	-100%	Fails		(±15)	45
TETRYL	13.00	2097	22.5700<	20	13%	Acceptable					20	-100%	Fails		(±15)	45
Nitrobenzene	13.65	1430	19.9700<	20	0%	Acceptable					20	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.05	1877	19.9200<	20	0%	Acceptable					20	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.52	1582	20.7800<	20	4%	Acceptable					20	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.52	1714	20.4300<	20	2%	Acceptable					20	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.90	1204	20.4200<	20	2%	Acceptable					20	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.62	1910	20.1200<	20	1%	Acceptable					20	-100%	Fails		(±15)	45
2-Nitrotoluene	21.54	890	21.4700<	20	7%	Acceptable					20	-100%	Fails		(±15)	45
4-Nitrotoluene	23.19	1051	21.0500<	20	5%	Acceptable					20	-100%	Fails		(±15)	45
3-Nitrotoluene	24.88	1026	20.6400<	20	3%	Acceptable					20	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		14.13	1548	22.5000<	20	13%	Acceptable		(±15)	45
PETN				20	-100%	Fails		26.60	983	26.2300<	20	31%	Fails High		(±15)	45
3,5-Dinitroaniline	12.80	2073	20.4400<	20	2%	Acceptable					20	-100%	Fails		(±15)	45
EGDN				20	-100%	Fails		8.44	6483	0.0000	20	-100%	Fails		(±15)	

1/31/11

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

TestAmerica West Sacramento

A-000041.D

Chromatography Summary

Injection Date: 1/28/2011 18:43 Operator: RN

DataFile: LC10.D\01272011.B\A-000041.D Vial Num: 7

Method 8330 Target Analyte Results

Instrument ID: LC10

Sample : **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.D\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.90	292	5.2900<	5	6%	Acceptable		15.89	464	4.4030	5	-12%	Acceptable		(±15)	
HMX	5.21	709	5.4780<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.37	561	6.1600<	5	23%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.43	853	10.6000	5	112%	Fails					5	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.56	820	5.1800<	5	4%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.06	835	5.3920<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	12.95	623	6.7060<	5	34%	Fails	M				5	-100%	Fails		(±15)	45
Nitrobenzene	13.61	441	6.1600<	5	23%	Fails					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.95	489	5.1900<	5	4%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.46	399	5.2410<	5	5%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.39	445	5.3050<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.80	304	5.1550<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.49	490	5.1620<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.40	276	6.6580<	5	33%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.05	295	5.9090<	5	18%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.70	224	4.5070<	5	-10%	Acceptable					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.02	327	4.7520<	5	-5%	Acceptable		(±15)	45
PETN				5	-100%	Fails		26.69	88	2.3480<	5	-53%	Fails		(±15)	45
3,5-Dinitroaniline	12.76	605	5.9660<	5	19%	Fails	M				5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails		8.41	1245	0.0000	5	-100%	Fails		(±15)	

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

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

Printed: 1/31/2011 9:12 AM

TestAmerica West Sacramento

A-000042.D

Chromatography Summary

Injection Date: 1/28/2011 19:28 Operator: RN

DataFile: LC10.D\01272011.B\A-000042.D Vial Num: 8

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0526 8330 L3 20ng/mL**

Method File: LC10.D\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0526 8330 L3 20ng/mL;2

Misc. Info: ;3; ; ; ;3,CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.89	1196	21.6600<	20	8%	Acceptable		15.91	2343	22.2300	20	11%	Acceptable		(±15)	
HMX	5.21	2604	20.1200<	20	1%	Acceptable					20	-100%	Fails		(±15)	45
RDX	7.35	1915	21.0300<	20	5%	Acceptable					20	-100%	Fails		(±15)	45
Picric ACID	8.41	4384	54.4600	50	9%	Acceptable					50	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.55	3246	20.5000<	20	3%	Acceptable					20	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.06	3196	20.6400<	20	3%	Acceptable					20	-100%	Fails		(±15)	45
TETRYL	12.93	2245	24.1600<	20	21%	Fails					20	-100%	Fails		(±15)	45
Nitrobenzene	13.60	1404	19.6100<	20	-2%	Acceptable					20	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.97	1926	20.4400<	20	2%	Acceptable					20	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.45	1625	21.3400<	20	7%	Acceptable					20	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.42	1738	20.7200<	20	4%	Acceptable					20	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.78	1218	20.6500<	20	3%	Acceptable					20	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.50	1964	20.6900<	20	3%	Acceptable					20	-100%	Fails		(±15)	45
2-Nitrotoluene	21.38	837	20.1900<	20	1%	Acceptable					20	-100%	Fails		(±15)	45
4-Nitrotoluene	23.02	1049	21.0100<	20	5%	Acceptable					20	-100%	Fails		(±15)	45
3-Nitrotoluene	24.71	1048	21.0800<	20	5%	Acceptable					20	-100%	Fails		(±15)	45
Nitroglycerin				20	-100%	Fails		14.03	1578	22.9300<	20	15%	Acceptable		(±15)	45
PETN				20	-100%	Fails		26.37	998	26.6300<	20	33%	Fails		(±15)	45
3,5-Dinitroaniline	12.75	2179	21.4900<	20	7%	Acceptable					20	-100%	Fails		(±15)	45
EGDN				20	-100%	Fails		8.41	6519	0.0000	20	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

TestAmerica West Sacramento

A-000055.D

Chromatography Summary

Injection Date: 1/29/2011 5:13 Operator: RN

DataFile: LC10.I\01272011.B\A-000055.D Vial Num: 4

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.I\01272011.B\S330AB.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.88	308	5.5800<	5	12%	Acceptable		15.90	510	4.8390	5	-3%	Acceptable		(±15)	
HMX	5.21	701	5.4160<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.35	663	7.2800<	5	46%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.43	857	10.6400	5	113%	Fails					5	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.56	821	5.1860<	5	4%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.05	848	5.4760<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	12.93	603	6.4900<	5	30%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	13.59	448	6.2580<	5	25%	Fails					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.97	533	5.6570<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.44	436	5.7270<	5	15%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.42	450	5.3640<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.82	346	5.8670<	5	17%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.53	509	5.3620<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.39	262	6.3200<	5	26%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.04	299	5.9890<	5	20%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.72	299	6.0160<	5	20%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.01	376	5.4640<	5	9%	Acceptable	M	(±15)	45
PETN				5	-100%	Fails					5	-100%	Fails	NA	(±15)	
3,5-Dinitroaniline	12.76	588	5.7980<	5	16%	Fails					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails		8.44	1267	0.0000	5	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

RE-INTEGRATION CODES
1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
6 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)
ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

Printed: 1/31/2011 9:45 AM

TestAmerica West Sacramento

A-000005.D

Chromatography Summary

Injection Date: 1/27/2011 14:38 Operator: RN

DataFile: LC10.I\01272011.B\A-000005.D Vial Num: 2

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_06 10GCSV0523 8330 L6 200ng/mL**

Method File: LC10.I\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_06 10GCSV0523 8330 L6 200ng/mL;2

Misc. Info: ;6;;;,3,CAL.sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.01	11337	205.4000<	200	3%	Acceptable		16.01	21325	202.3000	200	1%	Acceptable		(±15)	
HMX	5.21	26396	204.0000<	200	2%	Acceptable					200	-100%	Fails		(±15)	45
RDX	7.36	18636	204.6000<	200	2%	Acceptable					200	-100%	Fails		(±15)	45
Picric ACID	8.35	43662	542.4000	500	8%	Acceptable		8.35	64740	545.1000<	500	9%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.57	33209	209.8000<	200	5%	Acceptable					200	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.10	32409	209.3000<	200	5%	Acceptable					200	-100%	Fails		(±15)	45
TETRYL	13.01	22426	241.4000<	200	21%	Fails - HIGH					200	-100%	Fails		(±15)	45
Nitrobenzene	13.66	14906	208.2000<	200	4%	Acceptable					200	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.05	19542	207.4000<	200	4%	Acceptable					200	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.55	15923	209.2000<	200	5%	Acceptable					200	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.52	17451	208.0000<	200	4%	Acceptable					200	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.92	12194	206.8000<	200	3%	Acceptable					200	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.63	19728	207.8000<	200	4%	Acceptable					200	-100%	Fails		(±15)	45
2-Nitrotoluene	21.55	8595	207.3000<	200	4%	Acceptable					200	-100%	Fails		(±15)	45
4-Nitrotoluene	23.22	10489	210.1000<	200	5%	Acceptable					200	-100%	Fails		(±15)	45
3-Nitrotoluene	24.90	10298	207.2000<	200	4%	Acceptable					200	-100%	Fails		(±15)	45
Nitroglycerin				200	-100%	~~Fails~~ →		14.12	14372	208.9000<	200	4%	Acceptable		(±15)	45
PETN				200	-100%	~~Fails~~ →		26.61	7639	203.8000<	200	2%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.80	21640	213.4000<	200	7%	Acceptable					200	-100%	Fails		(±15)	45
EGDN				200	-100%	~~Fails~~ ND					200	-100%	Fails		(±15)	

RPN 1/31/11

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

Tetryl high - samples ND. See NCM 07-0119645
DR 2-2-11

Printed: 1/28/2011 8:44 AM

TestAmerica West Sacramento

A-000020.D

Chromatography Summary

Injection Date: 1/28/2011 1:52 Operator: RN

DataFile: LC10.\01272011.D\A-000020.D Vial Num: 3

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_05 10GCSV0524 8330 L5 100ng/mL**

Method File: LC10.\01272011.D\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: CAL.sub SpikeList:

Samp. Info: STD_05 10GCSV0524 8330 L5 100ng/mL;2

Misc. Info: ;5; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.98	5643	102.2000<	100	2%	Acceptable		15.98	10520	99.8200	100	0%	Acceptable		(±15)	
HMX	5.21	12806	98.9500<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.36	9181	100.8000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	8.39	17273	214.6000	200	7%	Acceptable		8.39	25636	215.8000<	200	8%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.57	16059	101.4000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.09	15663	101.1000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	13.00	10792	116.2000<	100	16%	Fails					100	-100%	Fails		(±15)	45
Nitrobenzene	13.64	7297	101.9000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.04	9378	99.5400<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.52	7754	101.8000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.50	8486	101.2000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.90	5890	99.8700<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.61	9580	100.9000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	21.53	4226	101.9000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	23.19	5139	102.9000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	24.88	5060	101.8000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	~~Fails~~		14.10	7135	103.7000<	100	4%	Acceptable		(±15)	45
PETN				100	-100%	~~Fails~~		26.61	3812	101.7000<	100	2%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.79	10507	103.6000<	100	4%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails					100	-100%	Fails		(±15)	

OK ± 20%.

NA

Notes:

M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

Printed: 1/28/2011 9:15 AM

TestAmerica West Sacramento

A-000033.D

Chromatography Summary

Injection Date: 1/28/2011 11:37 **Operator:** RN

DataFile: LC10.I\01272011.B\A-000033.D **Vial Num:** 3

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_05 10GCSV0524 8330 L5 100ng/mL**

Method File: LC10.I\01272011.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:** CAL.sub **SpikeList:**

Samp. Info: STD_05 10GCSV0524 8330 L5 100ng/mL;2

Misc. Info: ;5; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.99	5686	103.0000<	100	3%	Acceptable		15.99	10625	100.8000	100	1%	Acceptable		(±15)	
HMX	5.21	12881	99.5300<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.37	9120	100.1000<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	8.40	17342	215.4000	200	8%	Acceptable		8.40	25713	216.5000<	200	8%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.58	16108	101.7000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.10	15785	101.9000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	13.00	10901	117.3000<	100	17%	~~Fails~~ OK ±20%					100	-100%	Fails		(±15)	45
Nitrobenzene	13.65	7039	98.3200<	100	-2%	Acceptable					100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.04	9439	100.2000<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.53	7856	103.2000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.50	8596	102.5000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.90	5937	100.7000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.61	9629	101.4000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	21.54	4041	97.4800<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	23.20	4985	99.8500<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	24.91	4827	97.1100<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	~~Fails~~ ?		14.11	7011	101.9000<	100	2%	Acceptable		(±15)	45
PETN				100	-100%	~~Fails~~ ?		26.61	3989	106.4000<	100	6%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.79	10590	104.4000<	100	4%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails					100	-100%	Fails		(±15)	

RM 2/1/11

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

TestAmerica West Sacramento

A-000040.D

Chromatography Summary

Injection Date: 1/28/2011 17:58 Operator: RN

DataFile: LC10.I\01272011.B\A-000040.D Vial Num: 6

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample: **STD_05 10GCSV0524 8330 L5 100ng/mL**

Method File: LC10.I\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_05 10GCSV0524 8330 L5 100ng/mL;2

Misc. Info: ;5;;;;3;CAL.sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.89	5768	104.5000<	100	5%	Acceptable		15.89	10617	100.7000	100	1%	Acceptable		(±15)	
HMX	5.20	12802	98.9200<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.35	9203	101.0000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	8.38	17327	215.2000	200	8%	Acceptable		8.38	25645	215.9000<	200	8%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.54	16109	101.8000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.05	15689	101.3000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	12.93	11352	122.2000<	100	22%	Fails - HIGH					100	-100%	Fails		(±15)	45
Nitrobenzene	13.59	7292	101.8000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.96	9422	100.0000<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.45	7841	103.0000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.41	8549	101.9000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.80	5920	100.4000<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.50	9584	101.0000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	21.39	4224	101.9000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	23.04	5131	102.8000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	24.70	5068	102.0000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	~~Fails~~		14.03	7087	103.0000<	100	3%	Acceptable		(±15)	45
PETN				100	-100%	~~Fails~~		26.34	4024	107.4000<	100	7%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.75	10802	106.5000<	100	7%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails	NA				100	-100%	Fails		(±15)	

2/3/11

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

Printed: 2/3/2011 10:53 AM

TestAmerica West Sacramento

A-000054.D

Chromatography Summary

Injection Date: 1/29/2011 4:28 Operator: RN

DataFile: LC10.I\01272011.B\A-000054.D Vial Num: 3

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_05 10GCSV0524 8330 L5 100ng/mL**

Method File: LC10.I\01272011.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: CAL-sub SpikeList:

Samp. Info: STD_05 10GCSV0524 8330 L5 100ng/mL;2

Misc. Info: ;5;;;;3;CAL-sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.90	5741	104.0000<	100	4%	Acceptable		15.90	10575	100.3000	100	0%	Acceptable		(±15)	
HMX	5.21	12791	98.8400<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.35	9234	101.4000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	8.39	17256	214.4000	200	7%	Acceptable		8.39	25507	214.8000<	200	7%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.55	16089	101.6000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.06	15685	101.3000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	12.94	11349	122.2000<	100	22%	Fails					100	-100%	Fails		(±15)	45
Nitrobenzene	13.60	7311	102.1000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.97	9410	99.8800<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.45	7839	103.0000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.42	8552	101.9000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.80	5987	101.5000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.51	9619	101.3000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	21.39	4219	101.8000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	23.03	5108	102.3000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	24.70	5048	101.6000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	Fails		14.03	6995	101.6000<	100	2%	Acceptable		(±15)	45
PETN				100	-100%	Fails		26.37	4094	109.2000<	100	9%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.77	10801	106.5000<	100	7%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails					100	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

Printed: 1/31/2011 9:48 AM

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 21

Inst ID: LC10 Batch ID: 01272011
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
27-JAN-2011	11:38	RN	8330 PRIMER	A-000001.	0 g	0 mL	1	
27-JAN-2011	12:23	RN	STD_06 10GCSV0523 8330 L6 200n	A-000002.	0 g	0 mL	1	
27-JAN-2011	13:08	RN	STD_MRL 10GCSV0526 8330 L1 5ng	A-000003.	0 g	0 mL	1	
27-JAN-2011	13:53	RN	STD_MRL 10GCSV0526 8330 L3 20n	A-000004.	0 g	0 mL	1	
27-JAN-2011	14:38	RN	STD_06 10GCSV0523 8330 L6 200n	A-000005.	0 g	0 mL	1	
27-JAN-2011	15:23	RN	STD_MRL 10GCSV0526 8330 L1 5ng	A-000006.	0 g	0 mL	1	2-NT 1
27-JAN-2011	16:08	RN	STD_MRL 10GCSV0526 8330 L3 20n	A-000007.	0 g	0 mL	1	&
27-JAN-2011	16:53	RN	MDNKC1AA 1025149 G1A250000-149	A-000008.	1000 mL	20 mL	1	
27-JAN-2011	17:38	RN	MDNKC1AD 1025149 G1A250000-149	A-000009.	1000 mL	20 mL	1	
27-JAN-2011	18:22	RN	MDNKC1AC 1025149 G1A250000-149	A-000010.	1000 mL	20 mL	1	
27-JAN-2011	19:07	RN	MDHMN1AA 1025149 A1A200403-1 1	A-000011.	1032.99 mL	20 mL	1	RT
27-JAN-2011	19:52	RN	MDHMN1AC 1025149 A1A200403-1 S	A-000012.	1030.83 mL	20 mL	1	RT
27-JAN-2011	20:37	RN	MDHMN1AD 1025149 A1A200403-1 D	A-000013.	1029.83 mL	20 mL	1	
27-JAN-2011	21:22	RN	MDHMP1AA 1025149 A1A200403-2 1	A-000014.	1000.26 mL	20 mL	1	
27-JAN-2011	22:07	RN	MDHMQ1AA 1025149 A1A200403-3 1	A-000015.	1035.54 mL	20 mL	1	E' 2,6-DNT
27-JAN-2011	22:52	RN	MDHMR1AA 1025149 A1A200403-4 1	A-000016.	1013.87 mL	20 mL	1	
27-JAN-2011	23:37	RN	MDHMT1AA 1025149 A1A200403-5 1	A-000017.	1037.29 mL	20 mL	1	
28-JAN-2011	00:22	RN	RESIN QC	A-000018.	0 g	40 mL	~~20.2~~	mm 1/31/11
28-JAN-2011	01:07	RN	RESIN QC	A-000019.	1000 mL	20 mL	1	
28-JAN-2011	01:52	RN	STD_05 10GCSV0524 8330 L5 100n	A-000020.	0 g	0 mL	1	
28-JAN-2011	02:37	RN	STD_MRL 10GCSV0528 8330 L1 5ng	A-000021.	0 g	0 mL	1	
28-JAN-2011	03:22	RN	STD_MRL 10GCSV0526 8330 L3 20n	A-000022.	0 g	0 mL	1	
28-JAN-2011	04:07	RN	MDHMV1AA 1025149 A1A200403-6 1	A-000023.	979.93 mL	20 mL	1	
28-JAN-2011	04:52	RN	MDHMW1AA 1025149 A1A200403-7 1	A-000024.	923.96 mL	20 mL	1	
28-JAN-2011	05:37	RN	MDHMX1AA 1025149 A1A200403-8 1	A-000025.	962.67 mL	20 mL	1	
28-JAN-2011	06:22	RN	MDHMX1AC 1025149 A1A200403-8 S	A-000026.	983.38 mL	20 mL	1	
28-JAN-2011	07:07	RN	MDHMX1AD 1025149 A1A200403-8 D	A-000027.	899.58 mL	20 mL	1	
28-JAN-2011	07:52	RN	MDHMO1AA 1025149 A1A200403-9 1	A-000028.	956.96 mL	20 mL	1	E' 2,6-DNT
28-JAN-2011	08:37	RN	MDHM11AA 1025149 A1A200403-10	A-000029.	999.97 mL	20 mL	1	
28-JAN-2011	09:22	RN	MDHM21AA 1025149 A1A200403-11	A-000030.	967.37 mL	20 mL	1	
28-JAN-2011	10:07	RN	MDHM31AA 1025149 A1A200403-12	A-000031.	933.77 mL	20 mL	1	E' RDX
28-JAN-2011	10:52	RN	MDHM41AA 1025149 A1A200403-13	A-000032.	950.63 mL	20 mL	1	
28-JAN-2011	11:37	RN	STD_05 10GCSV0524 8330 L5 100n	A-000033.	0 g	0 mL	1	
28-JAN-2011	12:23	RN	STD_MRL 10GCSV0528 8330 L1 5ng	A-000034.	0 g	0 mL	1	RDX
28-JAN-2011	13:08	RN	STD_MRL 10GCSV0526 8330 L3 20n	A-000035.	0 g	0 mL	1	PETN 1
28-JAN-2011	13:53	RN	MDHM61AA 1025149 A1A200403-14	A-000036.	1004.09 mL	20 mL	1	
28-JAN-2011	14:38	RN	MDHM71AA 1025149 A1A200403-15	A-000037.	1004.64 mL	20 mL	1	
28-JAN-2011	15:28	RN	MDHM81AA 1025149 A1A200403-16	A-000038.	1038.79 mL	20 mL	1	
28-JAN-2011	17:13	RN	PRIMER	A-000039.	1000 mL	20 mL	1	
28-JAN-2011	17:58	RN	STD_05 10GCSV0524 8330 L5 100n	A-000040.	0 g	0 mL	1	
28-JAN-2011	18:43	RN	STD_MRL 10GCSV0528 8330 L1 5ng	A-000041.	0 g	0 mL	1	RDX, 2-NT 1
28-JAN-2011	19:28	RN	STD_MRL 10GCSV0526 8330 L3 20n	A-000042.	0 g	0 mL	1	PETN
28-JAN-2011	20:13	RN	MDHNA1AA 1025149 A1A200403-17	A-000043.	1036.38 mL	20 mL	1	
28-JAN-2011	20:57	RN	MDNKC1AD 1025149 G1A250000-149	A-000044.	1000 mL	20 mL	1	not needed
28-JAN-2011	21:43	RN	MDHMN1AC 1025149 A1A200403-1 S	A-000045.	1030.83 mL	20 mL	1	
28-JAN-2011	22:28	RN	MDHMN1AD 1025149 A1A200403-1 D	A-000046.	1029.83 mL	20 mL	1	
28-JAN-2011	23:13	RN	MDHMR1AA 1025149 A1A200403-4 1	A-000047.	1013.87 mL	20 mL	1	
28-JAN-2011	23:58	RN	MDHMV1AA 1025149 A1A200403-6 1	A-000048.	979.93 mL	20 mL	1	
29-JAN-2011	00:42	RN	MDHM11AA 1025149 A1A200403-10	A-000049.	999.97 mL	20 mL	1	
29-JAN-2011	01:27	RN	MDHM21AA 1025149 A1A200403-11	A-000050.	967.37 mL	20 mL	1	

Sequence continued on next page

mm 1/31/11

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page 2 of Batch 01272011 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
29-JAN-2011	02:13	RN	MDHMQ2AA 1025149 A1A200403-3 5	A-000051.	1035.54 mL	20 mL	5	
29-JAN-2011	02:58	RN	MDHMO2AA 1025149 A1A200403-9 5	A-000052.	956.96 mL	20 mL	5	
29-JAN-2011	03:43	RN	MDHM32AA 1025149 A1A200403-12	A-000053.	933.77 mL	20 mL	5	
29-JAN-2011	04:28	RN	STD_05 10GCSV0524 8330 L5 100n	A-000054.	0 g	0 mL	1	
29-JAN-2011	05:13	RN	STD_MRL 10GCSV0528 8330 L1 5ng	A-000055.	0 g	0 mL	1	RDX 1
29-JAN-2011	05:58	RN	STD_MRL 10GCSV0526 8330 L3 20n	A-000056.	0 g	0 mL	1	
29-JAN-2011	06:43	RN	MDP3J1AA 1026163 G1A260000-163	A-000057.	1000 mL	20 mL	1	
29-JAN-2011	07:28	RN	MDP3J1AD 1026163 G1A260000-163	A-000058.	1000 mL	20 mL	1	
29-JAN-2011	08:13	RN	MDP3J1AC 1026163 G1A260000-163	A-000059.	1000 mL	20 mL	1	
29-JAN-2011	08:58	RN	MDJPE1AA 1026163 A1A200534-1 1	A-000060.	1034.44 mL	20 mL	1	
29-JAN-2011	09:43	RN	MDJPF1AA 1026163 A1A200534-2 1	A-000061.	1014.31 mL	20 mL	1	
29-JAN-2011	10:28	RN	MDJPG1AA 1026163 A1A200534-3 1	A-000062.	1011.22 mL	20 mL	1	
29-JAN-2011	11:13	RN	MDJPH1AA 1026163 A1A200534-4 1	A-000063.	1020.31 mL	20 mL	1	
29-JAN-2011	11:58	RN	MDJPJ1AA 1026163 A1A200534-5 1	A-000064.	946.47 mL	20 mL	1	
29-JAN-2011	12:43	RN	MDJPK1AA 1026163 A1A200534-6 1	A-000065.	997.56 mL	20 mL	1	
29-JAN-2011	13:28	RN	MDJPL1AA 1026163 A1A200534-7 1	A-000066.	1016.9 mL	20 mL	1	
29-JAN-2011	14:13	RN	MDJPM1AA 1026163 A1A200534-8 1	A-000067.	880.14 mL	20 mL	1	
29-JAN-2011	14:58	RN	MDJPN1AA 1026163 A1A200534-9 1	A-000068.	945.94 mL	20 mL	1	
29-JAN-2011	15:43	RN	STD_05 10GCSV0524 8330 L5 100n	A-000069.	0 g	0 mL	1	
29-JAN-2011	16:28	RN	STD_MRL 10GCSV0528 8330 L1 5ng	A-000070.	0 g	0 mL	1	
29-JAN-2011	17:13	RN	STD_MRL 10GCSV0526 8330 L3 20n	A-000071.	0 g	0 mL	1	
29-JAN-2011	17:57	RN	MDJPP1AA 1026163 A1A200534-10	A-000072.	898.13 mL	20 mL	1	
29-JAN-2011	18:42	RN	MDJPP1AE 1026163 A1A200534-10	A-000073.	892.65 mL	20 mL	1	
29-JAN-2011	19:27	RN	MDJPP1AF 1026163 A1A200534-10	A-000074.	924.7 mL	20 mL	1	
29-JAN-2011	20:12	RN	MDJPQ1AA 1026163 A1A200534-11	A-000075.	905.45 mL	20 mL	1	
29-JAN-2011	20:57	RN	MDJPR1AA 1026163 A1A200534-12	A-000076.	997.1 mL	20 mL	1	
29-JAN-2011	21:42	RN	MDK1H1AA 1026163 A1A210540-1 1	A-000077.	1004.9 mL	20 mL	1	
29-JAN-2011	22:27	RN	MDK1T1AA 1026163 A1A210540-2 1	A-000078.	968.68 mL	20 mL	1	
29-JAN-2011	23:12	RN	MDK1X1AA 1026163 A1A210540-3 1	A-000079.	1033.48 mL	20 mL	1	
29-JAN-2011	23:57	RN	MDK101AA 1026163 A1A210540-4 1	A-000080.	1029.6 mL	20 mL	1	
30-JAN-2011	00:42	RN	STD_05 10GCSV0524 8330 L5 100n	A-000081.	0 g	0 mL	1	
30-JAN-2011	01:27	RN	STD_MRL 10GCSV0528 8330 L1 5ng	A-000082.	0 g	0 mL	1	
30-JAN-2011	02:12	RN	STD_MRL 10GCSV0526 8330 L3 20n	A-000083.	0 g	0 mL	1	
30-JAN-2011	02:57	RN	MDR8L1AA 1027253 G1A270000-253	A-000084.	10 g	80 mL	2	
30-JAN-2011	03:43	RN	MDR8L1AC 1027253 G1A270000-253	A-000085.	10 g	80 mL	2	
30-JAN-2011	04:28	RN	MDLGL1A7 1027253 C1A210600-1 1	A-000086.	10.01 g	80 mL	2	
30-JAN-2011	05:13	RN	MDLGM1AJ 1027253 C1A210600-2 1	A-000087.	10.07 g	80 mL	2	
30-JAN-2011	05:58	RN	MDLGN1AJ 1027253 C1A210600-3 1	A-000088.	10 g	80 mL	2	
30-JAN-2011	06:43	RN	MDLGP1AJ 1027253 C1A210600-4 1	A-000089.	9.95 g	80 mL	2	
30-JAN-2011	07:28	RN	MDLGQ1AJ 1027253 C1A210600-5 1	A-000090.	9.93 g	80 mL	2	
30-JAN-2011	08:13	RN	MDLGR1AJ 1027253 C1A210600-6 1	A-000091.	10.16 g	80 mL	2	
30-JAN-2011	09:58	RN	MDLGT1AJ 1027253 C1A210600-7 1	A-000092.	10.03 g	80 mL	2	
30-JAN-2011	09:43	RN	MDLGV1AJ 1027253 C1A210600-8 1	A-000093.	10.13 g	80 mL	2	
30-JAN-2011	10:28	RN	STD_05 10GCSV0524 8330 L5 100n	A-000094.	0 g	0 mL	1	
30-JAN-2011	11:13	RN	MDLGW1AJ 1027253 C1A210600-9 1	A-000095.	9.96 g	80 mL	2	
30-JAN-2011	11:58	RN	MDLGW1A9 1027253 C1A210600-9 S	A-000096.	10.03 g	80 mL	2	
30-JAN-2011	12:43	RN	MDLGW1CA 1027253 C1A210600-9 D	A-000097.	10.19 g	80 mL	2	
30-JAN-2011	13:28	RN	MDTE71AA 1027307 G1A270000-307	A-000098.	10 g	80 mL	2	
30-JAN-2011	14:13	RN	MDTE71AC 1027307 G1A270000-307	A-000099.	10 g	80 mL	2	

RDT 1/31/11

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC10 Batch ID: 02092011
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
09-FEB-2011	10:48	RN	PRIMER	A-000001.	1000 mL	20 mL	1	
09-FEB-2011	11:34	RN	PRIMER	A-000002.	1000 mL	20 mL	1	
09-FEB-2011	12:19	RN	STD_06 10GCSV0523 8330 200-500	A-000003.	0 g	0 mL	1	
09-FEB-2011	13:04	RN	STD_MRL 11GCSV0086 8330 5-50ng	A-000004.	0 g	0 mL	1	
09-FEB-2011	13:49	RN	MDMF81AE 1024166 G1A240000-166	A-000005.	1000 mL	20 mL	1	
09-FEB-2011	14:34	RN	MDMF81AG 1024166 G1A240000-166	A-000006.	1000 mL	20 mL	1	
09-FEB-2011	15:19	RN	MDMF81AF 1024166 G1A240000-166	A-000007.	1000 mL	20 mL	1	
09-FEB-2011	16:04	RN	MDF5J2AA 1024166 A1A190406-1 R	A-000008.	1034.57 mL	20 mL	1	
09-FEB-2011	16:49	RN	MDF5P2AA 1024166 A1A190406-2 R	A-000009.	1022.69 mL	20 mL	1	
09-FEB-2011	17:35	RN	MDF5Q2AA 1024166 A1A190406-3 R	A-000010.	1015.74 mL	20 mL	1	
09-FEB-2011	18:20	RN	MDF5R2AA 1024166 A1A190406-4 R	A-000011.	1036.8 mL	20 mL	1	
09-FEB-2011	19:05	RN	MDF5T2AA 1024166 A1A190406-5 R	A-000012.	1021.47 mL	20 mL	1	
09-FEB-2011	19:50	RN	MDAV01AA 1018138 G1A130497-29	A-000013.	1000 mL	20 mL	2	
09-FEB-2011	20:35	RN	STD_05 10GCSV0524 8330 100-250	A-000014.	0 g	0 mL	1	
09-FEB-2011	21:20	RN	STD_MRL 11GCSV0086 8330 5-50ng	A-000015.	0 g	0 mL	1	
09-FEB-2011	22:05	RN	MDNKC1AE 1025149 G1A250000-149	A-000016.	1000 mL	20 mL	1	
09-FEB-2011	22:50	RN	MDNKC1AG 1025149 G1A250000-149	A-000017.	1000 mL	20 mL	1	
09-FEB-2011	23:35	RN	MDNKC1AF 1025149 G1A250000-149	A-000018.	1000 mL	20 mL	1	
10-FEB-2011	00:20	RN	MDHMN2AA 1025149 A1A200403-1 R	A-000019.	1032.99 mL	20 mL	1	
10-FEB-2011	01:05	RN	MDHMN1AL 1025149 A1A200403-1 S	A-000020.	1030.83 mL	20 mL	1	
10-FEB-2011	01:50	RN	MDHMN1AM 1025149 A1A200403-1 D	A-000021.	1029.83 mL	20 mL	1	
10-FEB-2011	02:35	RN	MDHMP2AA 1025149 A1A200403-2 R	A-000022.	1000.26 mL	20 mL	1	
10-FEB-2011	03:20	RN	MDHMQ3AA 1025149 A1A200403-3 R	A-000023.	1035.54 mL	20 mL	1	
10-FEB-2011	04:05	RN	MDHMR2AA 1025149 A1A200403-4 R	A-000024.	1013.87 mL	20 mL	1	
10-FEB-2011	04:50	RN	MDHMT2AA 1025149 A1A200403-5 R	A-000025.	1037.29 mL	20 mL	1	
10-FEB-2011	05:35	RN	STD_05 10GCSV0524 8330 100-250	A-000026.	0 g	0 mL	1	
10-FEB-2011	06:20	RN	STD_MRL 11GCSV0086 8330 5-50ng	A-000027.	0 g	0 mL	1	
10-FEB-2011	07:05	RN	MDHMV2AA 1025149 A1A200403-6 R	A-000028.	979.93 mL	20 mL	1	
10-FEB-2011	07:51	RN	MDHMW2AA 1025149 A1A200403-7 R	A-000029.	923.96 mL	20 mL	1	
10-FEB-2011	08:36	RN	MDHMX2AA 1025149 A1A200403-8 R	A-000030.	962.67 mL	20 mL	1	
10-FEB-2011	09:21	RN	MDHMX1AN 1025149 A1A200403-8 S	A-000031.	983.38 mL	20 mL	1	
10-FEB-2011	10:06	RN	MDHMX1AP 1025149 A1A200403-8 D	A-000032.	899.58 mL	20 mL	1	
10-FEB-2011	10:51	RN	MDHM03AA 1025149 A1A200403-9 R	A-000033.	956.96 mL	20 mL	1	
10-FEB-2011	11:36	RN	MDHM12AA 1025149 A1A200403-10	A-000034.	999.97 mL	20 mL	1	
10-FEB-2011	12:21	RN	MDHM22AA 1025149 A1A200403-11	A-000035.	967.37 mL	20 mL	1	
10-FEB-2011	13:06	RN	MDHM33AA 1025149 A1A200403-12	A-000036.	933.77 mL	20 mL	1	
10-FEB-2011	13:51	RN	MDHM42AA 1025149 A1A200403-13	A-000037.	950.63 mL	20 mL	1	
10-FEB-2011	14:36	RN	STD_05 10GCSV0524 8330 100-250	A-000038.	0 g	0 mL	1	
10-FEB-2011	15:22	RN	STD_MRL 11GCSV0086 8330 5-50ng	A-000039.	0 g	0 mL	1	
10-FEB-2011	16:07	RN	MDHM62AA 1025149 A1A200403-14	A-000040.	1004.09 mL	20 mL	1	
10-FEB-2011	16:52	RN	MDHM72AA 1025149 A1A200403-15	A-000041.	1004.64 mL	20 mL	1	
10-FEB-2011	17:37	RN	MDHM82AA 1025149 A1A200403-16	A-000042.	1038.79 mL	20 mL	1	
10-FEB-2011	18:22	RN	MDHNA2AA 1025149 A1A200403-17	A-000043.	1036.38 mL	20 mL	1	
10-FEB-2011	19:07	RN	MDP3J1AE 1026163 G1A260000-163	A-000044.	1000 mL	20 mL	1	
10-FEB-2011	19:52	RN	MDP3J1AG 1026163 G1A260000-163	A-000045.	1000 mL	20 mL	1	
10-FEB-2011	20:37	RN	MDP3J1AF 1026163 G1A260000-163	A-000046.	1000 mL	20 mL	1	
10-FEB-2011	21:22	RN	MDJPB2AA 1026163 A1A200534-1 R	A-000047.	1034.44 mL	20 mL	1	
10-FEB-2011	22:07	RN	MDJPF2AA 1026163 A1A200534-2 R	A-000048.	1014.31 mL	20 mL	1	
10-FEB-2011	22:52	RN	MDJPG2AA 1026163 A1A200534-3 R	A-000049.	1011.22 mL	20 mL	1	
10-FEB-2011	23:37	RN	STD_05 10GCSV0524 8330 100-250	A-000050.	0 g	0 mL	1	

Sequence continued on next page

printed before end of Sequence

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC11 Batch ID: 02012011
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
01-FEB-2011	09:10	RN	PRIMER	M-000001.	0 g	0 mL	1	
01-FEB-2011	10:16	RN	PRIMER	M-000002.	0 g	0 mL	1	
01-FEB-2011	11:19	RN	STD_06 10GCSV0523 8330 200-500	M-000003.	0 g	0 mL	1	
01-FEB-2011	12:22	RN	STD_MRL 10GCSV0528 8330 5ng/mL	M-000004.	0 g	0 mL	1	
01-FEB-2011	13:26	RN	STD_MRL 10GCSV0526 8330 20ng/m	M-000005.	0 g	0 mL	1	
01-FEB-2011	14:29	RN	MDHMN1AC 1025149 A1A200403-1S	M-000006.	1030.83 mL	20 mL	1	
01-FEB-2011	15:33	RN	MDHMN1AD 1025149 A1A200403-1D	M-000007.	1029.83 mL	20 mL	1	
01-FEB-2011	16:36	RN	STD_05 10GCSV0524 8330 100-250	M-000008.	0 g	0 mL	1	
01-FEB-2011	17:40	RN	STD_MRL 10GCSV0528 8330 5ng/mL	M-000009.	0 g	0 mL	1	
01-FEB-2011	18:43	RN	STD_MRL 10GCSV0526 8330 20ng/m	M-000010.	0 g	0 mL	1	

TestAmerica West Sacramento

A-000028.D

Chromatography Summary

Injection Date: 1/28/2011 7:52 Operator: RN

DataFile: LC10.I\01272011.B\A-000028.D , Vial Num: 26

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **MDHM01AA 1025149 A1A200403-9 1X**

Method File: LC10.I\01272011.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	20 mL	956.96 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDHM01AA 1025149 A1A200403-9 1X;0;

Misc. Info: ;;956.96;;20;1;WATER.sub;;0;1;MDHM01AA

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene											0.0000	0.00	
HMX	5.22	0.003	11414	1.8430<	conf						0.0282	0.10	45
RDX	7.41	0.053	48939	11.2300<	conf. Pbr						0.0679	0.10	45
Picric ACID											0.1306	1.04	
1,3,5-Trinitrobenzene	9.59	0.016	188928	24.9400<	O see SX						0.0324	0.10	45
1,3-Dinitrobenzene	11.94	-0.157	2998	0.4046<	ND						0.0522	0.10	45
TETRYL											0.0522	0.10	
Nitrobenzene	13.73	0.083	873	0.2548<	conf. Pbr						0.0522	0.10	45
2,4,6-Trinitrotoluene	15.06	0.019	314484	69.7600<	O see SX						0.0251	0.10	45
4-AM-2,6-DNT	15.55	0.023	117775	32.3300<	O see SX						0.0230	0.10	45
2-AM-4,6-DNT	16.52	0.053	37140	9.2530<	conf.						0.1045	0.21	45
2,6-Dinitrotoluene	17.97	0.056	1300	0.4607<	not conf.						0.0522	0.10	45
2,4-Dinitrotoluene	18.60	-0.017	261	0.0575<	(J)						0.0522	0.10	45
2-Nitrotoluene											0.0752	0.52	
4-Nitrotoluene											0.0752	0.52	
3-Nitrotoluene	24.98	0.086	863	0.3629<	(J)						0.0648	0.52	45
Nitroglycerin											0.3448	0.68	
PETN											0.3135	0.68	
3,5-Dinitroaniline	12.81	0.023	2947	0.6074<	NA						0.0261	1.04	45

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.6124		0 matrix	2.6124		0	(79-111)

PETN Not confirmed on CN

Data 2-3-11

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

Reported Surrogate from cyano column due to high analyte masking on primary C18 column.

DA 2-2-2011.

Printed: 1/28/2011 10:10 AM

TestAmerica West Sacramento

C-000037.D

Chromatography Summary

Injection Date: 1/29/2011 3:05 Operator: RN

DataFile: LC12 B\01272011.B\C-000037.D Vial Num: 21

Instrument ID: LC12

Method 8330 Target Analyte Results

Sample: **MDHM01AA 1025149 A1A200403-9 1X**

Method File: LC12.B\01272011.B\8330CNAB.M

Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	956.96 mL	0 g

Matrix: WATER SubList: WATER sub SpikeList:

Samp. Info: MDHM01AA 1025149 A1A200403-9 1X;0,

Misc. Info: ;;956.96;;20;1;WATER sub;;0;1;MDHM01AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.30	-0.008	7100	2.5610<							0.0000	0.00	45
HMX	43.07	-0.021	4974	1.4940<	conf.						0.0282	0.10	45
RDX	33.12	-0.031	12718	5.9410<	conf. PD.						0.0679	0.10	45
Picric ACID											0.1306	1.04	
1,3,5-Trinitrobenzene	29.27	0.162	111332	28.9600<	O see SX						0.0324	0.10	45
1,3-Dinitrobenzene											0.0522	0.10	
TETRYL											0.0522	0.10	
Nitrobenzene	22.81	0.139	233	0.0983<	conf. PD.						0.0522	0.10	45
2,4,6-Trinitrotoluene	41.60	-0.004	306480	63.7400<	O see SX						0.0251	0.10	45
4-AM-2,6-DNT	37.86	-0.017	107962	27.9900<	O						0.0230	0.10	45
2-AM-4,6-DNT	37.35	-0.004	33860	7.9090<	conf.						0.1045	0.21	45
2,6-Dinitrotoluene	34.88	-0.214	1622	0.6657<	conf. ND						0.0522	0.10	45
2,4-Dinitrotoluene	33.81	-0.251	5788	1.4350<	PDMS 2/1/11						0.0522	0.10	45
2-Nitrotoluene											0.0752	0.52	
4-Nitrotoluene											0.0752	0.52	
3-Nitrotoluene											0.0648	0.52	
Nitroglycerin											0.3448	0.68	
PETN						53.14	-0.174	16003	2.2600<	ND	0.3135	0.68	45
3,5-Dinitroaniline	32.42	0.026	2529	0.7052<							0.0261	1.04	45

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.6124	2.5610	98	✓	2.6124		0	(48-143)

Notes. M = Manually Integrated — Signals Differ by More Than 40%

D = Operator Disabled Result — Signals Differ by More Than 50%

O = Over Calibration Range

Reporting surrogate from this column —
High analyte masking on primary C18 column.
DRL 2-2-2011

Printed: 1/31/2011 10:53 AM

TestAmerica West Sacramento

A-000053.D

Chromatography Summary

Injection Date: 1/29/2011 3:43 Operator: RN

DataFile: LC10.I\01272011.B\A-000053.D Vial Num: 37

Instrument ID: LC10

Method 8330 Target Analyte Results

Method File: LC10.I\01272011.B\8330AB.M

Sample : **MDHM32AA 1025149 A1A200403-12 5X**

Start Cal Date: 1/9/2011 2:11 End Cal Date: 1/9/2011 7:27

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
5X	20 mL	933.77 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDHM32AA 1025149 A1A200403-12 5X;0;

Misc. Info: ;;933.77;;20;1;WATER.sub;;0;5;MDHM32AA

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	16.00	0.110	1285	2.4930<		15.97	0.059	2427	2.4660		0.0000	0.00	
HMX	5.24	0.026	8919	7.3800<	see X conf.						0.1446	0.54	45
RDX	7.42	0.066	25001	29.4000<							0.3481	0.54	45
Picric ACID											0.6693	5.35	
1,3,5-Trinitrobenzene											0.1660	0.54	
1,3-Dinitrobenzene											0.2677	0.54	
TETRYL											0.2677	0.54	
Nitrobenzene											0.2677	0.54	
2,4,6-Trinitrotoluene											0.1285	0.54	
4-AM-2,6-DNT											0.1178	0.54	
2-AM-4,6-DNT											0.5355	1.07	
2,6-Dinitrotoluene											0.2677	0.54	
2,4-Dinitrotoluene											0.2677	0.54	
2-Nitrotoluene											0.3855	2.68	
4-Nitrotoluene											0.3855	2.68	
3-Nitrotoluene											0.3320	2.68	
Nitroglycerin											1.7670	3.48	
PETN											1.6064	3.48	
3,5-Dinitroaniline											0.1339	5.35	

rpm 2/1/11

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.6773	2.4930	93		2.6773	2.4660	92	(79-111)

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

Printed: 1/31/2011 9:05 AM

TestAmerica West Sacramento

C-000051.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 1/29/2011 18:26 Operator: RN
DataFile: LC12.R01272011.B\C-000051.D Vial Num: 63
Instrument ID: LC12

Sample: **MDHM32AA 1025149 A1A200403-12 5X**

Method File: LC12.R01272011.B\8330CNAB.M
Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
5X	20 mL	933.77 mL	0 g

Matrix: WATER SubList: WATER sub SpikeList:
Samp. Info: MDHM32AA 1025149 A1A200403-12 5X;0;
Misc. Info: ;;933 77,,20;1;WATER sub;,0;5,MDHM32AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.27	0.036	1338	2.4730<							0.0000	0.00	45
HMX	43.03	0.006	4420	6.8020<							0.1446	0.54	45
RDX	33.11	0.076	11636	27.8500<	conf.						0.3481	0.54	45
Picric ACID											0.6693	5.35	
1,3,5-Trinitrobenzene	29.02	-0.011	465	0.6197<							0.1660	0.54	45
1,3-Dinitrobenzene											0.2677	0.54	
TETRYL											0.2677	0.54	
Nitrobenzene											0.2677	0.54	
2,4,6-Trinitrotoluene											0.1285	0.54	
4-AM-2,6-DNT											0.1178	0.54	
2-AM-4,6-DNT											0.5355	1.07	
2,6-Dinitrotoluene											0.2677	0.54	
2,4-Dinitrotoluene											0.2677	0.54	
2-Nitrotoluene											0.3855	2.68	
4-Nitrotoluene											0.3855	2.68	
3-Nitrotoluene											0.3320	2.68	
Nitroglycerin											1.7670	3.48	
PETN											1.6064	3.48	
3,5-Dinitroaniline											0.1339	5.35	

BM 2/1/11

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.6773	2.4730	92		2.6773		0	(48-143)

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: 1/31/2011 11:04 AM

TestAmerica West Sacramento

A-000052.D

Chromatography Summary

Injection Date: 1/29/2011 2:58 Operator: RN

DataFile: LC10.D\01272011.B\A-000052.D Vial Num: 36

Method 8330 Target Analyte Results

Instrument ID: LC10

Sample : **MDHM02AA 1025149 A1A200403-9 5X**

Method File: LC10.D\01272011.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
5X	20 mL	956.96 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDHM02AA 1025149 A1A200403-9 5X;0;

Misc. Info: ;;956.96;;20;1;WATER.sub;;0;5;MDHM02AA

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene											0.0000	0.00	
HMX	5.24	0.026	2034	1.6420<							0.1411	0.52	45
RDX	7.49	0.132	9361	10.7400<							0.3396	0.52	45
Picric ACID											0.6531	5.22	
1,3,5-Trinitrobenzene	9.61	0.059	39763	26.2500<							0.1620	0.52	45
1,3-Dinitrobenzene	12.02	-0.038	699	0.4717<							0.2612	0.52	45
TETRYL	12.86	-0.078	674	0.7581<							0.2612	0.52	45
Nitrobenzene											0.2612	0.52	
2,4,6-Trinitrotoluene	15.05	0.079	62127	68.9100<							0.1254	0.52	45
4-AM-2,6-DNT	15.56	0.112	23181	31.8200<							0.1149	0.52	45
2-AM-4,6-DNT	16.53	0.109	7330	9.1310<							0.5225	1.04	45
2,6-Dinitrotoluene	17.65	-0.131	190	0.3367<							0.2612	0.52	45
2,4-Dinitrotoluene											0.2612	0.52	
2-Nitrotoluene											0.3762	2.61	
4-Nitrotoluene											0.3762	2.61	
3-Nitrotoluene											0.3239	2.61	
Nitroglycerin											1.7242	3.40	
PETN											1.5675	3.40	
3,5-Dinitroaniline											0.1306	5.22	

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.6124		0	2.6124		0	(79-111)

Masked by high level in sample - reported from confirmation

Notes:

M = Manually Integrated

D = Operator Disabled Result

O = Over Calibration Range

< = Primary Value

4 = Signals Differ by More Than 40%

5 = Signals Differ by More Than 50%

TestAmerica West Sacramento

C-000050.D

Chromatography Summary

Injection Date: 1/29/2011 17:21 Operator: RN

DataFile: LC12.B\01272011.B\C-000050.D Vial Num: 62

Instrument ID: LC12

Method 8330 Target Analyte Results

Sample: **MDHM02AA 1025149 A1A200403-9 5X**

Method File: LC12 B\01272011.B\8330CNAB M

Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0 30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
5X	20 mL	956.96 mL	0 g

Matrix: WATER SubList: WATER sub SpikeList:

Samp. Info: MDHM02AA 1025149 A1A200403-9 5X;0;

Misc. Info: ;,956.96;;20;1,WATER.sub;;0;5;MDHM02AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.25	0.017	1316	2.3730<							0.0000	0.00	45
HMX	43.03	0.000	981	1.4730<							0.1411	0.52	45
RDX	33.10	0.060	2636	6.1560<							0.3396	0.52	45
Picric ACID											0 6531	5.22	
1,3,5-Trinitrobenzene	29.12	0.090	20812	27.0600<	conf.						0.1620	0.52	45
1,3-Dinitrobenzene											0 2612	0.52	
TETRYL											0 2612	0.52	
Nitrobenzene											0.2612	0.52	
2,4,6-Trinitrotoluene	41.53	0.013	60408	62.8200<	conf.						0.1254	0.52	45
4-AM-2,6-DNT	37.79	0.027	21398	27.7400<							0.1149	0.52	45
2-AM-4,6-DNT	37.29	0.050	6716	7.8440<							0.5225	1.04	45
2,6-Dinitrotoluene	34.81	-0.170	319	0.6546<							0.2612	0.52	45
2,4-Dinitrotoluene	33.77	-0.207	1140	1.4130<							0.2612	0.52	45
2-Nitrotoluene											0.3762	2.61	
4-Nitrotoluene											0 3762	2.61	
3-Nitrotoluene											0.3239	2.61	
Nitroglycerin											1 7242	3.40	
PETN						53.07	-0.200	3132	2 2010<		1.5675	3 40	45
3,5-Dinitroaniline	32.38	0 067	511	0.7124<							0.1306	5 22	45

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.6124	2.3730	91	- reported due to high level masking on primary column DBL 2-2-11	2.6124		0	(48-143)

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: 1/31/2011 11:04 AM

TestAmerica West Sacramento

A-000051.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 1/29/2011 2:13 Operator: RN
DataFile: LC10.B\01272011.B\A-000051.D Vial Num: 35
Instrument ID: LC10

Sample: **MDHMQ2AA 1025149 A1A200403-3 5X**

Method File: LC10.B\01272011.B\8330AB.M
Start Cal Date: 1/9/2011 2:11 End Cal Date: 1/9/2011 7:27

Matrix: WATER SubList: WATER.sub SpikeList:
Samp. Info: MDHMQ2AA 1025149 A1A200403-3 5X;0;
Misc. Info: ;;1035.54;;20;1;WATER.sub;;0;5;MDHMQ2AA

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
5X	20 mL	1035.54 mL	0 g

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene											0.0000	0.00	
HMX	5.28	0.068	1089	0.8126<	see 1X						0.1304	0.48	45
RDX											0.3138	0.48	
Picric ACID											0.6036	4.83	
1,3,5-Trinitrobenzene											0.1497	0.48	
1,3-Dinitrobenzene											0.2414	0.48	
TETRYL											0.2414	0.48	
Nitrobenzene											0.2414	0.48	
2,4,6-Trinitrotoluene	15.04	0.068	43359	44.4400<	confirm						0.1159	0.48	45
4-AM-2,6-DNT	15.54	0.094	30460	38.6400<							0.1062	0.48	45
2-AM-4,6-DNT	16.51	0.088	21070	24.2500<							0.4828	0.97	45
2,6-Dinitrotoluene											0.2414	0.48	
2,4-Dinitrotoluene	18.57	0.068	339	0.3448<	see 1X						0.2414	0.48	45
2-Nitrotoluene											0.3476	2.41	
4-Nitrotoluene											0.3476	2.41	
3-Nitrotoluene											0.2994	2.41	
Nitroglycerin											1.5934	3.14	
PETN											1.4485	3.14	
3,5-Dinitroaniline	12.84	0.084	1257	1.1970<	NA						0.1207	4.83	45

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4142		0	Masked by high level in sample. See Confirmation.	2.4142		0	(79-111)

1/31/11 2-2-11

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

TestAmerica West Sacramento

C-000049.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 1/29/2011 16:15 Operator: RN
DataFile: LC12.R\01272011.B\C-000049.D Vial Num: 61
Instrument ID: LC12

Sample : **MDHMQ2AA 1025149 A1A200403-3 5X**

Method File: LC12.R\01272011.B\8330CNAB.M
Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
5X	20 mL	1035.54 mL	0 g

Matrix: WATER SubList: WATER sub SpikeList:
Samp. Info: MDHMQ2AA 1025149 A1A200403-3 5X;0;
Misc. Info: ;;1035.54,;20;1;WATER.sub;,0,5,MDHMQ2AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.24	0.000	1362	2.2700<							0.0000	0.00	45
HMX											0.1304	0.48	
RDX	33.06	0.020	245	0.5188<							0.3138	0.48	45
Picric ACID											0.6036	4.83	
1,3,5-Trinitrobenzene											0.1497	0.48	
1,3-Dinitrobenzene											0.2414	0.48	
TETRYL											0.2414	0.48	
Nitrobenzene											0.2414	0.48	
2,4,6-Trinitrotoluene	41.51	-0.003	42306	40.6600<							0.1159	0.48	45
4-AM-2,6-DNT	37.77	0.013	28936	34.6700<							0.1062	0.48	45
2-AM-4,6-DNT	37.27	0.027	20771	22.4200<							0.4828	0.97	45
2,6-Dinitrotoluene											0.2414	0.48	
2,4-Dinitrotoluene	33.99	0.013	298	0.3414<							0.2414	0.48	45
2-Nitrotoluene											0.3476	2.41	
4-Nitrotoluene											0.3476	2.41	
3-Nitrotoluene											0.2994	2.41	
Nitroglycerin											1.5934	3.14	
PETN											1.4485	3.14	
3,5-Dinitroaniline	32.36	0.047	980	1.2630<							0.1207	4.83	45

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4142	2.2700	94	✓	2.4142		0	(48-143)

Reported surrogate from this column due to high level on primary column

Notes: M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range

Signals Differ by More Than 40%
Signals Differ by More Than 50%

2-2-11

Printed: 1/31/2011 11:04 AM

TestAmerica West Sacramento

A-000015.D

Chromatography Summary

Injection Date: 1/27/2011 22:07 Operator: RN

DataFile: LC10.D\01272011.B\A-000015.D Vial Num: 18

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **MDHMQ1AA 1025149 A1A200403-3 1X**

Method File: LC10.D\01272011.D\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	20 mL	1035.54 mL	0 g

Matrix: WATER SubList: WATER sub SpikeList:

Samp. Info: MDHMQ1AA 1025149 A1A200403-3 1X;0;

Misc. Info: ;;1035.54;;20;1;WATER.sub;;0,1;MDHMQ1AA

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene											0.0000	0.00	
HMX	5.22	0.000	4260	0.6357<	not conf.						0.0261	0.10	45
RDX	7.39	0.021	2056	0.4360<	conf.						0.0628	0.10	45
Picric ACID											0.1207	0.97	
1,3,5-Trinitrobenzene											0.0299	0.10	
1,3-Dinitrobenzene	12.13	0.037	683	0.0852<	(J)						0.0483	0.10	45
TETRYL											0.0483	0.10	
Nitrobenzene	13.76	0.124	623	0.1681<	not conf.						0.0483	0.10	45
2,4,6-Trinitrotoluene	15.08	0.031	211393	43.3300<	O						0.0232	0.10	45
4-AM-2,6-DNT	15.58	0.067	147164	37.3300<	O						0.0212	0.10	45
2-AM-4,6-DNT	16.56	0.057	101311	23.3200<	O						0.0966	0.19	45
2,6-Dinitrotoluene	17.95	0.037	440	0.1441<	see 5x						0.0483	0.10	45
2,4-Dinitrotoluene	18.68	0.081	1473	0.2997<	conf.						0.0483	0.10	45
2-Nitrotoluene											0.0595	0.48	
4-Nitrotoluene											0.0595	0.48	
3-Nitrotoluene											0.0599	0.48	
Nitroglycerin											0.3187	0.63	
PETN											0.2897	0.63	
3,5-Dinitroaniline	12.83	0.037	5738	1.0930<	NA						0.0241	0.97	45

AM 2/1/11

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4142		0 matrix.	2.4142		0	(79-111)

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

Surrogate - masked by high analytes. See NCM - result taken from CN column. DEL 2-2-11 DH 2-2-11

TestAmerica West Sacramento

C-000028.D

Chromatography Summary

Injection Date: 1/28/2011 17:12 Operator: RN

DataFile: LC12.B\01272011.B\C-000028.D Vial Num: 15

Instrument ID: LC12

Method 8330 Target Analyte Results

Sample: **MDHMQ1AA 1025149 A1A200403-3 1X**

Method File: LC12 B\01272011.B\8330CNAB.M

Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	1035.54 mL	0 g

Matrix: WATER SubList: WATER sub SpikeList:

Samp. Info: MDHMQ1AA 1025149 A1A200403-3 1X,0;

Misc. Info: ;;1035.54,,20;1;WATER sub,,0,1;MDHMQ1AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.31	-0.034	7087	2.3620<							0.0000	0.00	45
HMX				– Not confirmed							0.0261	0.10	
RDX	33.13	-0.034	889	0.3837<	Conf.						0.0628	0.10	45
Picric ACID											0.1207	0.97	
1,3,5-Trinitrobenzene	29.10	-0.017	295	0.0709<							0.0299	0.10	45
1,3-Dinitrobenzene											0.0483	0.10	
TETRYL											0.0483	0.10	
Nitrobenzene	– not confirmed										0.0483	0.10	
2,4,6-Trinitrotoluene	41.60	-0.028	207353	39.8500<	O						0.0232	0.10	45
4-AM-2,6-DNT	37.87	-0.027	141307	33.8600<	O						0.0212	0.10	45
2-AM-4,6-DNT	37.37	-0.008	100508	21.6900<	O						0.0966	0.19	45
2,6-Dinitrotoluene	35.02	-0.121	387	0.1468<							0.0483	0.10	45
2,4-Dinitrotoluene	34.06	-0.034	1347	0.3087<	Conf.						0.0483	0.10	45
2-Nitrotoluene											0.0695	0.48	
4-Nitrotoluene											0.0695	0.48	
3-Nitrotoluene											0.0599	0.48	
Nitroglycerin											0.3187	0.63	
PETN											0.2897	0.63	
3,5-Dinitroaniline	32.40	-0.018	4409	1.1360<							0.0241	0.97	45

PM 2/1/11

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4142	2.3620	98	✓	2.4142		0	(48-143)

Notes:

M = Manually Integrated

D = Operator Disabled Result

O = Over Calibration Range

Signals Differ by More Than 40%

Signals Differ by More Than 50%

Surrogate reported from this column due to Analyte masking on primary column. DCH 2-2-2011

Printed: 1/31/2011 10:44 AM

TestAmerica West Sacramento

A-000031.D

Chromatography Summary

Injection Date: 1/28/2011 10:07 Operator: RN

DataFile: LC10.I\01272011.B\A-000031.D Vial Num: 29

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample: **MDHM31AA 1025149 A1A200403-12 1X**

Method File: LC10.I\01272011.B\8330AB.M

Start Cal Date: 1/9/2011 2:11 End Cal Date: 1/9/2011 7:27

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDHM31AA 1025149 A1A200403-12 1X;0;

Misc. Info: ;;933.77;;20;1;WATER sub;;0;1;MDHM31AA

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	933.77 mL	0 g

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	16.00	0.095	6550	2.5410<		16.00	0.095	12499	2.5400		0.0000	0.00	
HMX	5.22	0.015	45478	7.5270<	conf						0.0289	0.11	45
RDX	7.38	0.039	114610	26.9500<	ose 5 x						0.0696	0.11	45
Picric ACID											0.1339	1.07	
1,3,5-Trinitrobenzene											0.0332	0.11	
1,3-Dinitrobenzene											0.0535	0.11	
TETRYL											0.0535	0.11	
Nitrobenzene											0.0535	0.11	
2,4,6-Trinitrotoluene											0.0257	0.11	
4-AM-2,6-DNT											0.0236	0.11	
2-AM-4,6-DNT											0.1071	0.21	
2,6-Dinitrotoluene											0.0535	0.11	
2,4-Dinitrotoluene											0.0535	0.11	
2-Nitrotoluene											0.0771	0.54	
4-Nitrotoluene											0.0771	0.54	
3-Nitrotoluene											0.0664	0.54	
Nitroglycerin											0.3534	0.70	
PETN											0.3213	0.70	
3,5-Dinitroaniline											0.0268	1.07	

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.6773	2.5410	95		2.6773	2.5400	95	(79-111)

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

TestAmerica West Sacramento

C-000040.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 1/29/2011 6:22 Operator: RN
DataFile: LC12.I\01272011.B\C-000040.D Vial Num: 24
Instrument ID: LC12

Sample : **MDHM31AA 1025149 A1A200403-12 1X**

Method File: LC12.I\01272011.B\8330CNAB.M
Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	933.77 mL	0 g

Matrix: WATER SubList: WATER sub SpikeList:
Samp. Info: MDHM31AA 1025149 A1A200403-12 1X;0;
Misc. Info: ;,933.77;;20,1;WATER sub;;0,1;MDHM31AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.31	-0.001	6612	2.4440<							0.0000	0.00	45
HMX	43.07	-0.021	22479	6.9180<	conf.						0.0289	0.11	45
RDX	33.13	-0.018	55527	26.5800<	osesx						0.0696	0.11	45
Picric ACID											0.1339	1.07	
1,3,5-Trinitrobenzene	29.02	-0.085	2076	0.5533<							0.0332	0.11	45
1,3-Dinitrobenzene	26.14	0.115	290	0.0600<							0.0535	0.11	45
TETRYL											0.0535	0.11	
Nitrobenzene											0.0535	0.11	
2,4,6-Trinitrotoluene											0.0257	0.11	
4-AM-2,6-DNT											0.0236	0.11	
2-AM-4,6-DNT											0.1071	0.21	
2,6-Dinitrotoluene	35.14	0.039	265	0.1115<							0.0535	0.11	45
2,4-Dinitrotoluene											0.0535	0.11	
2-Nitrotoluene											0.0771	0.54	
4-Nitrotoluene											0.0771	0.54	
3-Nitrotoluene											0.0664	0.54	
Nitroglycerin											0.3534	0.70	
PETN											0.3213	0.70	
3,5-Dinitroaniline											0.0268	1.07	

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.6773	2.4440	91	2.6773		0	(48-143)

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: 1/31/2011 10:54 AM

TestAmerica West Sacramento

C-000046.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 1/29/2011 12:57 Operator: RN
DataFile: LC12.I\01272011.B\C-000046.D Vial Num: 27
Instrument ID: LC12

Sample: **MDHM71AA 1025149 A1A200403-15 1X**

Method File: LC12.I\01272011.B\8330CNAB.M
Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	1004.64 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:
Samp. Info: MDHM71AA 1025149 A1A200403-15 1X;0;
Misc. Info: ;,1004.64,,20;1;WATER sub;;0;1;MDHM71AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.27	0.031	7118	2.4460<							0.0000	0.00	45
HMX	43.05	0.021	597	0.1708<	conf PAM 2/1/11						0.0269	0.10	45
RDX	33.09	0.047	3513	1.5630<	conf.						0.0647	0.10	45
Picric ACID											0.1244	1.00	
1,3,5-Trinitrobenzene	29.04	0.011	561	0.1390<	conf.						0.0309	0.10	45
1,3-Dinitrobenzene											0.0498	0.10	
TETRYL											0.0498	0.10	
Nitrobenzene											0.0498	0.10	
2,4,6-Trinitrotoluene	41.55	0.028	767	0.1520<	conf. PAM 2/1/11						0.0239	0.10	45
4-AM-2,6-DNT	37.81	0.047	2702	0.6673<							0.0219	0.10	45
2-AM-4,6-DNT	37.30	0.051	2202	0.4899<							0.0995	0.20	45
2,6-Dinitrotoluene											0.0498	0.10	
2,4-Dinitrotoluene	33.86	-0.116	615	0.1453<							0.0498	0.10	45
2-Nitrotoluene											0.0717	0.50	
4-Nitrotoluene											0.0717	0.50	
3-Nitrotoluene											0.0617	0.50	
Nitroglycerin											0.3285	0.65	
PETN											0.2986	0.65	
3,5-Dinitroaniline	32.35	0.038	2004	0.5323<							0.0249	1.00	45

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4885	2.4460	98	2.4885		0	(48-143)

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

C-000047.D

Chromatography Summary

Method 8330 Target Analyte Results

Injection Date: 1/29/2011 14:03 Operator: RN
DataFile: LC12.B\01272011.B\C-000047.D Vial Num: 28
Instrument ID: LC12

Sample : **MDHM81AA 1025149 A1A200403-16 1X**

Method File: LC12 B\01272011.B\8330CNAB M
Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	1038.79 mL	0 g

Matrix: WATER SubList: WATER sub SpikeList:
Samp. Info: MDHM81AA 1025149 A1A200403-16 1X,0;
Misc. Info: ;,1038 79;;20,1;WATER sub;;0;1;MDHM81AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.23	-0.003	6542	2.1740<							0.0000	0.00	45
HMX											0.0260	0.10	
RDX											0.0626	0.10	
Picric ACID											0.1203	0.96	
1,3,5-Trinitrobenzene	29.29	0.264	18415	4.4120<							0.0298	0.10	45
1,3-Dinitrobenzene											0.0481	0.10	
TETRYL											0.0481	0.10	
Nitrobenzene											0.0481	0.10	
2,4,6-Trinitrotoluene											0.0231	0.10	
4-AM-2,6-DNT	37.52	-0.243	101	0.0241<							0.0212	0.10	45
2-AM-4,6-DNT											0.0963	0.19	
2,6-Dinitrotoluene											0.0481	0.10	
2,4-Dinitrotoluene											0.0481	0.10	
2-Nitrotoluene											0.0693	0.48	
4-Nitrotoluene											0.0693	0.48	
3-Nitrotoluene											0.0597	0.48	
Nitroglycerin											0.3177	0.63	
PETN											0.2888	0.63	
3,5-Dinitroaniline	32.48	0.170	103	0.0265<							0.0241	0.96	45

rpm 2/3/11
no PETN

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4066	2.1740	90		2.4066		0	(48-143)

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: 1/31/2011 11:02 AM

TestAmerica West Sacramento

C-000044.D

Chromatography Summary

Injection Date: 1/29/2011 10:46 Operator: RN

DataFile: LC12,B\01272011 B\C-000044.D Vial Num: 25

Method 8330 Target Analyte Results

Instrument ID: LC12

Sample : **MDHM41AA 1025149 A1A200403-13 1X**

Method File: LC12,B\01272011.B\8330CNAB M

Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	950.63 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDHM41AA 1025149 A1A200403-13 1X;0;

Misc. Info: ;;950.63;;20,1;WATER.sub,,;0;1;MDHM41AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.26	0.019	6644	2.4120<							0.0000	0.00	45
HMX	43.04	0.012	3061	0.9254<							0.0284	0.11	45
RDX	33.08	0.042	7434	3.4960<							0.0684	0.11	45
Picric ACID											0.1315	1.05	
1,3,5-Trinitrobenzene	28.98	-0.048	381	0.0998<							0.0326	0.11	45
1,3-Dinitrobenzene											0.0526	0.11	
TETRYL											0.0526	0.11	
Nitrobenzene											0.0526	0.11	
2,4,6-Trinitrotoluene											0.0252	0.11	
4-AM-2,6-DNT											0.0231	0.11	
2-AM-4,6-DNT											0.1052	0.21	
2,6-Dinitrotoluene											0.0526	0.11	
2,4-Dinitrotoluene											0.0526	0.11	
2-Nitrotoluene											0.0757	0.53	
4-Nitrotoluene											0.0757	0.53	
3-Nitrotoluene											0.0652	0.53	
Nitroglycerin											0.3471	0.68	
PETN											0.3156	0.68	
3,5-Dinitroaniline											0.0263	1.05	

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.6298	2.4120	92	2.6298		0	(48-143)

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: 1/31/2011 11:01 AM

TestAmerica West Sacramento

C-000029.D

Chromatography Summary

Injection Date: 1/28/2011 18:18 Operator: RN

DataFile: LC12.B\01272011.B\C-000029 D Vial Num: 16

Instrument ID: LC12

Method 8330 Target Analyte Results

Sample: **MDHMR1AA 1025149 A1A200403-4 1X**

Method File: LC12.B\01272011 B\8330CNAB M

Start Cal Date: 12/16/2010 18 24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	1013.87 mL	0 g

Matrix: WATER SubList: WATER sub SpikeList:

Samp. Info: MDHMR1AA 1025149 A1A200403-4 1X,0,

Misc. Info: ;;1013 87;;20;1;WATER.sub;;0,1;MDHMR1AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.30	-0.042	6621	2.2540<							0.0000	0.00	45
HMX											0.0266	0.10	
RDX											0.0641	0.10	
Picric ACID											0.1233	0 99	
1,3,5-Trinitrobenzene	29.36	0.245	45956	11.2800<							0.0306	0.10	45
1,3-Dinitrobenzene											0.0493	0.10	
TETRYL											0 0493	0.10	
Nitrobenzene											0.0493	0.10	
2,4,6-Trinitrotoluene											0.0237	0.10	
4-AM-2,6-DNT											0.0217	0.10	
2-AM-4,6-DNT											0,0986	0.20	
2,6-Dinitrotoluene											0,0493	0.10	
2,4-Dinitrotoluene											0.0493	0.10	
2-Nitrotoluene											0.0710	0.49	
4-Nitrotoluene											0.0710	0 49	
3-Nitrotoluene											0 0612	0.49	
Nitroglycerin											0 3255	0.64	
PETN											0.2959	0.64	
3,5-Dinitroaniline	32.49	0.072	141	0.0371<							0 0247	0.99	45

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4658	2.2540	91	2.4658		0	(48-143)

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: 1/31/2011 10:45 AM

WATER, Nitroguanidine

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A200403 R0
Analysis: SW846 8330M Nitroguanadine

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.1 and 2.8 °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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A200403 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: FWGLNWmw-025C-1674-GW

Dissolved HPLC

Lot-Sample #...: A1A200403-001 Work Order #...: MDHMN1AH Matrix.....: WG
Date Sampled...: 01/19/11 09:03 Date Received..: 01/20/11
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024298
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: FWGWBGmw-007C-1677-GW

Dissolved HPLC

Lot-Sample #...:	A1A200403-002	Work Order #...:	MDHMP1AD	Matrix.....:	WG
Date Sampled...:	01/19/11 11:19	Date Received..:	01/20/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1024298				
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: FWGFBQmw-174C-1673-GW

Dissolved HPLC

Lot-Sample #...: A1A200403-003 Work Order #...: MDHMQ1AD Matrix.....: WG
Date Sampled...: 01/19/11 13:21 Date Received..: 01/20/11
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024298
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-197C-1654-GW

Dissolved HPLC

Lot-Sample #...:	A1A200403-004	Work Order #...:	MDHMR1AD	Matrix.....:	WG
Date Sampled...:	01/19/11 15:04	Date Received..:	01/20/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1024298				
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-1653-GW

Dissolved HPLC

Lot-Sample #...:	A1A200403-005	Work Order #...:	MDHMT1AD	Matrix.....:	WG
Date Sampled...:	01/19/11 16:29	Date Received..:	01/20/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1024298				
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-005-1686-GW

Dissolved HPLC

Lot-Sample #...: A1A200403-006 Work Order #...: MDHMV1AD Matrix.....: WG
Date Sampled...: 01/19/11 09:15 Date Received..: 01/20/11
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024298
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-006-1687-GW

Dissolved HPLC

Lot-Sample #...:	A1A200403-007	Work Order #...:	MDHMW1AD	Matrix.....:	WG
Date Sampled...:	01/19/11 11:20	Date Received..:	01/20/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1024298				
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-003-1684-GW

Dissolved HPLC

Lot-Sample #...: A1A200403-008 Work Order #...: MDHMX1AH Matrix.....: WG
Date Sampled...: 01/19/11 12:50 Date Received..: 01/20/11
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024298
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-238C-1650-GW

Dissolved HPLC

Lot-Sample #...: A1A200403-009 Work Order #...: MDHM01AD Matrix.....: WG
Date Sampled...: 01/19/11 15:25 Date Received..: 01/20/11
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024298
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: FWGWBGmw-005C-1675-GW

Dissolved HPLC

Lot-Sample #...:	A1A200403-010	Work Order #...:	MDHM11AD	Matrix.....:	WG
Date Sampled...:	01/19/11 09:05	Date Received..:	01/20/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1024298				
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: FWGWBGmw-DUP5-1696-GW

Dissolved HPLC

Lot-Sample #...:	A1A200403-011	Work Order #...:	MDHM21AD	Matrix.....:	WG
Date Sampled...:	01/19/11 10:05	Date Received..:	01/20/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1024298				
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: FWGWBGmw-006C-1676-GW

Dissolved HPLC

Lot-Sample #...:	A1A200403-012	Work Order #...:	MDHM31AD	Matrix.....:	WG
Date Sampled...:	01/19/11 11:15	Date Received..:	01/20/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1024298				
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: FWGWBGmw-009C-1678-GW

Dissolved HPLC

Lot-Sample #...:	A1A200403-013	Work Order #...:	MDHM41AD	Matrix.....:	WG
Date Sampled...:	01/19/11 12:30	Date Received..:	01/20/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1024298				
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: FWGEQUIPRINSE3-1700-GW

Dissolved HPLC

Lot-Sample #...:	A1A200403-014	Work Order #...:	MDHM61AD	Matrix.....:	WQ
Date Sampled...:	01/19/11 13:30	Date Received..:	01/20/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1024298				
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-1651-GW

Dissolved HPLC

Lot-Sample #...:	A1A200403-015	Work Order #...:	MDHM71AD	Matrix.....:	WG
Date Sampled...:	01/19/11 15:00	Date Received..:	01/20/11		
Prep Date.....:	01/24/11	Analysis Date..:	01/27/11		
Prep Batch #...:	1024298				
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: FWGCBPmw-005C-1657-GW

Dissolved HPLC

Lot-Sample #...: A1A200403-016 Work Order #...: MDHM81AD Matrix.....: WG
Date Sampled...: 01/19/11 16:10 Date Received..: 01/20/11
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024298
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: FWGCBPmw-008C-1659-GW

Dissolved HPLC

Lot-Sample #...: A1A200403-017 Work Order #...: MDHNA1AD Matrix.....: WG
Date Sampled...: 01/19/11 17:05 Date Received..: 01/20/11
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024298
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 #...: A1A200403 Work Order #...: MDMXK1AA Matrix.....: WATER
MB Lot-Sample #: G1A240000-298

Prep Date.....: 01/24/11
Analysis Date..: 01/27/11 Prep Batch #...: 1024298
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 #...: A1A200403 Work Order #...: MDMXK1AC Matrix.....: WATER
LCS Lot-Sample#: G1A240000-298
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024298
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	104	(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 #...: A1A200403 Work Order #...: MDHMN1AJ-MS Matrix.....: WG
MS Lot-Sample #: A1A200403-001 MDHMN1AK-MSD
Date Sampled...: 01/19/11 09:03 Date Received..: 01/20/11
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024298
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	106	(73 - 117)			SW846 8330 (Modified
	106	(73 - 117)	0.39	(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 #...: A1A200403 Work Order #...: MDHMX1AJ-MS Matrix.....: WG
MS Lot-Sample #: A1A200403-008 MDHMX1AK-MSD
Date Sampled...: 01/19/11 12:50 Date Received..: 01/20/11
Prep Date.....: 01/24/11 Analysis Date..: 01/27/11
Prep Batch #...: 1024298
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	107	(73 - 117)			SW846 8330 (Modified
	107	(73 - 117)	0.17	(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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A200403 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 coolers were received between 1.1 and 2.8 °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 1/26/11 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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A200403 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

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLNWmw-025C-1674-GW

General Chemistry

Lot-Sample #...: A1A200403-001 Work Order #...: MDHMN Matrix.....: WG
Date Sampled...: 01/19/11 09:03 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-007C-1677-GW

General Chemistry

Lot-Sample #...: A1A200403-002 Work Order #...: MDHMP Matrix.....: WG
Date Sampled...: 01/19/11 11:19 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GW

General Chemistry

Lot-Sample #...: A1A200403-003 Work Order #...: MDHMQ Matrix.....: WG
Date Sampled...: 01/19/11 13:21 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1654-GW

General Chemistry

Lot-Sample #...: A1A200403-004 Work Order #...: MDHMR Matrix.....: WG
Date Sampled...: 01/19/11 15:04 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GW

General Chemistry

Lot-Sample #...: A1A200403-005 Work Order #...: MDHMT Matrix.....: WG
Date Sampled...: 01/19/11 16:29 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1686-GW

General Chemistry

Lot-Sample #...: A1A200403-006 Work Order #...: MDHMV Matrix.....: WG
Date Sampled...: 01/19/11 09:15 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1687-GW

General Chemistry

Lot-Sample #...: A1A200403-007 Work Order #...: MDHMW Matrix.....: WG
Date Sampled...: 01/19/11 11:20 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1684-GW

General Chemistry

Lot-Sample #...: A1A200403-008 Work Order #...: MDHMX Matrix.....: WG
Date Sampled...: 01/19/11 12:50 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/27/11	1027101
	Dilution Factor: 1			MDL.....: 0.48		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GW

General Chemistry

Lot-Sample #...: A1A200403-009 Work Order #...: MDHM0 Matrix.....: WG
Date Sampled...: 01/19/11 15:25 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075
	Dilution Factor: 1			MDL.....: 0.48		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-005C-1675-GW

General Chemistry

Lot-Sample #...: A1A200403-010 Work Order #...: MDHM1 Matrix.....: WG
Date Sampled...: 01/19/11 09:05 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-DUP5-1696-GW

General Chemistry

Lot-Sample #...: A1A200403-011 Work Order #...: MDHM2 Matrix.....: WG
Date Sampled...: 01/19/11 10:05 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GW

General Chemistry

Lot-Sample #...: A1A200403-012 Work Order #...: MDHM3 Matrix.....: WG
Date Sampled...: 01/19/11 11:15 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-009C-1678-GW

General Chemistry

Lot-Sample #...: A1A200403-013 Work Order #...: MDHM4 Matrix.....: WG
Date Sampled...: 01/19/11 12:30 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

General Chemistry

Lot-Sample #...: A1A200403-014 Work Order #...: MDHM6 Matrix.....: WQ
Date Sampled...: 01/19/11 13:30 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GW

General Chemistry

Lot-Sample #...: A1A200403-015 Work Order #...: MDHM7 Matrix.....: WG
Date Sampled...: 01/19/11 15:00 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-005C-1657-GW

General Chemistry

Lot-Sample #...: A1A200403-016 Work Order #...: MDHM8 Matrix.....: WG
Date Sampled...: 01/19/11 16:10 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-008C-1659-GW

General Chemistry

Lot-Sample #...: A1A200403-017 Work Order #...: MDHNA Matrix.....: WG
Date Sampled...: 01/19/11 17:05 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075

Dilution Factor: 1 MDL.....: 0.48

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1A200403 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MDNDT1AA		MB Lot-Sample #:	G1A250000-075	
	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/25-01/26/11	1025075
		Dilution Factor: 1				
Nitrocellulose		Work Order #: MDRFD1AA		MB Lot-Sample #:	G1A270000-101	
	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/27/11	1027101
		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 #...: A1A200403 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MDNDT1AC LCS Lot-Sample#: G1A250000-075			
	98	(26 - 144)	TAL-SOP WS-WC-005	01/25-01/26/11	1025075
		Dilution Factor: 1			
Nitrocellulose		Work Order #: MDRFD1AC LCS Lot-Sample#: G1A270000-101			
	96	(26 - 144)	TAL-SOP WS-WC-005	01/27/11	1027101
		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 #...: A1A200403 Matrix.....: WG
Date Sampled...: 01/19/11 12:50 Date Received..: 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: MDHMN1AF-MS/MDHMN1AG-MSD MS Lot-Sample #: A1A200403-001					
	86	(26 - 144)			TAL-SOP WS-WC-005	01/25-01/26/11	1025075
	89	(26 - 144)	3.1	(0-45)	TAL-SOP WS-WC-005	01/25-01/26/11	1025075
		Dilution Factor: 1					
Nitrocellulose		WO#: MDHMX1AL-MS/MDHMX1AM-MSD MS Lot-Sample #: A1A200403-008					
	106	(26 - 144)			TAL-SOP WS-WC-005	01/27/11	1027101
	108	(26 - 144)	2.4	(0-45)	TAL-SOP WS-WC-005	01/27/11	1027101
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

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

Category	Code
Initial Calibration	
Initial Calibration RRF	Q
Initial Calibration RSD	R
Initial Calibration Cor. Coef	S
Initial Calibration Verification	
Initial Calibration Verificaton RRF	T
Initial CalibrationVerification %D	U
Continuing Calibration	
Continuing Calibraiton RRF	V
Continuing Calibration %D	W
GC/MS Tune	
GC/MS Tune for Initial Calibration	X
GC/MS Tune for Continuing Calibration	Y
Laboratory Duplicate	Z
Categories not Assessed by Automated Data Review*	
Internal Standards	Is
Calibration Blanks	Cb
Resolution Check Mixture	Rm
Performance Evaluation Mixture	Pm
Professional Judgement	Pj

* Qualifiers for data-review categories not assessed by automated data review are manually entered by the user. The application automatically adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A200403										
8330	FWGCBPmw-005C-1657-GW	AQ	N							
				HMX	0.096	0.049J		J	ug/L	L
8330	FWGFBQmw-174C-1673-GW	AQ	N							
				1,3-Dinitrobenzene	0.096	0.085J		J	ug/L	L
8330	FWGLL3mw-238C-1650-GW	AQ	N							
				2,4-Dinitrotoluene	0.10	0.057J		J	ug/L	L
				3-Nitrotoluene	0.52	0.36J		J	ug/L	L
				Nitrobenzene	0.10	0.25PG		J	ug/L	Pj
				RDX	0.10	11PG		J	ug/L	Pj
8330	FWGLL3mw-239C-1651-GW	AQ	N							
				2,4-Dinitrotoluene	0.099	0.096J		J	ug/L	L
				RDX	0.099	1.6		J	ug/L	Pj
8330	FWGLL4mw-197C-1654-GW	AQ	N							
				2,4,6-TNT	0.098	0.075J		J	ug/L	L
8330	FWGWBGmw-005C-1675-GW	AQ	N							
				2,4,6-TNT	0.10	0.062J		J	ug/L	Pj,P,L
				TETRYL	0.10	0.057J		J	ug/L	Pj,P,L
8330	FWGWBGmw-006C-1676-GW	AQ	N							
				RDX	0.54	29q		J	ug/L	Pj
8330	FWGWBGmw-009C-1678-GW	AQ	N							
				RDX	0.10	3.5		J	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 : FWGCBPmw-005C-1657-GW **Lab Report Batch :** A1A200403 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A200403016

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 0.96**															
HMX	0.049		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 : FWGFBQmw-174C-1673-GW **Lab Report Batch :** A1A200403 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A200403003

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 0.96**															
1,3-Dinitrobenzene	0.085		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 : FWGLL3mw-238C-1650-GW **Lab Report Batch :** A1A200403 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A200403009

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 1.04**															
2,4-Dinitrotoluene	0.057		ug/L	J	YES	J								J							L
3-Nitrotoluene	0.36		ug/L	J	YES	J								J							L
Nitrobenzene	0.25		ug/L	PG	YES	J															Pj
RDX	11		ug/L	PG	YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-239C-1651-GW **Lab Report Batch :** A1A200403 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A200403015

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 0.99**															
2,4-Dinitrotoluene	0.096		ug/L	J	YES	J								J							L
RDX	1.6		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL4mw-197C-1654-GW **Lab Report Batch :** A1A200403 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A200403004

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 0.98**															
2,4,6-TNT	0.075		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGWBGmw-005C-1675-GW **Lab Report Batch :** A1A200403 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A1A200403010

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 1**															
TETRYL	0.057		ug/L	J	YES	J								J							Pj,P,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGWBGmw-005C-1675-GW **Lab Report Batch :** A1A200403 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200403010

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 1**															
2,4,6-TNT	0.062		ug/L	J	YES	J								J							Pj,P,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGWBGmw-006C-1676-GW **Lab Report Batch :** A1A200403 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A1A200403012

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 5.35**															
RDX	29		ug/L	q	YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGWBGmw-009C-1678-GW
Lab Report Batch : A1A200403
Lab ID : TALCAN
Sample Date : 01/19/2011
Analysis Type: DL
Sample Matrix : AQ
Lab Sample ID: A1A200403013

Reviewed By / Date : Angye Dragotta 3/15/2011
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 : 8330						**Dilution: 1.05**															
RDX	3.5		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

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: A1A200403 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGCBPmw-005C-1657-	A1A200403016	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGCBPmw-008C-1659-	A1A200403017	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGEQUIPRINSE3-1700	A1A200403014	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGFBQmw-174C-1673-	A1A200403003	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL3mw-238C-1650-G	A1A200403009	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGLL3mw-239C-1651-G	A1A200403015	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL4mw-196C-1653-G	A1A200403005	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL4mw-197C-1654-G	A1A200403004	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGLNWmw-025C-1674-	A1A200403001	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGSCFmw-003-1684-G	A1A200403008	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: 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: A1A200403 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGSCFmw-003-1684-G	A1A200403008	8330	AQ	3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGSCFmw-005-1686-G	A1A200403006	8330	AQ	2-Nitrotoluene	U	0.51	0.20	ug/L
				3-Nitrotoluene	U	0.51	0.20	ug/L
				4-Nitrotoluene	U	0.51	0.20	ug/L
FWGSCFmw-006-1687-G	A1A200403007	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.54	0.22	ug/L
				3-Nitrotoluene	U	0.54	0.22	ug/L
				4-Nitrotoluene	U	0.54	0.22	ug/L
FWGWBGmw-005C-1675-	A1A200403010	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGWBGmw-006C-1676-	A1A200403012	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.54	0.21	ug/L
				3-Nitrotoluene	U	0.54	0.21	ug/L
				4-Nitrotoluene	U	0.54	0.21	ug/L
FWGWBGmw-007C-1677-	A1A200403002	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGWBGmw-009C-1678-	A1A200403013	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGWBGmw-DUP5-1696	A1A200403011	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **030240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A1A200403 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGCBPmw-005C-1657-	A1A200403016	8330	AQ	HMX	J	0.049	0.096	ug/L
FWGFBQmw-174C-1673-	A1A200403003			1,3-Dinitrobenzene	J	0.085	0.096	ug/L
FWGLL3mw-238C-1650-G	A1A200403009			2,4-Dinitrotoluene	J	0.057	0.10	ug/L
				3-Nitrotoluene	J	0.36	0.52	ug/L
FWGLL3mw-239C-1651-G	A1A200403015			2,4-Dinitrotoluene	J	0.096	0.099	ug/L
FWGLL4mw-197C-1654-G	A1A200403004			2,4,6-TNT	J	0.075	0.098	ug/L
FWGWBGmw-005C-1675-	A1A200403010			2,4,6-TNT	J	0.062	0.10	ug/L
				TETRYL	J	0.057	0.10	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A1A200403 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
8330	AQ	2,4,6-TNT	FWGWBGmw-00	RES	0.062	J	FWGWBGmw-DU	DL	0.10	U	200.0	30	ug/L
	AQ	TETRYL		RE	0.057	J		RE	0.10	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.

Project Number and Name: ***030240.0006 - RVAAP (OH)***

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** February 28, 2011
STL Sample Delivery Group: A1A180421 **Revision:** 0

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

QA/QC Summary

On Jan. 17, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1A180421.

Field Sample ID	Analytes	Method
FWGLL1mw-084c-1643-GW	VOCs SVOCs Pesticides PCBs Cyanide	SW846 8260B SW846 8270C SW846 8081A SW846 8082 SW846 9012A
FWGLL1mw-DUP2-1693-GW		
FWGEQUIPRinse1-1698-GW		
FWGLL1mw-085c-1644-GW		
FWGLL1mw-067c-1640-GW		
FWGLL1mw-082c-1642-GW		
FWGLL1mw-081c-1641-GW		
FWGEQUIPRinse1-1698-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGLL1mw-084c-1643-GF	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGLL1mw-DUP2-1693-GF		
FWGLL1mw-085c-1644-GF		
FWGLL1mw-067c-1640-GF		
FWGLL1mw-082c-1642-GF		
FWGLL1mw-081c-1641-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 0.9°C – 2.7°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

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** February 28, 2011
STL Sample Delivery Group: A1A180421 **Revision:** 0

MRL Recovery

- The opening MRL check analyzed 1/20/2011 at 1051 had bromomethane recover above control limits at 131% and methylene chloride at 159%.
- The closing MRL check analyzed 1/20/2011 at 2038 had methylene chloride recover above control limits at 150% and styrene below control limits at 69%.

The styrene results were qualified as estimated, "UJ". No additional qualifications were made as there were no detected concentrations of bromomethane or methylene chloride in the bracketed samples.

Blanks

- Methylene chloride was detected at 0.66ug/L in the method blank.
- FWGTEAM1-Trip had acetone detected at 12ug/L, 2-butanone at 0.62ug/L and 4-methyl-2-pentanone at 0.39ug/L.
- FWGTEAM2-Trip had acetone detected at 12ug/L, 2-butanone at 0.65ug/L and 4-methyl-2-pentanone at 0.34ug/L.
- FWGTEAM3-Trip had acetone detected at 13ug/L.
- O-Xylene was detected in FWGEQUIPRinse1-1698-GW/GF at 0.91ug/L, m,p-xylene at 2.5ug/L, acetone at 26ug/L, 2-butanone at 19ug/L, toluene at 2.2ug/L and ethylbenzene at 0.59ug/L.

The acetone result for sample FWGLL1mw-081c-1641-GW was qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations reported for the associated field samples.

Matrix Spike Recovery

Bromomethane recovered below control limits in the matrix spike at 69%. The bromomethane result for sample FWGLL1mw-081c-1641-GW was qualified as estimated, "UJ".

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

Field Duplicate RPD

The bis (2-ethylhexyl) phthalate RPD for samples FWGLL1mw-Dup2-1693-GW and FWGLL1mw-084c-1643-GW was above control limits at 59%. The bis (2-ethylhexyl) phthalate results for samples FWGLL1mw-Dup2-1693-GW and FWGLL1mw-084c-1643-GW were qualified as estimated, "J".

Matrix Spike Recovery

The matrix spike and matrix spike duplicate analyzed on sample FWGLL1mw-081c-1641-GW recovered below control limits for 3,3'-dichlorobenzidine at 30 and 8.6% and hexachlorocyclopentadiene at 36% and 38%. As there were no other QC outliers, no qualifications were made.

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

MRL Recovery
The opening and closing MRLs for the analytical sequence starting on 2/1/11 recovered above control for several targets. Toxaphene was not included in the MRL standard. The toxaphene results were qualified as estimated, "UJ". No additional qualifications were made for the other analytes, as there were no detected concentrations in the bracketed field samples.

ICV
The toxaphene curve analyzed 12/21/10 did not have an ICV. As toxaphene is a multi component analyte and identification is based on pattern and the bracketing CCVs were within limits, the toxaphene results for samples FWGEQUIPRinse1-1698-GW, FWGLL1mw-085c-1644-GW, FWGLL1mw-067c-1640-GW, FWGLL1mw-082c-1642-GW and FWGLL1mw-081c-1641-GW were qualified as estimated,"UJ".

CCV
- The closing toxaphene CCV on 1/21/11 was analyzed outside the 12 window, but no qualifications were made as the closing CCV (when analyzed) was within control limits. The second column tox CCV %D was above control limits at 1224. No qualifications were made as there were no detected toxaphene concentrations.
- The opening and closing CCVs for the analytical sequence starting on 2/1/11 recovered above control limits for several targets, however no qualifications were made as there were no reported concentrations in the associated field samples.

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 the LCS at 44%, FWGLL1mw-081c-1641-GW at 40% and FWGLL1mw-082c-1642-GW at 40%. The results for FWGLL1mw-081c-1641-GW and FWGLL1mw-082c-1642-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
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 1/21/11 had thallium detected at 0.31ug/L. The thallium results for samples FWGLL1mw-084c-1643-GF and FWGLL1mw-DUP2-1693-GF were <5x the ICB contamination and were qualified, "U".
- The CCBs analyzed 1/21/11 had detected thallium from 0.21ug/L to 0.36ug/L. The thallium results for samples FWGLL1mw-084c-1643-GF and FWGLL1mw-DUP2-1693-GF were <5x the CCB contamination and were qualified, "U".
- The method blank had detected concentrations of sodium at 18.4ug/L. No qualifications were required as the detected concentrations in the 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.

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

Blanks
No qualifications were made for due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

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 SUMMARY

A1A180421

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDEXV	001	FWGLL1mw-084C-1643-GW	01/17/11	15:07
MDEX1	002	FWGLL1mw-084C-1643-GF	01/17/11	15:07
MDEX2	003	FWGLL1mw-DUP2-1693-GW	01/17/11	16:10
MDEX3	004	FWGLL1mw-DUP2-1693-GF	01/17/11	16:10
MDEX4	005	FWGEQUIPRINSE1-1698-GW/GF	01/17/11	17:20
MDEX6	006	FWGTEAM1-TRIP	01/17/11	13:00
MDEX7	007	FWGTEAM2-TRIP	01/17/11	13:00
MDEX8	008	FWGLL1mw-085C-1644-GW	01/17/11	14:25
MDEX9	009	FWGLL1mw-085C-1644-GF	01/17/11	14:25
MDE0A	010	FWGLL1mw-067C-1640-GW	01/17/11	15:30
MDE0C	011	FWGLL1mw-067C-1640-GF	01/17/11	15:30
MDE0D	012	FWGLL1mw-082C-1642-GW	01/17/11	16:50
MDE0E	013	FWGLL1mw-082C-1642-GF	01/17/11	16:50
MDE0F	014	FWGTEAM3-TRIP	01/17/11	13:00
MDE0G	015	FWGLL1mw-081C-1641-GW	01/17/11	15:10
MDE0H	016	FWGLL1mw-081C-1641-GF	01/17/11	15:10

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 20
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQW	John Miller	Erik Corbin	M. Loeb	Team 1 1/17/11
Address: 1800 Carillon Blvd.	Telephone:	Telephone:	Telephone:	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com	TAT if different from below per SOW		
Phone: 513-825-7500		☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Pick-up			
Project Number: 30240.0006	Shipping/Tracking No: NA			
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	Field Filtered	Lab Perform MS/MSD	VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012, Carbonate 2320, Metals 7470	Metals 6020	Mg/Na 353.2	Perchlorates	Sample Specific Notes / Special Instructions:
FWGLLImw-084C-1643-GW	1/17/11	15:07		X						3	1		9		N	G	X	X	X	X	X	X	X				A291
FWGLLImw-084C-1643-GF	1/17/11	15:07		X					1				1		Y	G								X	1/17/11	X	A291
FWGLLImw-DUP2-1693-GW	1/17/11	16:10		X						3	1		9		N	G	X	X	X	X	X	X	X				A250
FWGLLImw-DUP2-1693-GF	1/17/11	16:10		X					1				1		Y	G								X	EC	X	A250
FWGEQUIPRINSE1-1698-GW/GF	1/17/11	17:20		X					1	3	1		10		N	G	X	X	X	X	X	X	X	X		X	Not filtered L820
FWGTeam1-Trip	1/17/11	1300		X						2					N	G	X										A291
					EC			1/17/11																			

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 and perchlorates are field filtered. Temps may not meet requirements if sample collection is close to lab pick-up.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/17/11 17:56	AC Reed	TAL-NC	1/17/11 1756
Relinquished by: PC Reed	Company: TA-NC	Date/Time: 1/17/11 1804	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Celena Schatt	Company: TAL NC	Date/Time: 1/18/11 700

TAL-0018 (1008)

All VOCs in cooler A291

North Canton

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

21

TAL-4142 (0408)

Client: EQM
Project Manager: John Miller
Date: 1-17-11
Chain of Custody Number: 000452
Address: 1800 Carillon Blvd
Telephone Number (Area Code)/Fax Number: 513 825 7500 (7495)
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 Ravenna Oh
Carrier/Waybill Number: Lab Pickup
Contract/Purchase Order/Quote No.: 30240.0006 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	Explo 8330	Propellants	Cyanide 9012	Perchlorate 6850	Metals (6 to Metals)	Special Instructions/ Conditions of Receipt
FWG Team 2 - Trip	1-17-11	1300		X						2			X									L875
FWGLL1MW-085C-1644-GW		1425		X			9			3	1		X	X	X	X	X	X	X	X	X	A206
FWGLL1MW-085C-1644-GF				X			1		1											X	X	A206 L875 * FILTERED Metals only *
FWGLL1MW-067C-1640-GW		1530		X			9			3	1		X	X	X	X	X	X	X	X	X	L875
FWGLL1MW-067C-1640-GF				X			1		1											X	X	L875 * FILTERED Metals only *
FWGLL1MW-082C-1642-GW		1650		X			9			3	1		X	X	X	X	X	X	X			L582
FWGLL1MW-082C-1642-GF				X			1		1											X	X	L582 FILTERED PERCH + Metal.

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown
Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)
Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW
QC Requirements (Specify): perchlorates were not Field Filtered @ 085 or 067 ***

	Date	Time		Date	Time
1. Relinquished By	1-17-11	1756	1. Received By	1/17/11	1756
2. Relinquished By	1/17/11	1854	2. Received By	1/18/11	700
3. Relinquished By			3. Received By		

Comments

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

All VOAs in L875

North Canton

Chain of Custody Record

TestAmerica 22
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: Erik Corbin	Lab Contact: M. Loeb
Address: 1800 Carillon Blvd	Telephone: 513 825 7500 (Ext 7495)	Telephone: 513 825 7500	Telephone: 330 497 9396
City/State/Zip: Cincinnati, OH 45240	Email: ecorbin@eqm.com		
Phone:		TAT if different from below: PER SOW ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Pick UP		
Project Number: 30240.00010	Shipping/Tracking No: N/A		
PO# 116726			

COC No: 117201 1T3
1 of 1 COCs

Analyses

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered	VOC 8260B	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010/6020/7470	perchlorate	Sample Specific Notes / Special Instructions: COOLER ID
FWGTeam3-Trip	1-17-11	1300		X						2					N	X									A2586
FWGLLIMW-081C-1641-GW	1-17-11	1510		X				3		9	3		27		N	X	X	X	X	X	X	X			19416, 18597, A2586
FWGLLIMW-081C-1641-GF	1-17-11	1510		X					3				3		Y								X	X	19416, 18597, A2586

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

ALL VOAS IN COOLER A2586

Temps may not meet requirements if sample time is close to lab pick up.

Relinquished by: Lisa M. Schlatter	Company: EQM	Date/Time: 1-17-11	Received by:	Company: TAL-NC	Date/Time: 1/17/11 1856
Relinquished by:	Company: TAL-NC	Date/Time: 1/17/11 1854	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Maria Schott	Company: TAL NC	Date/Time: 1/18/11 700

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

TAL-0018 (1008)

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 410421
North Canton Facility

Client EQM Project RVAAP By: _____ (Signature)
Cooler Received on 1/18/11 Opened on 1/18/11
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 12 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
084C-1643	<2 >12	1/18/11	
DUP2-1693	<2 >12		
EQUIPRinse1	<2 >12		
085C-1644	<2 >12		
067C-1640	<2 >12		
082C-1642	<2 >12		
081C-1641	<2 <2 <2 >12 >12 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
A250	1.8	IR	Ice
L820	1.5		
A291	2.4		
A206	1.4		
L875	2.0		
L582	2.6		
A286	0.9		
L946	1.9		
L859	2.7		

Discrepancies Cont'd:

CASE NARRATIVE

A1A180421

The following report contains the analytical results for thirteen water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received January 18, 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 February 09, 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 0.9 to 2.7°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.

The matrix spike/matrix spike duplicate(s) for FWGLL1mw-081C-1641-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GC/MS SEMIVOLATILES

The sample(s) that 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-1641-GW had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

Sample(s) FWGLL1mw-067C-1640-GW had elevated reporting limits due to limited initial sample volume.

PESTICIDES-8081

Sample(s) FWGLL1mw-084C-1643-GW and FWGLL1mw-DUP2-1693-GW had elevated reporting limits due to matrix interferences.

For sample(s) FWGLL1mw-067C-1640-GW, FWGLL1mw-082C-1642-GW, and FWGLL1mw-081C-1641-GW, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

CASE NARRATIVE (continued)

PESTICIDES-8081 (continued)

The opening and closing CCVs failed biased high, but since the associated sample(s) FWGLL1mw-084C-1643-GW, FWGLL1mw-DUP2-1693-GW, FWGLL1mw-081C-1641-GW (MS), FWGLL1mw-081C-1641-GW (MSD), and the blank associated with batch(es) 1018104 were non-detect, no further corrective action was necessary.

The opening and closing MRLs failed biased high, but since the associated sample(s) FWGLL1mw-084C-1643-GW, FWGLL1mw-DUP2-1693-GW, FWGLL1mw-081C-1641-GW (MS), FWGLL1mw-081C-1641-GW (MSD) were non-detect, no further corrective action was necessary.

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGLL1mw-082C-1642-GW, FWGLL1mw-081C-1641-GW, and the LCS associated with batch(es) 1018106, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The 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-I641-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 sample duplicate RPD was outside the acceptance limits for some analytes. The result is less than five times the reporting limit; therefore, no corrective action is required. Refer to the sample duplicate report for RPDS that exceed 20%.

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).

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Metbod Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.
California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

MANUAL INTEGRATION SUMMARY

Lot A1A180421

Client ID: FWGLL1mw-081C-1641-
Compound Name: Decachlorobiphenyl
Instrument ID: a2hp9.i
File Name: 042F2701.D
Inj. Date and Time: 01-FEB-2011 01:27
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: MDE061AC.D
Inj. Date and Time: 24-JAN-2011 11:36
Manual Integration Reason: Poor Chromatography

Client ID: INTRA-LAB BLANK
Compound Name: TCMX
Instrument ID: a2hp13.i
File Name: 026F1901.D
Inj. Date and Time: 26-JAN-2011 14:13
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 027F2001.D
Inj. Date and Time: 26-JAN-2011 14:30
Manual Integration Reason: Analyte not Identified by the Data System

ANALYTICAL METHODS SUMMARY

A1A180421

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.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.9 and 2.7 °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– Jan 13, 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 methylene chloride 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?	✓			1/20/2011	LCG Table 1 R
15. Was a MRL Level Verification run at the beginning and end of every daily	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
sequence or every 12 hours?					
16. Were the QC/MRL recoveries 70-130%?		✓		• The opening MRL check analyzed 1/20/2011 at 1051 had bromomethane recover above control limits at 131% and methylene chloride at 159%. • The closing MRL check analyzed 1/20/2011 at 2038 had methylene chloride recover above control limits at 150% and styrene below control limits at 69%. The styrene results were qualified as estimated, "UJ". No additional qualifications were made as there were no detected concentrations of bromomethane or methylene chloride in the bracketed samples.	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed? Were results 80-120%?	✓			1/13/2011 @1314	LCG Table 1, <60%=J/R >120%=J; 60-80%=J/UJ
18. Was a CCV run every 12 hours?	✓			1/20/2011 @ 1006	LCG Table 1
19. Did the CCCs have a %Difference < 20%?	✓				LCG Table 1
20. Were the minimum RFs for the SPCCs within limits?	✓				LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓				LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
26. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR. Methylene chloride was detected at 0.66ug/L in the method blank, however no qualifications were made as there we no detected methylene chloride concentrations reported for the field samples.	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse1-1698-GW/GF	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGTEAM1-Trip had acetone detected at 12ug/L, 2-butanone at 0.62ug/L and 4-methyl-2-pentanone at 0.39ug/L. • FWGTEAM2-Trip had acetone detected at 12ug/L, 2-butanone at 0.65ug/L and 4-methyl-2-pentanone at 0.34ug/L. • FWGTEAM3-Trip had acetone detected at 13ug/L. • O-Xylene was detected in FWGEQUIPRinse1-1698-GW/GF at 0.91ug/L, m,p-xylene at 2.5ug/L, acetone at 26ug/L, 2-butanone at 19ug/L, toluene at 2.2ug/L and ethylbenzene at 0.59ug/L. The acetone result for sample FWGLL1mw-081c-1641-GW was qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations 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;	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent sample a Ravenna sample?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?		✓		Bromomethane recovered below control limits in the matrix spike at 69%. The bromomethane result for sample FWGLL1mw-081c-1641-GW was qualified as estimated, "UJ".	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: FWGLL1mw-084C-1643-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-001 **Work Order #...:** MDEXV1AA **Matrix.....:** WG
Date Sampled...: 01/17/11 15:07 **Date Received..:** 01/18/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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: FWGLL1mw-084C-1643-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-001 Work Order #...: MDEXV1AA 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	76	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1693-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-003 **Work Order #...:** MDEX21AA **Matrix.....:** WG
Date Sampled...: 01/17/11 16:10 **Date Received..:** 01/18/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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: FWGLL1mw-DUP2-1693-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-003 **Work Order #...:** MDEX21AA **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	75	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1698-GW/GF

GC/MS Volatiles

Lot-Sample #...: A1A180421-005 **Work Order #...:** MDEX41AA **Matrix.....:** WQ
Date Sampled...: 01/17/11 17:20 **Date Received..:** 01/18/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	**0.91 J**	**1.0**	**ug/L**	**0.14**
m-Xylene & p-Xylene	**2.5**	**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	**26**	**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	**19**	**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	**2.2**	**1.0**	**ug/L**	**0.13**
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	**0.59 J**	**1.0**	**ug/L**	**0.17**

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1698-GW/GF

GC/MS Volatiles

Lot-Sample #...: A1A180421-005 **Work Order #...:** MDEX41AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	**3.4**	**2.0**	**ug/L**	**0.28**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	84	(50 - 150)
1,2-Dichloroethane-d4	78	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A180421-006 **Work Order #...:** MDEX61AA **Matrix.....:** WQ
Date Sampled...: 01/17/11 13:00 **Date Received..:** 01/18/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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	**12**	**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	**0.62 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	**0.39 J**	**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: PWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A180421-006 **Work Order #...:** MDEX61AA **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	77	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A180421-007 **Work Order #...:** MDEX71AA **Matrix.....:** WQ
Date Sampled...: 01/17/11 13:00 **Date Received..:** 01/18/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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	13	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	0.65 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	0.34 J	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: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A180421-007 **Work Order #...:** MDEX71AA **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	77	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-085C-1644-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-008 **Work Order #...:** MDEX81AA **Matrix.....:** WG
Date Sampled...: 01/17/11 14:25 **Date Received..:** 01/18/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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: FWGLL1mw-085C-1644-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-008 **Work Order #...:** MDEX81AA **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	76	(50 - 150)
Toluene-d8	86	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1640-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-010 **Work Order #...:** MDE0A1AA **Matrix.....:** WG
Date Sampled...: 01/17/11 15:30 **Date Received..:** 01/18/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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: FWGLL1mw-067C-1640-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-010 **Work Order #...:** MDE0A1AA **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	77	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1642-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-012 **Work Order #...:** MDE0D1AA **Matrix.....:** WG
Date Sampled...: 01/17/11 16:50 **Date Received..:** 01/18/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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: FWGLL1mw-082C-1642-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-012 **Work Order #...:** MDE0D1AA **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	77	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A180421-014 **Work Order #...:** MDE0F1AA **Matrix.....:** WQ
Date Sampled...: 01/17/11 13:00 **Date Received..:** 01/18/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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	**13**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	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: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A180421-014 **Work Order #...:** MDE0F1AA **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	78	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1641-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-015 **Work Order #...:** MDE0G1AA **Matrix.....:** WG
Date Sampled...: 01/17/11 15:10 **Date Received..:** 01/18/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**1.6 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1641-GW

GC/MS Volatiles

Lot-Sample #...: A1A180421-015 **Work Order #...:** MDE0G1AA **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	78	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A180421 **Work Order #...:** MDHXP1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A200000-121

Prep Date.....: 01/20/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/20/11 **Prep Batch #...:** 1020121
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	0.66 J	**2.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A180421 **Work Order #...:** MDHXP1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	85	(50 - 150)
1,2-Dichloroethane-d4	78	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A180421 Work Order #...: MDHXP1AC Matrix.....: WATER
LCS Lot-Sample#: A1A200000-121
Prep Date.....: 01/20/11 Analysis Date..: 01/20/11
Prep Batch #...: 1020121
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
cis-1,2-Dichloroethene	96	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	93	(75 - 134)	SW846 8260B
1,2-Dibromoethane	91	(75 - 127)	SW846 8260B
Bromochloromethane	98	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	92	(75 - 122)	SW846 8260B
o-Xylene	93	(75 - 118)	SW846 8260B
Chloromethane	76	(58 - 135)	SW846 8260B
Bromomethane	78	(35 - 153)	SW846 8260B
Vinyl chloride	92	(73 - 134)	SW846 8260B
Chloroethane	84	(72 - 129)	SW846 8260B
Methylene chloride	95	(69 - 118)	SW846 8260B
Acetone	73	(51 - 157)	SW846 8260B
Carbon disulfide	94	(74 - 123)	SW846 8260B
1,1-Dichloroethene	93	(75 - 125)	SW846 8260B
1,1-Dichloroethane	94	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	94	(85 - 111)	SW846 8260B
Chloroform	97	(74 - 127)	SW846 8260B
1,2-Dichloroethane	93	(67 - 132)	SW846 8260B
2-Butanone	84	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	94	(70 - 127)	SW846 8260B
Carbon tetrachloride	97	(71 - 132)	SW846 8260B
Bromodichloromethane	95	(70 - 130)	SW846 8260B
1,2-Dichloropropane	94	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	93	(73 - 132)	SW846 8260B
Trichloroethene	98	(67 - 128)	SW846 8260B
Dibromochloromethane	95	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	91	(75 - 136)	SW846 8260B
Benzene	93	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	96	(74 - 131)	SW846 8260B
Bromoform	102	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	86	(59 - 150)	SW846 8260B
2-Hexanone	83	(53 - 139)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A180421 **Work Order #...:** MDHXP1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A200000-121

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	93	(75 - 129)	**SW846 8260B**
1,1,2,2-Tetrachloroethane	85	(68 - 129)	**SW846 8260B**
Toluene	91	(75 - 125)	**SW846 8260B**
Chlorobenzene	92	(75 - 127)	**SW846 8260B**
Ethylbenzene	92	(75 - 120)	**SW846 8260B**
Styrene	94	(75 - 130)	**SW846 8260B**
Xylenes (total)	92	(90 - 114)	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	88	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	88	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A180421 Work Order #...: MDE0G1AC-MS Matrix.....: WG
MS Lot-Sample #: A1A180421-015 MDE0G1AD-MSD
Date Sampled...: 01/17/11 15:10 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/20/11
Prep Batch #...: 1020121
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	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.4	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	87	(70 - 130)			SW846 8260B
	91	(70 - 130)	4.7	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(70 - 130)			SW846 8260B
	87	(70 - 130)	4.1	(0-30)	SW846 8260B
Bromochloromethane	92	(70 - 130)			SW846 8260B
	97	(70 - 130)	5.8	(0-30)	SW846 8260B
m-Xylene & p-Xylene	86	(70 - 130)			SW846 8260B
	88	(70 - 130)	2.6	(0-30)	SW846 8260B
o-Xylene	86	(70 - 130)			SW846 8260B
	87	(70 - 130)	0.80	(0-30)	SW846 8260B
Chloromethane	72	(70 - 130)			SW846 8260B
	77	(70 - 130)	7.3	(0-30)	SW846 8260B
Bromomethane	69 a	(70 - 130)			SW846 8260B
	78	(70 - 130)	13	(0-30)	SW846 8260B
Vinyl chloride	85	(70 - 130)			SW846 8260B
	91	(70 - 130)	7.1	(0-30)	SW846 8260B
Chloroethane	75	(70 - 130)			SW846 8260B
	81	(70 - 130)	7.2	(0-30)	SW846 8260B
Methylene chloride	82	(70 - 130)			SW846 8260B
	83	(70 - 130)	0.85	(0-30)	SW846 8260B
Acetone	86	(70 - 130)			SW846 8260B
	75	(70 - 130)	12	(0-30)	SW846 8260B
Carbon disulfide	95	(70 - 130)			SW846 8260B
	92	(70 - 130)	3.3	(0-30)	SW846 8260B
1,1-Dichloroethene	91	(70 - 130)			SW846 8260B
	91	(70 - 130)	0.29	(0-30)	SW846 8260B
1,1-Dichloroethane	87	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.0	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.6	(0-30)	SW846 8260B
Chloroform	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.5	(0-30)	SW846 8260B
1,2-Dichloroethane	88	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.9	(0-30)	SW846 8260B
2-Butanone	93	(70 - 130)			SW846 8260B
	83	(70 - 130)	11	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE0G1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1A180421-015 MDE0G1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	89	(70 - 130)			SW846 8260B
	92	(70 - 130)	3.0	(0-30)	SW846 8260B
Carbon tetrachloride	93	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.2	(0-30)	SW846 8260B
Bromodichloromethane	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.2	(0-30)	SW846 8260B
1,2-Dichloropropane	88	(70 - 130)			SW846 8260B
	90	(70 - 130)	2.2	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	84	(70 - 130)			SW846 8260B
	89	(70 - 130)	5.3	(0-30)	SW846 8260B
Trichloroethene	90	(70 - 130)			SW846 8260B
	95	(70 - 130)	5.6	(0-30)	SW846 8260B
Dibromochloromethane	90	(70 - 130)			SW846 8260B
	92	(70 - 130)	1.8	(0-30)	SW846 8260B
1,1,2-Trichloroethane	90	(70 - 130)			SW846 8260B
	87	(70 - 130)	3.1	(0-30)	SW846 8260B
Benzene	88	(70 - 130)			SW846 8260B
	91	(70 - 130)	3.3	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	87	(70 - 130)			SW846 8260B
	87	(70 - 130)	0.49	(0-30)	SW846 8260B
Bromoform	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.2	(0-30)	SW846 8260B
4-Methyl-2-pentanone	94	(70 - 130)			SW846 8260B
	88	(70 - 130)	6.7	(0-30)	SW846 8260B
2-Hexanone	94	(70 - 130)			SW846 8260B
	84	(70 - 130)	12	(0-30)	SW846 8260B
Tetrachloroethene	87	(70 - 130)			SW846 8260B
	88	(70 - 130)	1.1	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	81	(70 - 130)			SW846 8260B
	79	(70 - 130)	2.2	(0-30)	SW846 8260B
Toluene	84	(70 - 130)			SW846 8260B
	87	(70 - 130)	2.7	(0-30)	SW846 8260B
Chlorobenzene	86	(70 - 130)			SW846 8260B
	89	(70 - 130)	3.6	(0-30)	SW846 8260B
Ethylbenzene	89	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.4	(0-30)	SW846 8260B
Styrene	87	(70 - 130)			SW846 8260B
	90	(70 - 130)	2.8	(0-30)	SW846 8260B
Xylenes (total)	86	(70 - 130)			SW846 8260B
	88	(70 - 130)	2.0	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE0G1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1A180421-015 MDE0G1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	85	(50 - 150)
	88	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
	84	(50 - 150)
Toluene-d8	84	(50 - 150)
	84	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)
	85	(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.

1/20/2011 @ 1051

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10120A.b\UXJ5075.D
Report Date: 20-Jan-2011 11:16

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: MRL
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\J10120A.b\8260LLUX11.m
Misc Info: J10120A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	0.9291	92.91	70-130
	42	Trichloroethene	1.000	0.9929	99.29	70-130
	59	Chlorobenzene	1.000	0.9838	98.38	70-130
	50	Toluene	1.000	0.9166	91.66	70-130
	41	Benzene	1.000	0.9796	97.96	70-130
	16	Acetone	2.000	1.837	91.84	70-130
	20	Carbon Disulfide	1.000	1.005	100.54	70-130
	9	Chloromethane	1.000	1.156	115.61	70-130
	11	Bromomethane	1.000	1.306	130.65*	70-130
	10	Vinyl Chloride	1.000	1.240	124.04	70-130
	12	Chloroethane	1.000	1.148	114.84	70-130
	21	Methylene Chloride	1.000	1.586	158.58*	70-130
	28	1,1-Dichloroethane	1.000	0.9629	96.29	70-130
M	31	1,2-Dichloroethene	2.000	1.887	94.35	70-130
	35	Chloroform	1.000	0.9437	94.37	70-130
	40	1,2-Dichloroethane	1.000	0.9991	99.91	70-130
	30	2-Butanone	2.000	1.962	98.13	70-130
	37	1,1,1-Trichloroeth	1.000	0.9940	99.40	70-130
	39	Carbon Tetrachlori	1.000	0.9353	93.53	70-130
	46	Bromodichlorometha	1.000	0.9413	94.13	70-130
	43	1,2-Dichloropropan	1.000	0.9471	94.71	70-130
	48	cis-1,3-Dichloropr	1.000	0.9093	90.93	70-130
	54	1,3-Dichloropropan	1.000	0.9458	94.58	70-130
	57	Dibromochlorometha	1.000	0.8882	88.82	70-130
	53	1,1,2-Trichloroeth	1.000	0.9494	94.94	70-130
	51	trans-1,3-Dichloro	1.000	0.8508	85.08	70-130
	49	4-Methyl-2-pentano	2.000	1.752	87.62	70-130
	56	2-Hexanone	2.000	1.700	85.03	70-130
	55	Tetrachloroethene	1.000	0.9694	96.94	70-130
	68	1,1,2,2-Tetrachlor	1.000	0.8313	83.13	70-130
	66	Bromoform	1.000	0.8553	85.53	70-130
	61	Ethylbenzene	1.000	0.9363	93.63	70-130
	65	Styrene	1.000	0.8590	85.90	70-130
M	63	Xylenes (total)	3.000	2.729	90.98	70-130
	32	cis-1,2-dichloroet	1.000	0.9439	94.39	70-130
	25	trans-1,2-Dichloro	1.000	0.9431	94.31	70-130
	8	Dichlorodifluorome	1.000	1.244	124.43	70-130
	13	Trichlorofluoromet	1.000	0.9011	90.11	70-130

70 1,2,3-Trichloropro	1.000	0.8545	85.45	70-130
18 Freon-113	1.000	0.9475	94.75	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10120A.b\UXJ5075.D
Report Date: 20-Jan-2011 11:16

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.9512	95.12	70-130
58 1,2-Dibromoethane	1.000	0.9549	95.49	70-130
67 Isopropylbenzene	1.000	0.9001	90.01	70-130
80 1,3-Dichlorobenzen	1.000	0.9654	96.54	70-130
81 1,4-Dichlorobenzen	1.000	0.9726	97.26	70-130
83 1,2-Dichlorobenzen	1.000	0.9752	97.52	70-130
84 1,2-Dibromo-3-chlo	1.000	0.7661	76.61	70-130
85 1,2,4-Trichloroben	1.000	0.7516	75.16	70-130
98 Cyclohexane	1.000	1.004	100.45	70-130
143 Methyl Acetate	2.000	1.815	90.74	70-130
144 Methylcyclohexane	1.000	0.9780	97.80	70-130
71 Bromobenzene	1.000	0.8084	80.84	70-130
34 Bromochloromethane	1.000	0.9603	96.03	70-130
82 n-Butylbenzene	1.000	0.8850	88.50	70-130
78 sec-Butylbenzene	1.000	0.8413	84.13	70-130
76 tert-Butylbenzene	1.000	0.8784	87.84	70-130
73 2-Chlorotoluene	1.000	0.8333	83.33	70-130
75 4-Chlorotoluene	1.000	0.8176	81.76	70-130
45 Dibromomethane	1.000	0.9797	97.97	70-130
33 2,2-Dichloropropan	1.000	0.8922	89.22	70-130
38 1,1-Dichloropropen	1.000	1.006	100.57	70-130
86 Hexachlorobutadien	1.000	0.7966	79.66	70-130
19 Iodomethane	1.000	1.080	108.02	70-130
79 4-Isopropyltoluene	1.000	0.8368	83.68	70-130
87 Naphthalene	1.000	0.9407	94.07	70-130
72 n-Propylbenzene	1.000	0.8557	85.57	70-130
60 1,1,1,2-Tetrachlor	1.000	0.9471	94.71	70-130
88 1,2,3-Trichloroben	1.000	0.7316	73.16	70-130
77 1,2,4-Trimethylben	1.000	0.8420	84.20	70-130
74 1,3,5-Trimethylben	1.000	0.8043	80.43	70-130
150 Vinyl Acetate-86	1.000	0.8016	80.16	70-130
62 m + p-Xylene	2.000	1.842	92.12	70-130
64 Xylene-o	1.000	0.8871	88.71	70-130
49 4-Methyl-2-pentano	2.000	1.752	87.62	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	8.467	84.67	75-121
$ 5 1,2-Dichloroethane	10.000	7.910	79.10	63-129
$ 6 Toluene-d8	10.000	8.490	84.90	74-115
$ 7 Bromofluorobenzene	10.000	8.417	84.17	66-117

1/20/2011 @2038

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10120A.b\UXJ5101.D
Report Date: 21-Jan-2011 08:28

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10120A.b\8260LLUX11.m
Misc Info: J10120A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	0.7754	77.54	70-130
	42	Trichloroethene	1.000	0.9134	91.34	70-130
	59	Chlorobenzene	1.000	0.8273	82.73	70-130
	50	Toluene	1.000	0.8312	83.12	70-130
	41	Benzene	1.000	0.9430	94.30	70-130
	16	Acetone	2.000	1.750	87.48	70-130
	20	Carbon Disulfide	1.000	0.8080	80.80	70-130
	9	Chloromethane	1.000	0.9601	96.01	70-130
	11	Bromomethane	1.000	0.9554	95.54	70-130
	10	Vinyl Chloride	1.000	1.095	109.48	70-130
	12	Chloroethane	1.000	1.003	100.33	70-130
	21	Methylene Chloride	1.000	1.504	150.35*	70-130
	28	1,1-Dichloroethane	1.000	0.8795	87.95	70-130
M	31	1,2-Dichloroethene	2.000	1.774	88.70	70-130
	35	Chloroform	1.000	0.9607	96.07	70-130
	40	1,2-Dichloroethane	1.000	0.9176	91.76	70-130
	30	2-Butanone	2.000	2.022	101.11	70-130
	37	1,1,1-Trichloroeth	1.000	0.8015	80.15	70-130
	39	Carbon Tetrachlori	1.000	0.7490	74.90	70-130
	46	Bromodichlorometha	1.000	0.8244	82.44	70-130
	43	1,2-Dichloropropan	1.000	0.9246	92.47	70-130
	48	cis-1,3-Dichloropr	1.000	0.7597	75.97	70-130
	54	1,3-Dichloropropan	1.000	0.9449	94.49	70-130
	57	Dibromochlorometha	1.000	0.7872	78.73	70-130
	53	1,1,2-Trichloroeth	1.000	0.8520	85.20	70-130
	51	trans-1,3-Dichloro	1.000	0.7188	71.88	70-130
	49	4-Methyl-2-pentano	2.000	1.786	89.31	70-130
	56	2-Hexanone	2.000	1.592	79.62	70-130
	55	Tetrachloroethene	1.000	0.6962	OK 69.62*	70-130
	68	1,1,2,2-Tetrachlor	1.000	0.8342	83.42	70-130
	66	Bromoform	1.000	0.7360	73.60	70-130
	61	Ethylbenzene	1.000	0.7512	75.13	70-130
	65	Styrene	1.000	0.6894	68.94*	70-130
M	63	Xylenes (total)	3.000	2.160	72.00	70-130
	32	cis-1,2-dichloroet	1.000	0.9056	90.56	70-130
	25	trans-1,2-Dichloro	1.000	0.8683	86.83	70-130
	8	Dichlorodifluorome	1.000	1.109	110.87	70-130
	13	Trichlorofluoromet	1.000	0.8533	85.33	70-130

70	1,2,3-Trichloropro	1.000	0.9202	92.02	70-130
18	Freon-113	1.000	0.7705	77.05	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10120A.b\UXJ5101.D
Report Date: 21-Jan-2011 08:28

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.8629	86.29	70-130
58 1,2-Dibromoethane	1.000	0.8475	84.75	70-130
67 Isopropylbenzene	1.000	0.6316	NT 63.16*	70-130
80 1,3-Dichlorobenzen	1.000	0.7225	72.25	70-130
81 1,4-Dichlorobenzen	1.000	0.8006	80.06	70-130
83 1,2-Dichlorobenzen	1.000	0.8387	83.87	70-130
84 1,2-Dibromo-3-chlo	1.000	0.6086	NT 60.86*	70-130
85 1,2,4-Trichloroben	1.000	0.5107	NT 51.07*	70-130
98 Cyclohexane	1.000	0.6367	NT 63.67*	70-130
143 Methyl Acetate	2.000	1.840	92.02	70-130
144 Methylcyclohexane	1.000	0.5910	NT 59.10*	70-130
71 Bromobenzene	1.000	0.6997	OK 69.97*	70-130
34 Bromochloromethane	1.000	0.9927	99.27	70-130
82 n-Butylbenzene	1.000	0.5545	NT 55.45*	70-130
78 sec-Butylbenzene	1.000	0.5203	NT 52.03*	70-130
76 tert-Butylbenzene	1.000	0.5765	NT 57.65*	70-130
73 2-Chlorotoluene	1.000	0.6163	NT 61.63*	70-130
75 4-Chlorotoluene	1.000	0.6219	L 62.19*	70-130
45 Dibromomethane	1.000	0.9023	90.23	70-130
33 2,2-Dichloropropan	1.000	0.7538	75.38	70-130
38 1,1-Dichloropropen	1.000	0.7488	74.88	70-130
86 Hexachlorobutadien	1.000	0.5092	NT 50.92*	70-130
19 Iodomethane	1.000	0.9881	98.81	70-130
79 4-Isopropyltoluene	1.000	0.5625	NT 56.25*	70-130
87 Naphthalene	1.000	0.6131	NT 61.31*	70-130
72 n-Propylbenzene	1.000	0.5281	NT 52.81*	70-130
60 1,1,1,2-Tetrachlor	1.000	0.7787	77.87	70-130
88 1,2,3-Trichloroben	1.000	0.5817	NT 58.17*	70-130
77 1,2,4-Trimethylben	1.000	0.6121	61.21*	70-130
74 1,3,5-Trimethylben	1.000	0.5644	56.44*	70-130
150 Vinyl Acetate-86	1.000	0.5392	53.92*	70-130
62 m + p-Xylene	2.000	1.420	70.99	70-130
64 Xylene-o	1.000	0.7402	74.02	70-130
49 4-Methyl-2-pentano	2.000	1.786	89.31	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	8.535	85.35	75-121
$ 5 1,2-Dichloroethane	10.000	7.977	79.77	63-129
$ 6 Toluene-d8	10.000	8.583	85.83	74-115
$ 7 Bromofluorobenzene	10.000	8.692	86.92	66-117

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.9 and 2.7 °C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP9-1/21/2011 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: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 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, butylbenzyl phthalate 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%?	✓				LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
19. Was a second source (ICV) verification analyzed after the ICAL? Were results 70-130%?	✓			1/21/11 @ 1259	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?	✓			1/24/11 @ 0947	LCG Table 2
21. Was the percent difference (% D) for the CCCs ≤ 20%? (see Table 1) (% drift if regression fit model used)	✓				LCG Table 2
22. Were the minimum RFs for the SPCCs met? (see Table 2)	✓				LCG Table 2
23. Was the %Difference or %Drift ≤20% for all target analytes? OR was the average %D ≤20% with no individual analyte ≥30%D?	✓				LCG Table 2 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>30% (neg) = J/R D>30% (pos) = J

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG**: A1A180421 R0
Sample Event: January 2011 **Analysis**: SW846 8270C (including PAHs)
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
24. Were the internal standards added to every sample?	✓				LCG Table 2
25. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point ICAL std?	✓				LCG Table 2 R
26. Did the areas of all IS compounds vary by no more than -50% to +100% from the ICAL EICP area?	✓				LCG Table 2 R
27. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 2
28. Were all target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR.	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%?		✓		The bis (2-ethylhexyl) phthalate RPD for samples FWGLL1mw-Dup2-1693-GW and FWGLL1mw-084c-1643-GW was above control limits at 59%. The bis (2-ethylhexyl) phthalate results for samples FWGLL1mw-Dup2-1693-GW and FWGLL1mw-084c-1643-GW were qualified as estimated, "J".	QAPP Table 3-2 RPD >30=J
33. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 2
34. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	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 matrix spike and matrix spike duplicate analyzed on sample FWGLL1mw-081c-1641-GW recovered below control limits for 3,3'-dichlorobenzidine at 30 and 8.6% and hexachlorocyclopentadiene at 36% and 38%. As there were no other QC outliers, no qualifications were made.	LCG Table 2 Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
38. Were surrogate recoveries within 50-150%?	✓			Checked by ADR.	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
2,4-Dinitrophenol	0.050
4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1643-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-001 **Work Order #...:** MDEXV1AC **Matrix.....:** WG
Date Sampled...: 01/17/11 15:07 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1018102
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	**0.87 J**	10	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1643-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-001 **Work Order #...:** MDEXV1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	**1.8 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1643-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-001 **Work Order #...:** MDEXV1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	70	(50 - 150)
Terphenyl-d14	87	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	76	(50 - 150)
2,4,6-Tribromophenol	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1693-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-003 **Work Order #...:** MDEX21AC **Matrix.....:** WG
Date Sampled...: 01/17/11 16:10 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1018102
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	**1.6 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-DUP2-1693-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-003 Work Order #...: MDEX21AC 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	**2.1 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1693-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-003 **Work Order #...:** MDEX21AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	82	(50 - 150)
Phenol-d5	70	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	74	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1698-GW/GF

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-005 **Work Order #...:** MDEX41AC **Matrix.....:** WQ
Date Sampled...: 01/17/11 17:20 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1018102
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1698-GW/GF

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-005 **Work Order #...:** MDEX41AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1698-GW/GF

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-005 **Work Order #...:** MDEX41AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	62	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	70	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1644-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-008 **Work Order #...:** MDEX81AC **Matrix.....:** WG
Date Sampled...: 01/17/11 14:25 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1018102
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	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	1.3	**1.0**	**ug/L**	**0.80**
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1644-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-008 **Work Order #...:** MDEX81AC **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: FWGLL1mw-085C-1644-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-008 **Work Order #...:** MDEX81AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	70	(50 - 150)
2-Fluorophenol	69	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1640-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-010 **Work Order #...:** MDE0A1AC **Matrix.....:** WG
Date Sampled...: 01/17/11 15:30 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1018102
Dilution Factor: 1.25 **Initial Wgt/Vol:** 800 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.25	ug/L	0.12
Acenaphthylene	ND	0.25	ug/L	0.12
Anthracene	ND	0.25	ug/L	0.12
Benzo(a)anthracene	ND	0.25	ug/L	0.12
Benzo(b)fluoranthene	ND	0.25	ug/L	0.12
Benzo(k)fluoranthene	ND	0.25	ug/L	0.12
Benzoic acid	ND	12	ug/L	12
Benzo(ghi)perylene	ND	0.25	ug/L	0.12
Benzo(a)pyrene	ND	0.25	ug/L	0.12
Benzyl alcohol	ND	6.2	ug/L	0.48
bis(2-Chloroethoxy) methane	ND	1.2	ug/L	0.40
bis(2-Chloroethyl)-ether	ND	1.2	ug/L	0.12
bis(2-Ethylhexyl) phthalate	**1.0 J**	**12**	**ug/L**	**1.0**
4-Bromophenyl phenyl ether	ND	2.5	ug/L	1.0
Butyl benzyl phthalate	ND	1.2	ug/L	1.0
Carbazole	ND	1.2	ug/L	0.35
4-Chloroaniline	ND	2.5	ug/L	1.0
4-Chloro-3-methylphenol	ND	2.5	ug/L	1.0
2-Chloronaphthalene	ND	1.2	ug/L	0.12
2-Chlorophenol	ND	1.2	ug/L	0.36
4-Chlorophenyl phenyl ether	ND	2.5	ug/L	0.38
Chrysene	ND	0.25	ug/L	0.12
Dibenz(a,h)anthracene	ND	0.25	ug/L	0.12
Dibenzofuran	ND	1.2	ug/L	0.12
Di-n-butyl phthalate	ND	1.2	ug/L	0.84
1,2-Dichlorobenzene	ND	1.2	ug/L	0.36
1,3-Dichlorobenzene	ND	1.2	ug/L	1.0
1,4-Dichlorobenzene	ND	1.2	ug/L	0.42
3,3'-Dichlorobenzidine	ND	6.2	ug/L	0.46
2,4-Dichlorophenol	ND	2.5	ug/L	1.0
Diethyl phthalate	ND	1.2	ug/L	0.75
2,4-Dimethylphenol	ND	2.5	ug/L	1.0
Dimethyl phthalate	ND	1.2	ug/L	0.36

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1640-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-010 **Work Order #...:** MDE0A1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	6.2	ug/L	3.0
2,4-Dinitrophenol	ND	6.2	ug/L	3.0
2,4-Dinitrotoluene	ND	6.2	ug/L	0.34
2,6-Dinitrotoluene	ND	6.2	ug/L	1.0
Di-n-octyl phthalate	ND	1.2	ug/L	1.0
Fluoranthene	ND	0.25	ug/L	0.12
Fluorene	ND	0.25	ug/L	0.12
Hexachlorobenzene	ND	0.25	ug/L	0.12
Hexachlorobutadiene	ND	1.2	ug/L	0.34
Hexachloroethane	ND	1.2	ug/L	1.0
Indeno(1,2,3-cd)pyrene	ND	0.25	ug/L	0.12
Isophorone	ND	1.2	ug/L	0.34
2-Methylnaphthalene	ND	0.25	ug/L	0.12
2-Methylphenol	ND	1.2	ug/L	1.0
4-Methylphenol	ND	1.2	ug/L	1.0
Naphthalene	ND	0.25	ug/L	0.12
2-Nitroaniline	ND	2.5	ug/L	1.0
3-Nitroaniline	ND	2.5	ug/L	0.35
4-Nitroaniline	ND	2.5	ug/L	1.0
Nitrobenzene	ND	1.2	ug/L	0.050
2-Nitrophenol	ND	2.5	ug/L	0.35
4-Nitrophenol	ND	6.2	ug/L	3.0
N-Nitrosodiphenylamine	ND	1.2	ug/L	0.39
N-Nitrosodi-n-propyl-amine	ND	1.2	ug/L	1.0
2,2'-oxybis (1-Chloropropane)	ND	1.2	ug/L	0.50
Pentachlorophenol	ND	6.2	ug/L	3.0
Phenanthrene	ND	0.25	ug/L	0.12
Phenol	ND	1.2	ug/L	0.75
Pyrene	ND	0.25	ug/L	0.12
1,2,4-Trichloro-benzene	ND	1.2	ug/L	0.35
2,4,5-Trichloro-phenol	ND	6.2	ug/L	0.38
2,4,6-Trichloro-phenol	ND	6.2	ug/L	1.0
Hexachlorocyclopenta-diene	ND	12	ug/L	1.0

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1640-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-010 **Work Order #...:** MDE0A1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(50 - 150)
2-Fluorobiphenyl	65	(50 - 150)
Terphenyl-d14	82	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1642-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-012 **Work Order #...:** MDE0D1AC **Matrix.....:** WG
Date Sampled...: 01/17/11 16:50 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1018102
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	**0.85 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1642-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-012 Work Order #...: MDE0D1AC 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: FWGLL1mw-082C-1642-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-012 **Work Order #...:** MDE0D1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	71	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1641-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-015 **Work Order #...:** MDE0G1AE **Matrix.....:** WG
Date Sampled...: 01/17/11 15:10 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1018102
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1641-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-015 **Work Order #...:** MDE0G1AE **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: FWGLL1mw-081C-1641-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A180421-015 **Work Order #...:** MDE0G1AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	59	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	66	(50 - 150)
2-Fluorophenol	65	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE061AA **Matrix.....:** WATER
MB Lot-Sample #: A1A180000-102

Prep Date.....: 01/18/11 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 01/24/11 **Prep Batch #...:** 1018102
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

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE061AA **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	67	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	83	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	74	(50 - 150)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE061AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	72	(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 #...: A1A180421 Work Order #...: MDE061AC Matrix.....: WATER
LCS Lot-Sample#: A1A180000-102
Prep Date.....: 01/18/11 Analysis Date..: 01/24/11
Prep Batch #...: 1018102
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	65	(30 - 120)	SW846 8270C
Acenaphthene	69	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	75	(34 - 151)	SW846 8270C
Pyrene	71	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	69	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	69	(30 - 115)	SW846 8270C
Pentachlorophenol	51	(30 - 150)	SW846 8270C
Phenol	79	(30 - 115)	SW846 8270C
2-Chlorophenol	78	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	76	(31 - 121)	SW846 8270C
4-Nitrophenol	74	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	71	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	65	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	77	(36 - 135)	SW846 8270C
4-Methylphenol	76	(31 - 115)	SW846 8270C
4-Nitroaniline	67	(30 - 140)	SW846 8270C
Acenaphthylene	71	(37 - 115)	SW846 8270C
Anthracene	74	(45 - 118)	SW846 8270C
Benzo(a)anthracene	68	(43 - 138)	SW846 8270C
Benzo(a)pyrene	64	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	66	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	75	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	81	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	74	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	77	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	78	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	74	(30 - 154)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A180421 Work Order #...: MDE061AC Matrix.....: WATER
LCS Lot-Sample#: A1A180000-102

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	75	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	75	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	57	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	50	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	74	(43 - 122)	SW846 8270C
2-Chloronaphthalene	69	(35 - 115)	SW846 8270C
2-Methylnaphthalene	80	(32 - 115)	SW846 8270C
2-Methylphenol	74	(30 - 116)	SW846 8270C
2-Nitroaniline	67	(36 - 140)	SW846 8270C
2-Nitrophenol	78	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	52	(30 - 160)	SW846 8270C
3-Nitroaniline	65	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	75	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	76	(43 - 118)	SW846 8270C
4-Chloroaniline	55	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	73	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	75	(37 - 136)	SW846 8270C
Carbazole	72	(49 - 126)	SW846 8270C
Chrysene	73	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	75	(38 - 130)	SW846 8270C
Dibenzofuran	71	(40 - 115)	SW846 8270C
Diethyl phthalate	74	(43 - 132)	SW846 8270C
Dimethyl phthalate	74	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	72	(36 - 151)	SW846 8270C
Fluoranthene	76	(47 - 132)	SW846 8270C
Fluorene	70	(41 - 115)	SW846 8270C
Hexachlorobenzene	75	(42 - 123)	SW846 8270C
Hexachlorobutadiene	52	(30 - 120)	SW846 8270C
Hexachloroethane	54	(30 - 120)	SW846 8270C
Isophorone	71	(33 - 115)	SW846 8270C
Naphthalene	71	(30 - 119)	SW846 8270C
Nitrobenzene	77	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	65	(35 - 124)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE061AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A180000-102

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	72	(45 - 117)	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	74	(37 - 130)	**SW846 8270C**
Di-n-butyl phthalate	78	(46 - 123)	**SW846 8270C**
Hexachlorocyclopenta-diene	34	(30 - 115)	**SW846 8270C**
Benzoic acid	59	(30 - 136)	**SW846 8270C**
Benzyl alcohol	76	(29 - 115)	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	74	(50 - 150)
2-Fluorophenol	76	(50 - 150)
2,4,6-Tribromophenol	76	(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 #...: A1A180421 Work Order #...: MDE0G1AF-MS Matrix.....: WG
MS Lot-Sample #: A1A180421-015 MDE0G1AG-MSD
Date Sampled...: 01/17/11 15:10 Date Received..: 01/18/11
Prep Date.....: 01/18/11 Analysis Date..: 01/24/11
Prep Batch #...: 1018102
Dilution Factor: 1 Initial Wgt/Vol: 480 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	69	(45 - 135)			SW846 8270C
	68	(45 - 135)	1.6	(0-40)	SW846 8270C
Acenaphthene	70	(45 - 135)			SW846 8270C
	69	(45 - 135)	2.3	(0-40)	SW846 8270C
2,4-Dinitrotoluene	77	(45 - 135)			SW846 8270C
	76	(45 - 135)	0.38	(0-40)	SW846 8270C
Pyrene	74	(45 - 135)			SW846 8270C
	70	(45 - 135)	6.1	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	70	(45 - 135)			SW846 8270C
	68	(45 - 135)	2.8	(0-40)	SW846 8270C
1,4-Dichlorobenzene	71	(45 - 135)			SW846 8270C
	69	(45 - 135)	2.4	(0-40)	SW846 8270C
Pentachlorophenol	57	(45 - 135)			SW846 8270C
	56	(45 - 135)	2.7	(0-40)	SW846 8270C
Phenol	80	(45 - 135)			SW846 8270C
	77	(45 - 135)	3.8	(0-40)	SW846 8270C
2-Chlorophenol	77	(45 - 135)			SW846 8270C
	76	(45 - 135)	1.4	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	78	(45 - 135)			SW846 8270C
	75	(45 - 135)	4.1	(0-40)	SW846 8270C
4-Nitrophenol	81	(45 - 135)			SW846 8270C
	77	(45 - 135)	4.7	(0-40)	SW846 8270C
Acenaphthylene	71	(45 - 135)			SW846 8270C
	69	(45 - 135)	2.4	(0-40)	SW846 8270C
Anthracene	76	(45 - 135)			SW846 8270C
	70	(45 - 135)	8.5	(0-40)	SW846 8270C
Benzo(a)anthracene	71	(45 - 135)			SW846 8270C
	66	(45 - 135)	6.7	(0-40)	SW846 8270C
Benzo(b)fluoranthene	67	(45 - 135)			SW846 8270C
	59	(45 - 135)	13	(0-40)	SW846 8270C
Benzo(k)fluoranthene	81	(45 - 135)			SW846 8270C
	80	(45 - 135)	1.4	(0-40)	SW846 8270C
Benzo(ghi)perylene	77	(45 - 135)			SW846 8270C
	71	(45 - 135)	7.3	(0-40)	SW846 8270C
Benzo(a)pyrene	66	(45 - 135)			SW846 8270C
	61	(45 - 135)	7.5	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE0G1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1A180421-015 MDE0G1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	75	(45 - 135)			SW846 8270C
	74	(45 - 135)	1.8	(0-40)	SW846 8270C
bis(2-Chloroethyl)- ether	78	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.6	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	78	(45 - 135)			SW846 8270C
	78	(45 - 135)	0.20	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	78	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.8	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	78	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.4	(0-40)	SW846 8270C
Butyl benzyl phthalate	83	(45 - 135)			SW846 8270C
	75	(45 - 135)	11	(0-40)	SW846 8270C
Carbazole	75	(45 - 135)			SW846 8270C
	72	(45 - 135)	3.8	(0-40)	SW846 8270C
4-Chloroaniline	55	(45 - 135)			SW846 8270C
	52	(45 - 135)	5.3	(0-40)	SW846 8270C
2-Chloronaphthalene	71	(45 - 135)			SW846 8270C
	70	(45 - 135)	2.3	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	75	(45 - 135)			SW846 8270C
	74	(45 - 135)	1.3	(0-40)	SW846 8270C
Chrysene	74	(45 - 135)			SW846 8270C
	75	(45 - 135)	1.8	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	78	(45 - 135)			SW846 8270C
	72	(45 - 135)	8.2	(0-40)	SW846 8270C
Dibenzofuran	72	(45 - 135)			SW846 8270C
	71	(45 - 135)	1.5	(0-40)	SW846 8270C
Di-n-butyl phthalate	80	(45 - 135)			SW846 8270C
	78	(45 - 135)	3.2	(0-40)	SW846 8270C
1,2-Dichlorobenzene	72	(45 - 135)			SW846 8270C
	71	(45 - 135)	1.3	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE0G1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1A180421-015 MDE0G1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	67	(45 - 135)			SW846 8270C
	66	(45 - 135)	1.8	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	30 a	(45 - 135)			SW846 8270C
	8.6 a,p	(45 - 135)	111	(0-40)	SW846 8270C
2,4-Dichlorophenol	76	(45 - 135)			SW846 8270C
	76	(45 - 135)	0.0	(0-40)	SW846 8270C
Diethyl phthalate	76	(45 - 135)			SW846 8270C
	77	(45 - 135)	1.8	(0-40)	SW846 8270C
2,4-Dimethylphenol	62	(45 - 135)			SW846 8270C
	51	(45 - 135)	19	(0-40)	SW846 8270C
Dimethyl phthalate	74	(45 - 135)			SW846 8270C
	76	(45 - 135)	2.3	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	75	(45 - 135)			SW846 8270C
	74	(45 - 135)	0.87	(0-40)	SW846 8270C
2,4-Dinitrophenol	54	(45 - 135)			SW846 8270C
	52	(45 - 135)	2.5	(0-40)	SW846 8270C
2,6-Dinitrotoluene	76	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.70	(0-40)	SW846 8270C
Di-n-octyl phthalate	74	(45 - 135)			SW846 8270C
	70	(45 - 135)	6.5	(0-40)	SW846 8270C
Fluoranthene	79	(45 - 135)			SW846 8270C
	74	(45 - 135)	6.0	(0-40)	SW846 8270C
Fluorene	71	(45 - 135)			SW846 8270C
	70	(45 - 135)	2.4	(0-40)	SW846 8270C
Hexachlorobenzene	75	(45 - 135)			SW846 8270C
	72	(45 - 135)	4.0	(0-40)	SW846 8270C
Hexachlorobutadiene	56	(45 - 135)			SW846 8270C
	55	(45 - 135)	0.38	(0-40)	SW846 8270C
Hexachlorocyclopenta-diene	36 a	(45 - 135)			SW846 8270C
	38 a	(45 - 135)	5.2	(0-40)	SW846 8270C
Hexachloroethane	56	(45 - 135)			SW846 8270C
	57	(45 - 135)	0.72	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	77	(45 - 135)			SW846 8270C
	71	(45 - 135)	7.8	(0-40)	SW846 8270C
Isophorone	73	(45 - 135)			SW846 8270C
	72	(45 - 135)	1.1	(0-40)	SW846 8270C
2-Methylnaphthalene	81	(45 - 135)			SW846 8270C
	79	(45 - 135)	2.9	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE0G1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1A180421-015 MDE0G1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	76	(45 - 135)			SW846 8270C
	73	(45 - 135)	3.0	(0-40)	SW846 8270C
4-Methylphenol	75	(45 - 135)			SW846 8270C
	70	(45 - 135)	6.2	(0-40)	SW846 8270C
Naphthalene	72	(45 - 135)			SW846 8270C
	70	(45 - 135)	2.4	(0-40)	SW846 8270C
2-Nitroaniline	66	(45 - 135)			SW846 8270C
	68	(45 - 135)	2.3	(0-40)	SW846 8270C
3-Nitroaniline	63	(45 - 135)			SW846 8270C
	66	(45 - 135)	4.0	(0-50)	SW846 8270C
4-Nitroaniline	67	(45 - 135)			SW846 8270C
	70	(45 - 135)	3.8	(0-40)	SW846 8270C
Nitrobenzene	77	(45 - 135)			SW846 8270C
	77	(45 - 135)	0.64	(0-40)	SW846 8270C
2-Nitrophenol	80	(45 - 135)			SW846 8270C
	78	(45 - 135)	3.2	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	66	(45 - 135)			SW846 8270C
	54	(45 - 135)	19	(0-40)	SW846 8270C
Phenanthrene	74	(45 - 135)			SW846 8270C
	71	(45 - 135)	4.7	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	79	(45 - 135)			SW846 8270C
	81	(45 - 135)	2.2	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	77	(45 - 135)			SW846 8270C
	77	(45 - 135)	0.05	(0-40)	SW846 8270C
Benzoic acid	60	(45 - 135)			SW846 8270C
	60	(45 - 135)	0.03	(0-40)	SW846 8270C
Benzyl alcohol	77	(45 - 135)			SW846 8270C
	77	(45 - 135)	0.04	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
	65	(50 - 150)
2-Fluorobiphenyl	68	(50 - 150)
	66	(50 - 150)
Terphenyl-d14	85	(50 - 150)
	79	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE0G1AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1A180421-015 MDE0G1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	76	(50 - 150)
	70	(50 - 150)
2-Fluorophenol	77	(50 - 150)
	72	(50 - 150)
2,4,6-Tribromophenol	79	(50 - 150)
	77	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ Feb. 28, 2011

SDG: A1A180421 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.9 and 2.7 °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 1/18/11, 1/31/11 12/21/10, 1/25/11 (toxaphene) stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column Only the primary column was evaluated as there were no detected concentrations above the RL.	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?	✓			12/24/10	LCG Table 4 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ Feb. 28, 2011

SDG: A1A180421 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?		✓		10/21/10 @ 1946 and 10/22/10 @ 0405 The opening and closing MRLs for the analytical sequence starting on 2/1/11 recovered above control for several targets. Toxaphene was not included in the MRL standard. The toxaphene results were qualified as estimated, "UJ". No additional qualifications were made for the other analytes, as there were no detected concentrations in the bracketed field samples.	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%?		✓		1/18/11 @ 1628, 1/31/11 @1743 Tox 1/25/11 @1729 The toxaphene curve analyzed 12/21/10 did not have an ICV. As toxaphene is a multi component analyte and identification is based on pattern and the bracketing CCVs were within limits, the toxaphene results for samples FWGEQUIPRinse1-1698-GW, FWGLL1mw-085c-1644-GW, FWGLL1mw-067c-1640-GW, FWGLL1mw-082c-1642-GW and FWGLL1mw-081c-1641-GW were qualified as estimated,"UJ".	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R
15. Was a CCV run every 12 hours?		✓		1/20/11 @ 1334 and 1946, 2/1/11 @ 0041, 0508 Tox-1/20/11 @ 1224, 1/21/11 @ 0238, 1/31/11 @1224, 2/1/11 @ 0238 The closing toxaphene CCV on 1/21/11 was analyzed outside the 12 window, but no qualifications were made as the closing CCV (when analyzed) was within control limits. The second column tox CCV %D was above control limits at 1224. No qualifications were made as there were no detected toxaphene concentrations. The opening and closing CCVs for the analytical sequence starting on 2/1/11 recovered above control for several targets; however no qualifications were made as there were no reported concentrations in the associated field samples.	LCG Table 4
16. Was the %D for all target analytes ≤5%? OR was the average %D ≤ 15% with no individual analyte >30%?	✓			The average %D was ≤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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ Feb. 28, 2011

SDG: A1A180421 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 50-150% and RPD ≤20%?	✓				*Was QAPP Table 3-2,* Pj
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits for FWGLL1mw-067c-1640-GW at 48%, FWGLL1mw-081c-1641-GW at 40% and FWGLL1mw-082c-1642-GW at 39%. The results for FWGLL1mw-067c-1640-GW, FWGLL1mw-081c-1641-GW and FWGLL1mw-082c-1642-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?			✓	As there were no detected concentrations above the RL, no evaluation was made.	LCG Table 4 >40 RPD=J
29. Were reported sample concentrations within calibration range?			✓		
30. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
31. Were lab comments included in report? If yes, summarize contents.	✓			Samples FWGLL1mw-084c-1643-GW and FWGLL1mw-Dup2-1963-GW were diluted due to matrix interference, elevating reporting limits.	

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

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-084C-1643-GW

GC Semivolatiles

Lot-Sample #...: A1A180421-001 **Work Order #...:** MDEXV1AD **Matrix.....:** WG
Date Sampled...: 01/17/11 15:07 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1018104
Dilution Factor: 5 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.15	ug/L	0.035
beta-BHC	ND	0.15	ug/L	0.042
delta-BHC	ND	0.15	ug/L	0.044
gamma-BHC (Lindane)	ND	0.15	ug/L	0.032
Heptachlor	ND	0.15	ug/L	0.040
Aldrin	ND	0.15	ug/L	0.041
Heptachlor epoxide	ND	0.15	ug/L	0.036
Endosulfan I	ND	0.12	ug/L	0.065
Dieldrin	ND	0.15	ug/L	0.038
4,4'-DDE	ND	0.15	ug/L	0.048
Endrin	ND	0.15	ug/L	0.055
Endosulfan II	ND	0.12	ug/L	0.060
4,4'-DDD	ND	0.15	ug/L	0.048
Endosulfan sulfate	ND	0.15	ug/L	0.055
4,4'-DDT	ND	0.15	ug/L	0.080
Methoxychlor	ND	0.50	ug/L	0.16
Endrin ketone	ND	0.15	ug/L	0.039
Endrin aldehyde	ND	0.15	ug/L	0.055
alpha-Chlordane	ND	0.15	ug/L	0.070
gamma-Chlordane	ND	0.15	ug/L	0.060
Toxaphene	ND	10	ug/L	1.6

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	98 DIL	(50 - 150)
Decachlorobiphenyl	60 DIL	(50 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1693-GW

GC Semivolatiles

Lot-Sample #...: A1A180421-003 **Work Order #...:** MDEX21AD **Matrix.....:** WG
Date Sampled...: 01/17/11 16:10 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1018104
Dilution Factor: 5 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.15	ug/L	0.035
beta-BHC	ND	0.15	ug/L	0.042
delta-BHC	ND	0.15	ug/L	0.044
gamma-BHC (Lindane)	ND	0.15	ug/L	0.032
Heptachlor	ND	0.15	ug/L	0.040
Aldrin	ND	0.15	ug/L	0.041
Heptachlor epoxide	ND	0.15	ug/L	0.036
Endosulfan I	ND	0.12	ug/L	0.065
Dieldrin	ND	0.15	ug/L	0.038
4,4'-DDE	ND	0.15	ug/L	0.048
Endrin	ND	0.15	ug/L	0.055
Endosulfan II	ND	0.12	ug/L	0.060
4,4'-DDD	ND	0.15	ug/L	0.048
Endosulfan sulfate	ND	0.15	ug/L	0.055
4,4'-DDT	ND	0.15	ug/L	0.080
Methoxychlor	ND	0.50	ug/L	0.16
Endrin ketone	ND	0.15	ug/L	0.039
Endrin aldehyde	ND	0.15	ug/L	0.055
alpha-Chlordane	ND	0.15	ug/L	0.070
gamma-Chlordane	ND	0.15	ug/L	0.060
Toxaphene	ND	10	ug/L	1.6

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96 DIL	(50 - 150)
Decachlorobiphenyl	78 DIL	(50 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1698-GW/GF

GC Semivolatiles

Lot-Sample #...: A1A180421-005 **Work Order #...:** MDEX41AD **Matrix.....:** WQ
Date Sampled...: 01/17/11 17:20 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1018104
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1644-GW

GC Semivolatiles

Lot-Sample #...: A1A180421-008 **Work Order #...:** MDEX81AD **Matrix.....:** WG
Date Sampled...: 01/17/11 14:25 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1018104
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	79	(50 - 150)
Decachlorobiphenyl	56	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1640-GW

GC Semivolatiles

Lot-Sample #...: A1A180421-010 **Work Order #...:** MDE0A1AD **Matrix.....:** WG
Date Sampled...: 01/17/11 15:30 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1018104
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	84	(50 - 150)
Decachlorobiphenyl	48 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1642-GW

GC Semivolatiles

Lot-Sample #...: A1A180421-012 **Work Order #...:** MDE0D1AD **Matrix.....:** WG
Date Sampled...: 01/17/11 16:50 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1018104
Dilution Factor: 1 **Initial Wgt/Vol:** 900 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	39 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1641-GW

GC Semivolatiles

Lot-Sample #...: A1A180421-015 **Work Order #...:** MDE0G1AH **Matrix.....:** WG
Date Sampled...: 01/17/11 15:10 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1018104
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE081AA **Matrix.....:** WATER
MB Lot-Sample #: A1A180000-104

Prep Date.....: 01/18/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 02/01/11 **Prep Batch #...:** 1018104
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	99	(50 - 150)
Decachlorobiphenyl	99	(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 #...: A1A180421 Work Order #...: MDE081AC Matrix.....: WATER
LCS Lot-Sample#: A1A180000-104
Prep Date.....: 01/18/11 Analysis Date..: 01/20/11
Prep Batch #...: 1018104
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	86	(44 - 137)	SW846 8081A
beta-BHC	82	(50 - 135)	SW846 8081A
delta-BHC	86	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	74	(58 - 127)	SW846 8081A
Heptachlor	83	(48 - 150)	SW846 8081A
Aldrin	81	(53 - 128)	SW846 8081A
Heptachlor epoxide	85	(50 - 127)	SW846 8081A
Endosulfan I	53	(50 - 160)	SW846 8081A
Dieldrin	85	(50 - 124)	SW846 8081A
4,4'-DDE	87	(50 - 130)	SW846 8081A
Endrin	89	(50 - 137)	SW846 8081A
Endosulfan II	62	(50 - 144)	SW846 8081A
4,4'-DDD	91	(50 - 137)	SW846 8081A
Endosulfan sulfate	87	(50 - 160)	SW846 8081A
4,4'-DDT	86	(50 - 145)	SW846 8081A
Methoxychlor	93	(50 - 160)	SW846 8081A
Endrin ketone	86	(50 - 150)	SW846 8081A
Endrin aldehyde	74	(30 - 160)	SW846 8081A
alpha-Chlordane	82	(50 - 122)	SW846 8081A
gamma-Chlordane	84	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	90	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1A180421 Work Order #...: MDE0G1AJ-MS Matrix.....: WG
MS Lot-Sample #: A1A180421-015 MDE0G1AK-MSD
Date Sampled...: 01/17/11 15:10 Date Received..: 01/18/11
Prep Date.....: 01/18/11 Analysis Date..: 02/01/11
Prep Batch #...: 1018104
Dilution Factor: 2 Initial Wgt/Vol: 490 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	135	(50 - 150)			SW846 8081A
	130	(50 - 150)	3.3	(0-50)	SW846 8081A
beta-BHC	133	(50 - 150)			SW846 8081A
	128	(50 - 150)	3.6	(0-50)	SW846 8081A
delta-BHC	142	(50 - 150)			SW846 8081A
	138	(50 - 150)	3.0	(0-50)	SW846 8081A
gamma-BHC (Lindane)	114	(50 - 150)			SW846 8081A
	111	(50 - 150)	3.1	(0-50)	SW846 8081A
Heptachlor	97	(50 - 150)			SW846 8081A
	90	(50 - 150)	7.3	(0-50)	SW846 8081A
Aldrin	121	(50 - 150)			SW846 8081A
	116	(50 - 150)	4.6	(0-50)	SW846 8081A
Heptachlor epoxide	129	(50 - 150)			SW846 8081A
	127	(50 - 150)	1.1	(0-50)	SW846 8081A
Endosulfan I	80	(50 - 150)			SW846 8081A
	80	(50 - 150)	0.12	(0-50)	SW846 8081A
Dieldrin	125	(50 - 150)			SW846 8081A
	124	(50 - 150)	0.51	(0-50)	SW846 8081A
4,4'-DDE	143	(50 - 150)			SW846 8081A
	139	(50 - 150)	2.6	(0-50)	SW846 8081A
Endrin	118	(50 - 150)			SW846 8081A
	116	(50 - 150)	1.6	(0-50)	SW846 8081A
Endosulfan II	84	(50 - 150)			SW846 8081A
	86	(50 - 150)	1.9	(0-50)	SW846 8081A
4,4'-DDD	140	(50 - 150)			SW846 8081A
	142	(50 - 150)	0.97	(0-50)	SW846 8081A
Endosulfan sulfate	125	(50 - 150)			SW846 8081A
	127	(50 - 150)	1.9	(0-50)	SW846 8081A
4,4'-DDT	106	(50 - 150)			SW846 8081A
	105	(50 - 150)	1.1	(0-50)	SW846 8081A
Methoxychlor	101	(50 - 150)			SW846 8081A
	103	(50 - 150)	1.6	(0-50)	SW846 8081A
Endrin ketone	108	(50 - 150)			SW846 8081A
	111	(50 - 150)	2.3	(0-50)	SW846 8081A
Endrin aldehyde	91	(50 - 150)			SW846 8081A
	96	(50 - 150)	4.5	(0-50)	SW846 8081A
alpha-Chlordane	127	(50 - 150)			SW846 8081A
	125	(50 - 150)	1.8	(0-50)	SW846 8081A
gamma-Chlordane	127	(50 - 150)			SW846 8081A
	125	(50 - 150)	1.4	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE0G1AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A1A180421-015 MDE0G1AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	100	(50 - 150)
	95	(50 - 150)
Decachlorobiphenyl	113	(50 - 150)
	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa00713
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp9.i\110131IC-1.b\PEST9.m
Misc Info:

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.01142	228.41*	70-130
5 gamma-BHC (Lindane	0.005000	0.006324	126.49	70-130
6 beta-BHC	0.005000	0.007182	143.65*	70-130
7 delta-BHC	0.005000	0.006199	123.99	70-130
8 Heptachlor	0.005000	0.005317	106.34	70-130
10 Aldrin	0.005000	0.006428	128.57	70-130
12 Heptachlor epoxide	0.005000	0.006668	133.36*	70-130
13 gamma-Chlordane	0.005000	0.006528	130.57*	70-130
14 alpha-Chlordane	0.005000	0.006630	132.59*	70-130
15 Endosulfan I	0.005000	0.006328	126.56	70-130
16 4,4'-DDE	0.005000	0.006633	132.67*	70-130
17 Dieldrin	0.005000	0.006384	127.67	70-130
18 Endrin	0.005000	0.006318	126.36	70-130
20 4,4'-DDD	0.005000	0.006946	138.91*	70-130
22 Endosulfan II	0.005000	0.006519	130.38*	70-130
23 4,4'-DDT	0.005000	0.005428	108.55	70-130
25 Endrin aldehyde	0.005000	0.006350	127.01	70-130
27 Methoxychlor	0.005000	0.006310	126.21	70-130
28 Endosulfan sulfate	0.005000	0.006713	134.27*	70-130
29 Endrin ketone	0.005000	0.006177	123.54	70-130

TestAmerica North Canton

PESTICIDES 8081/608

Data file : \\cansvr11\dd\chem\GCS\a2hp9.i\110131IC-1.b\041F2601.D
Lab Smp Id: MRL
Inj Date : 01-FEB-2011 01:04
Operator : 093905 Inst ID: a2hp9.i
Smp Info : MRL
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\GCS\a2hp9.i\110131IC-1.b\PEST9.m
Meth Date : 01-Feb-2011 08:14 vandorenc Quant Type: ESTD
Cal Date : 25-JAN-2011 14:24 Cal File: 007F0701.D
Als bottle: 41 QC Sample: MRL
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: mrl.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: CANPGCSV23

Concentration Formula: Amt * DF * Vt/Vo/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (uL)
Vo	1.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
4 alpha-BHC					CAS #: 319-84-6		
4.502	4.502	0.000	612727	0.01142	0.01142		(R)
5 gamma-BHC (Lindane)					CAS #: 58-89-9		
4.923	4.924	-0.001	300940	0.00632	0.006324		
6 beta-BHC					CAS #: 319-85-7		
5.070	5.070	0.000	259048	0.00718	0.007182		(R)
7 delta-BHC					CAS #: 319-86-8		
5.318	5.319	-0.001	544726	0.00620	0.006199		
Sum of Peak Concentrations = 0.006199							
8 Heptachlor					CAS #: 76-44-8		
5.643	5.644	-0.001	428863	0.00532	0.005317		
10 Aldrin					CAS #: 309-00-2		

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 01-FEB-2011 05:08
Lab File ID: 051F3601.D Init. Cal. Date(s): 15-DEC-2010 31-JAN-2011
Analysis Type: Init. Cal. Times: 12:37 17:20
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110131IC-1.b\PEST9.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	59095449	66090240	66090240	0.000	-11.83643	15.00000	Averaged	
4 alpha-BHC	0.02500	0.03358	13078960	0.010	-34.30185	0.000e+000	Linear	
5 gamma-BHC (Lindane)	47584539	62729960	62729960	0.010	-31.82845	15.00000	Averaged	<-
6 beta-BHC	36066303	46395640	46395640	0.010	-28.63985	15.00000	Averaged	<-
7 delta-BHC	0.02500	0.03668	11531600	0.010	-46.71797	0.000e+000	Quadratic	
8 Heptachlor	80656599	89351040	89351040	0.010	-10.77958	15.00000	Averaged	
10 Aldrin	37840080	48873200	48873200	0.010	-29.15723	15.00000	Averaged	<-
12 Heptachlor epoxide	25077703	30764280	30764280	0.010	-22.67583	15.00000	Averaged	<-
13 gamma-Chlordane	26777567	33809320	33809320	0.010	-26.25987	15.00000	Averaged	<-
14 alpha-Chlordane	28159995	35056600	35056600	0.010	-24.49079	15.00000	Averaged	<-
15 Endosulfan I	74346287	86996680	86996680	0.010	-17.01550	15.00000	Averaged	<-
16 4,4'-DDE	86281014	116169000	116169000	0.010	-34.64028	15.00000	Averaged	<-
17 Dieldrin	30853326	38380040	38380040	0.010	-24.39515	15.00000	Averaged	<-
18 Endrin	27833898	33227880	33227880	0.010	-19.37919	15.00000	Averaged	<-
20 4,4'-DDD	52503270	69275200	69275200	0.010	-31.94454	15.00000	Averaged	<-
22 Endosulfan II	29222613	34585760	34585760	0.010	-18.35273	15.00000	Averaged	<-
23 4,4'-DDT	59086707	68967040	68967040	0.010	-16.72175	15.00000	Averaged	<-
25 Endrin aldehyde	22043850	26776920	26776920	0.010	-21.47116	15.00000	Averaged	<-
27 Methoxychlor	30076656	35433280	35433280	0.010	-17.80991	15.00000	Averaged	<-
28 Endosulfan sulfate	29287313	35048160	35048160	0.010	-19.67011	15.00000	Averaged	<-
29 Endrin ketone	33862696	39166040	39166040	0.010	-15.66132	15.00000	Averaged	<-
$ 30 Decachlorobiphenyl	34680842	44743800	44743800	0.010	-29.01590	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 24.21661
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

Data File: \\cansvr11\dd\chem\GCS\a2hp9.i\110131IC-1.b\040F2501.D Page 1
Report Date: 01-Feb-2011 08:12

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 01-FEB-2011 00:41
Lab File ID: 040F2501.D Init. Cal. Date(s): 15-DEC-2010 31-JAN-2011
Analysis Type: Init. Cal. Times: 12:37 17:20
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110131IC-1.b\PEST9.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	59095449	68772040	68772040	0.000	-16.37451	15.00000	Averaged	<-
4 alpha-BHC	0.02500	0.03621	143441640	0.010	-44.85111	0.000e+000	Linear	
5 gamma-BHC (Lindane)	47584539	69908840	69908840	0.010	-46.91503	15.00000	Averaged	<-
6 beta-BHC	36066303	53109360	53109360	0.010	-47.25479	15.00000	Averaged	<-
7 delta-BHC	0.02500	0.04141	130411280	0.010	-65.63063	0.000e+000	Quadratic	
8 Heptachlor	80656599	92935800	92935800	0.010	-15.22405	15.00000	Averaged	<-
10 Aldrin	37840080	51873840	51873840	0.010	-37.08703	15.00000	Averaged	<-
12 Heptachlor epoxide	25077703	36390120	36390120	0.010	-45.10947	15.00000	Averaged	<-
13 gamma-Chlordane	26777567	38088320	38088320	0.010	-42.23966	15.00000	Averaged	<-
14 alpha-Chlordane	28159995	39998240	39998240	0.010	-42.03923	15.00000	Averaged	<-
15 Endosulfan I	74346287	101967000	101967000	0.010	-37.15144	15.00000	Averaged	<-
16 4,4'-DDE	86281014	127914960	127914960	0.010	-48.25389	15.00000	Averaged	<-
17 Dieldrin	30853326	44671560	44671560	0.010	-44.78685	15.00000	Averaged	<-
18 Endrin	27833898	37922200	37922200	0.010	-36.24466	15.00000	Averaged	<-
20 4,4'-DDD	52503270	80046560	80046560	0.010	-52.46014	15.00000	Averaged	<-
22 Endosulfan II	29222613	39890320	39890320	0.010	-36.50497	15.00000	Averaged	<-
23 4,4'-DDT	59086707	71220200	71220200	0.010	-20.53506	15.00000	Averaged	<-
25 Endrin aldehyde	22043850	27480680	27480680	0.010	-24.66370	15.00000	Averaged	<-
27 Methoxychlor	30076656	37009880	37009880	0.010	-23.05185	15.00000	Averaged	<-
28 Endosulfan sulfate	29287313	39633280	39633280	0.010	-35.32577	15.00000	Averaged	<-
29 Endrin ketone	33862696	40968000	40968000	0.010	-20.98269	15.00000	Averaged	<-
$ 30 Decachlorobiphenyl	34680842	49318760	49318760	0.010	-42.20751	15.00000	Averaged	<-

Average %D / Drift Results.
Calculated Average %D/Drift = 37.49518
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa00713
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp9.i\110131IC-1.b\PEST9.m
Misc Info:

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.01097	219.43*	70-130
5 gamma-BHC (Lindane	0.005000	0.005733	114.66	70-130
6 beta-BHC	0.005000	0.006383	127.66	70-130
7 delta-BHC	0.005000	0.005643	112.87	70-130
8 Heptachlor	0.005000	0.005434	108.68	70-130
10 Aldrin	0.005000	0.005960	119.21	70-130
12 Heptachlor epoxide	0.005000	0.006025	120.50	70-130
13 gamma-Chlordane	0.005000	0.006110	122.20	70-130
14 alpha-Chlordane	0.005000	0.006254	125.08	70-130
15 Endosulfan I	0.005000	0.005820	116.40	70-130
16 4,4'-DDE	0.005000	0.006600	132.00*	70-130
17 Dieldrin	0.005000	0.006067	121.34	70-130
18 Endrin	0.005000	0.006003	120.06	70-130
20 4,4'-DDD	0.005000	0.006797	135.94*	70-130
22 Endosulfan II	0.005000	0.006240	124.80	70-130
23 4,4'-DDT	0.005000	0.005751	115.01	70-130
25 Endrin aldehyde	0.005000	0.006181	123.63	70-130
27 Methoxychlor	0.005000	0.006546	130.93*	70-130
28 Endosulfan sulfate	0.005000	0.006484	129.68	70-130
29 Endrin ketone	0.005000	0.006227	124.54	70-130

TestAmerica North Canton

PESTICIDES 8081/608

Data file : \\cansvr11\dd\chem\GCS\a2hp9.i\110131IC-1.b\052F3701.D
Lab Smp Id: MRL
Inj Date : 01-FEB-2011 05:31
Operator : 093905 Inst ID: a2hp9.i
Smp Info : MRL
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\GCS\a2hp9.i\110131IC-1.b\PEST9.m
Meth Date : 01-Feb-2011 08:14 vandorenc Quant Type: ESTD
Cal Date : 25-JAN-2011 14:24 Cal File: 007F0701.D
Als bottle: 52 QC Sample: MRL
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: mrl.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: CANPGCSV23

Concentration Formula: Amt * DF * Vt/Vo/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (uL)
Vo	1.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
4 alpha-BHC					CAS #: 319-84-6		
4.502	4.502	0.000	558873	0.01097	0.01097		(R)
5 gamma-BHC (Lindane)					CAS #: 58-89-9		
4.923	4.924	-0.001	272792	0.00573	0.005733		
6 beta-BHC					CAS #: 319-85-7		
5.070	5.070	0.000	230218	0.00638	0.006383		
7 delta-BHC					CAS #: 319-86-8		
5.319	5.319	0.000	503477	0.00564	0.005643		
Sum of Peak Concentrations = 0.005643							
8 Heptachlor					CAS #: 76-44-8		
5.644	5.644	0.000	438270	0.00543	0.005434		
10 Aldrin					CAS #: 309-00-2		

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.9 and 2.7 °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 1/19/11 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?	✓			No data provided for evaluation.	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			1/19/11@ 2317	LCG Table 3 >115%=J; 80-85%=J/UJ; <80%=J/R
12. Were single standards of the other five Aroclors run to aid in pattern recognition and to determine a single point calibration factor?	✓				Method 8082 Section 5.6.2
13. Was a CCV run every 12 hours?	✓			1/26/11 @ 0704, 1144, 1446	LCG Table 3

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was the % D ≤ 15 % for each analyte or the average %D across all analytes ≤ 15% with a maximum %D for each target analyte ≤30%?	✓				LCG Table 3 D>30% (neg) =J/R D>30% (pos) =J
15. Was a method blank prepared and analyzed with each batch?	✓			Section checked by ADR	LCG Table 5
16. Were target analytes <1/2 the MRL?	✓				LCG Table 5 <5x = B
17. Was an equipment blank collected and analyzed?	✓				
18. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓			Section checked by ADR	<5x = B
19. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 3
20. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Section checked by ADR	LCG Appendix C >UL=J; LL-30%=J/UJ; <30%=J/R
21. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 3
22. Was the MS/MSD parent a Ravenna sample?		✓			
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 the LCS at 44%, FWGLL1mw-081c-1641-GW at 40% and FWGLL1mw-082c-1642-GW at 40%. The results for FWGLL1mw-081c-1641-GW and FWGLL1mw-082c-1642-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: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 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: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1643-GW

GC Semivolatiles

Lot-Sample #...:	A1A180421-001	**Work Order #...:**	MDEXV1AF	**Matrix.....:**	WG
Date Sampled...:	01/17/11 15:07	**Date Received..:**	01/18/11		
Prep Date.....:	01/18/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1018106				
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	93	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1693-GW

GC Semivolatiles

Lot-Sample #...:	A1A180421-003	**Work Order #...:**	MDEX21AF	**Matrix.....:**	WG
Date Sampled...:	01/17/11 16:10	**Date Received..:**	01/18/11		
Prep Date.....:	01/18/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1018106				
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	94	(50 - 150)
Decachlorobiphenyl	70	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1698-GW/GF

GC Semivolatiles

Lot-Sample #...: A1A180421-005 **Work Order #...:** MDEX41AF **Matrix.....:** WQ
Date Sampled...: 01/17/11 17:20 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1018106
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	93	(50 - 150)
Decachlorobiphenyl	87	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1644-GW

GC Semivolatiles

Lot-Sample #...: A1A180421-008 **Work Order #...:** MDEX81AF **Matrix.....:** WG
Date Sampled...: 01/17/11 14:25 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1018106
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	91	(50 - 150)
Decachlorobiphenyl	56	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1640-GW

GC Semivolatiles

Lot-Sample #...: A1A180421-010 **Work Order #...:** MDE0A1AF **Matrix.....:** WG
Date Sampled...: 01/17/11 15:30 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1018106
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	95	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1642-GW

GC Semivolatiles

Lot-Sample #...: A1A180421-012 **Work Order #...:** MDE0D1AF **Matrix.....:** WG
Date Sampled...: 01/17/11 16:50 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1018106
Dilution Factor: 1 **Initial Wgt/Vol:** 900 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	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1641-GW

GC Semivolatiles

Lot-Sample #...: A1A180421-015 **Work Order #...:** MDE0G1AP **Matrix.....:** WG
Date Sampled...: 01/17/11 15:10 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1018106
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	97	(50 - 150)
Decachlorobiphenyl	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1A180421 **Work Order #...:** MDE1D1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A180000-106

Prep Date.....: 01/18/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/26/11 **Prep Batch #...:** 1018106
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	95	(50 - 150)
Decachlorobiphenyl	98	(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 #...: A1A180421 **Work Order #...:** MDE1D1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A180000-106
Prep Date.....: 01/18/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1018106
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	97	(58 - 141)	**SW846 8082**
Aroclor 1260	96	(71 - 143)	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	100	(50 - 150)
Decachlorobiphenyl	44 *	(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 #...: A1A180421 **Work Order #...:** MDE0G1AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A1A180421-015 MDE0G1AR-MSD
Date Sampled...: 01/17/11 15:10 **Date Received..:** 01/18/11
Prep Date.....: 01/18/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1018106
Dilution Factor: 2 **Initial Wgt/Vol:** 500 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**87**	**(50 - 150)**			**SW846 8082**
	91	**(50 - 150)**	**4.6**	**(0-50)**	**SW846 8082**
Aroclor 1260	**93**	**(50 - 150)**			**SW846 8082**
	100	**(50 - 150)**	**7.0**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
	95	(50 - 150)
Decachlorobiphenyl	79	(50 - 150)
	89	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.9 and 2.7 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			ICP- 11/11/10 ICPMS-11/5/10 Hg-11/2/10	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 1/21/11 had thallium detected at 0.31ug/L. The thallium results for samples FWGLL1mw-084c-1643-GF and FWGLL1mw-DUP2-1693-GF were <5x the ICB contamination and were qualified, "U". No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 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 90-85%=J/UJ; <85%=J/R
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICPMS The CCBs analyzed 1/21/11 had detected thallium from 0.21ug/L to 0.36ug/L. The thallium results for samples FWGLL1mw-084c-1643-GF and FWGLL1mw-DUP2-1693-GF were <5x the CCB contamination and were qualified, "U". No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 <5x = U
18. Was an Interelement Check Standard run at the beginning of the analytical sequence?	✓				LCG Table 7
19. Was the ICS recovery within 80 to 120% of true value for each element of interest?	✓				LCG Table 7 >120%=J; 50-79%=J/UJ; <50%=Pj/R
21. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 7
22. Were target analytes <1/2 the MRL in the method blank?		✓		ADR checked section; ICPMS -The method blank had detected concentrations of sodium at 18.4ug/L. No qualifications were required as the detected concentration in the field samples were >5x contamination.	LCG Table 7 <5x = B
23. Was a field blank collected and analyzed?	✓				
24. Were target analytes reported in the field blank analyses >1/2 the MRL?		✓		ADR checked section;	<5x=B
25. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 7
26. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 60%-LL= J/UJ; <60%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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%?	✓			The spike recovery for manganese was not calculated as the sample concentration was >4x spiking level.	LCG Table 7 >125% = J 30% - 75% = J/UJ <30% = J/R
30. Was the lab sample duplicate RPD ≤20%?	✓				LCG Table 7 >20% = J
31. Was a Post Digestion Spike analyzed as needed? Were results within 75-125%?			✓	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?	✓			The manganese matrix spike recovery was not calculated due to high parent sample concentration. The manganese serial dilution was analyzed with acceptable results.	LCG Table 7 >10%=J
34. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓			Only detected concentrations above the reporting limit were evaluated.	QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				
36. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
37. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 7 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.9 and 2.7 °C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG:** A1A180421 R0
Sample Event: January 2010 **Analysis:** SW846 7470A
Data Reviewer/Date: Angye Dragotta/ February 28, 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%?	✓				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: January 2010
Data Reviewer/Date: Angye Dragotta/ February 28, 2011

SDG: A1A180421 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: FWGLLlmw-084C-1643-GF

TOTAL Metals

Lot-Sample #...: A1A180421-002 **Matrix.....:** WG
Date Sampled...: 01/17/11 15:07 **Date Received..:** 01/18/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020017						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX11AN
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**337**	**50.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDEX11AA**
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX11AK
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**17.8**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDEX11AP**
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDEX11AC
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**46400**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDEX11AQ**
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	**1.8**	**0.50**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDEX11AD**
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**20.6**	**5.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDEX11AR**
		Dilution Factor: 1		Analysis Time..: 19:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX11AT
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	**9.4**	**5.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDEX11AU**
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1643-GF

TOTAL Metals

Lot-Sample #...: A1A180421-002 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDEX11AE
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/21/11	MDEX11A2
		Dilution Factor: 1		Analysis Time..: 16:08	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	2590	1000	ug/L	SW846 6010B	01/20-01/25/11	MDEX11AV
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	3190	1000	ug/L	SW846 6010B	01/20-01/25/11	MDEX11AW
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	222	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX11AX
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	3330 J	1000	ug/L	SW846 6020	01/20-01/21/11	MDEX11AJ
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	37.4	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX11A0
		Dilution Factor: 1		Analysis Time..: 19:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	2.7 B	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX11AL
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDEX11AF
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX11AM
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1643-GF

TOTAL Metals

Lot-Sample #...: A1A180421-002 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.71 B**	1.0	ug/L	SW846 6020	01/20-01/21/11	MDEX11AH
		Dilution Factor: 1		Analysis Time..: 13:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX11A1
		Dilution Factor: 1		Analysis Time..: 10:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**68.5**	10.0	ug/L	SW846 6020	01/20-01/21/11	MDEX11AG
		Dilution Factor: 1		Analysis Time..: 13:19	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-DUP2-1693-GF

TOTAL Metals

Lot-Sample #...: A1A180421-004 **Matrix.....:** WG
Date Sampled...: 01/17/11 16:10 **Date Received..:** 01/18/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020017						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX31AR
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**357**	**50.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDEX31AE**
		Dilution Factor: 1		Analysis Time..: 13:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX31AN
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**18.8**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDEX31AT**
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDEX31AF
		Dilution Factor: 1		Analysis Time..: 13:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**46100**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDEX31AU**
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	**1.9**	**0.50**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDEX31AG**
		Dilution Factor: 1		Analysis Time..: 13:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**21.6**	**5.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDEX31AV**
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX31AW
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	**11.3**	**5.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDEX31AX**
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1693-GF

TOTAL Metals

Lot-Sample #...: A1A180421-004 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDEX31AH
		Dilution Factor: 1		Analysis Time..: 13:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/21/11	MDEX31AD
		Dilution Factor: 1		Analysis Time..: 16:13	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	3020	1000	ug/L	SW846 6010B	01/20-01/25/11	MDEX31A0
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	3220	1000	ug/L	SW846 6010B	01/20-01/25/11	MDEX31A1
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	237	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX31A2
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	3490 J	1000	ug/L	SW846 6020	01/20-01/21/11	MDEX31AM
		Dilution Factor: 1		Analysis Time..: 13:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	38.1	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX31AA
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX31AP
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDEX31AJ
		Dilution Factor: 1		Analysis Time..: 13:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX31AQ
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1693-GF

TOTAL Metals

Lot-Sample #...: A1A180421-004 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.40 B**	**1.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDEX31AL**
		Dilution Factor: 1		Analysis Time..: 13:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX31AC
		Dilution Factor: 1		Analysis Time..: 10:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**73.5**	**10.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDEX31AK**
		Dilution Factor: 1		Analysis Time..: 13:26	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: FWGEQUIPRINSE1-1698-GW/GF

TOTAL Metals

Lot-Sample #...: A1A180421-005 **Matrix.....:** WQ
Date Sampled...: 01/17/11 17:20 **Date Received..:** 01/18/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020017						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX41AU
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDEX41AG
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX41AQ
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX41AV
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDEX41AH
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	01/20-01/25/11	MDEX41AW
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDEX41AJ
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX41AX
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX41A0
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX41A1
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1698-GW/GF

TOTAL Metals

Lot-Sample #...: A1A180421-005 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDEX41AK
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/21/11	MDEX41A7
		Dilution Factor: 1		Analysis Time..: 16:11	Analyst ID.....: 002260	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	01/20-01/25/11	MDEX41A2
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	01/20-01/25/11	MDEX41A3
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX41A4
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6020	01/20-01/21/11	MDEX41AP
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX41A5
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX41AR
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDEX41AL
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX41AT
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1698-GW/GF

TOTAL Metals

Lot-Sample #...: A1A180421-005 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDEX41AN
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDEX41A6
		Dilution Factor: 1		Analysis Time..: 10:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/20-01/21/11	MDEX41AM
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** March 3, 2011
Sample Delivery Group: A1A200532 **Revision:** 0

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

QA/QC Summary

On Jan. 20, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1A200532.

Field Sample ID	Analytes	Method
FWGEBGmw-126c-1668-GW	VOCs SVOCs Pesticides PCBs Cyanide	SW846 8260B SW846 8270C SW846 8081A SW846 8082 SW846 9012A
FWGEBGmw-129c-1669-GW		
FWGEBGmw-124c-1667-GW		
FWGEBGmw-123c-1666-GW		
FWGCPmw-002c-1660-GW		
FWGCPmw-006c-1662-GW		
FWGCPmw-DUP4-1695-GW		
FWGCBPmw-004c-1656-GW		
FWGEQUIPRinse4-1701-GW		
FWGCPmw-005c-1661-GW		
FWGCBPmw-001c-1655-GW		
FWGCBPmw-007c-1658-GW		
FWGEQUIPRinse4-1701-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGEBGmw-126c-1668-GF	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGEBGmw-129c-1669-GF		
FWGEBGmw-124c-1667-GF		
FWGEBGmw-123c-1666-GF		
FWGCPmw-002c-1660-GF		
FWGCPmw-006c-1662-GF		
FWGCPmw-DUP4-1695-GF		
FWGCBPmw-004c-1656-GF		
FWGCPmw-005c-1661-GF		
FWGCBPmw-001c-1655-GF		
FWGCBPmw-007c-1658-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 1.7°C – 3.3°C. The samples received for FWGCBP-007C-1658-GW/GF were marked on the COC as FWGCBP-007C-1664-GW/GF. Samples were logged per label.

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: Jan 2011 **Date:** March 3, 2011
Sample Delivery Group: A1A200532 **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

- The closing MRL check analyzed 1/24/2011 at 1900 had methylene chloride recover above control limits at 159% and acetone below control limits at 66%.

The acetone results were qualified as estimated, "J/UJ". No additional qualifications were made as there were no detected concentrations of methylene chloride in the bracketed samples.

CCV

For the CCV analyzed at 1022 on 1/24/11, the %D was above control limits for acetone at 21%, bromoform at 22%. The acetone results for FWGTeam1-Trip, FWGTeam2-Trip, FWGEQUIPRinse4-1701-GW and FWGTeam3-Trip were qualified as estimated, "J". No detected bromoform concentrations were reported so no bromoform qualifications were necessary.

Blanks

- FWGTEAM1-Trip had acetone detected at 13ug/L, 2-butanone at 0.68ug/L and 4-methyl-2-pentanone at 0.37ug/L.
- FWGTEAM2-Trip had acetone detected at 12ug/L and 4-methyl-2-pentanone at 0.33ug/L.
- FWGTEAM3-Trip had acetone detected at 12ug/L.
- Acetone was detected in FWGEQUIPRinse4-1701-GW at 7.7ug/L, chloroform at 0.73ug/L and 2-butanone at 2.3ug/L.

The acetone result for sample FWGEQUIPRinse4-1701-GW was qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations reported for the associated field samples. □

Field Duplicate RPD

The field duplicate RPD for samples FWGSCFmw-004-168-GW and FWGSCFmw-DUP1-1697-GW was above control limits for carbon disulfide at 50%. The carbon disulfide results for samples FWGSCFmw-004-168-GW and FWGSCFmw-DUP1-1697-GW were qualified as estimated, "J".

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

Field Duplicate RPD
The field duplicate RPDs for samples FWGCPmw-Dup4-1695-GW and FWGCPmw-006c-1662-GW were above control limits for bis (2-ethylhexyl) phthalate at 200%. The bis (2-ethylhexyl) phthalate results for samples FWGCPmw-Dup4-1695-GW and FWGCPmw-006c-1662-GW were qualified as estimated, "J/UJ".

Matrix Spike Recovery
Both the matrix spike and matrix spike duplicate analyzed on sample FWGCPmw-005c-1661-GW recovered below control limits for 3,3'-dichlorobenzidine at 34%. The MS and MSD for hexachlorocyclopentadiene recovered below control limits at 21%and 20%. No qualification was made for the MS and MSD outliers as there were no other QC outliers.

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

MRL Recovery

- The MRL check analyzed 2/4/11 at 0951 had alpha-BHC recover above control limits at 226% and beta-BHC at 132%.
- The MRL check analyzed 2/4/11 at 1922 had alpha-BHC recover above control limits at 213%.

The beta-BHC result for FWGCBP-007c-1658-GW was qualified as estimated, "J". No qualifications made for alpha-BHC as there were no reported alpha-BHC concentrations.

CCV
The CCV analyzed 2/4/11 @ 0904 was above control limits with an average %D of 17%, with the delta-BHC %D above limits at 32%

- The CCV analyzed 2/4/11 @ 1859(pest 9) was above control limits with an average %D of 18% and the alpha-BHC %D was above limits at 31%.
- The CCV analyzed 2/4/11 @ 1859(pest 9r) was above control limits with an average %D of 16%.

The beta-BHC result for FWGCBP-007c-1658-GW was qualified as estimated, "J". No additional qualifications were made as there were no other detected concentrations reported.

Surrogate Recovery
The surrogate, DCB, recovered below control limits for FWGCBPmw-001c-1655-GW at 41%, FWGCBPmw-004c-1656-GW at 19%, FWGCBPmw-007c-1658-GW at 36%, FWGCPmw-002c-1660-GW at 28%, FWGCPmw-006c-1662-GW at 22%, FWGCPmw-DUP4c-1695-GW at 21%, FWGEBGmw-123c-1666-GW at 22%, FWGEBGmw-124c-1667-GW at 21%, FWGEBGmw-126c-1668-GW at 18% and FWGEBGmw-129c-1669-GW at 31%. The results for FWGCBPmw-001c-1655-GW, FWGCBPmw-004c-1656-GW, FWGCBPmw-007c-1658-GW, FWGCPmw-002c-1660-GW, FWGCPmw-006c-1662-GW, FWGCPmw-DUP4c-1695-GW, FWGEBGmw-123c-1666-GW, FWGEBGmw-124c-1667-GW, FWGEBGmw-126c-1668-GW and FWGEBGmw-129c-1669-GW were qualified as estimated, "J/UJ".

Second Column Confirmation
The second column confirmation for sample FWGCBPmw-007-1658-GW had an RPD of 45% for beta-BHC. The beta-BHC result was qualified as estimated, "J".

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** March 3, 2011
Sample Delivery Group: A1A200532 **Revision:** 0

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 FWGCBPmw-001c-1655-GW at 37%, FWGCBPmw-004c-1656-GW at 17%, FWGCBPmw-007c-1658-GW at 28%, FWGCPmw-002c-1660-GW at 25%, FWGCPmw-006c-1662-GW at 19%, FWGCPmw-DUP4c-1695-GW at 18%, FWGEBGmw-123c-1666-GW at 20%, FWGEBGmw-124c-1667-GW at 19%, FWGEBGmw-126c-1668-GW at 17% and FWGEBGmw-129c-1669-GW at 28%. The results for FWGCBPmw-001c-1655-GW, FWGCBPmw-004c-1656-GW, FWGCBPmw-007c-1658-GW, FWGCPmw-002c-1660-GW, FWGCPmw-006c-1662-GW, FWGCPmw-DUP4c-1695-GW, FWGEBGmw-123c-1666-GW, FWGEBGmw-124c-1667-GW, FWGEBGmw-126c-1668-GW and FWGEBGmw-129c-1669-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 method blank had chromium detected at 2ug/L and vanadium at 2.4ug/L. Vanadium and chromium results for sample FWGCPmw-005C-1661-GF were qualified, "B", due to sample results <5x blank contamination.

No qualifications were made for ICP results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

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 1/25/11 had thallium detected at 0.18ug/L. The thallium result for sample FWGCBPmw-001c-1655-GF was <5x the ICB contamination and was qualified, "U".
- The CCBs analyzed 1/25/11 had detected thallium from 0.14ug/L to 0.25ug/L and sodium at 11.8ug/L to 18.5ug/L. The thallium result for sample FWGCBPmw-001c-1655-GF was <5x the CCB contamination and was qualified, "U". No sodium qualifications were made as the detected sodium concentrations were >5 x contamination.
- The method blank had sodium detected at 57.9ug/L and zinc at 3.8ug/L. The zinc results for samples FWGCBPmw-001C-1655-GF, FWGCBPmw-007C-1658-GF, FWGCPmw-002C-1660-GF, FWGCPmw-005C-1661-GF, FWGCPmw-006C-1662-GF, FWGCPmw-DUP4-1695-GF, FWGEBGmw-124C-1667-GF and FWGEBGmw-126C-1668-GF were qualified, "B", due to detected results <5x blank contamination;

No qualifications were made for ICPMS results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

Field Duplicate

The field duplicate RPD for samples FWGCPmw-006c-1662-GF and FWGCPmw-DUP4-1695-GF was above control limits for aluminum at 92%. The aluminum result for sample FWGCPmw-006c-1662-GF was 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

Field Duplicate

The field duplicate RPD for samples FWGCPmw-006c-1662-GF and FWGCPmw-DUP4-1695-GF was above control limits for mercury at 200%. The mercury result for sample FWGCPmw-006c-1662-GF was qualified as estimated, "J".

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

Matrix Spike

The MS analyzed on sample FWGCPmw-005c-1661-GW recovered below control limits at 74%. The MSD analyzed on sample FWGEBGmw-126c-1668-GW recovered below control limits at 68%. All cyanide results were qualified as estimated, "UJ".

SAMPLE SUMMARY

A1A200532

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDJNA	001	FWGTEAM1-TRIP	01/20/11	08:00
MDJNC	002	FWGEBGmw-126C-1668-GW	01/20/11	09:23
MDJNE	003	FWGEBGmw-126C-1668-GF	01/20/11	09:23
MDJNF	004	FWGEBGmw-129C-1669-GW	01/20/11	10:42
MDJNG	005	FWGEBGmw-129C-1669-GF	01/20/11	10:42
MDJNH	006	FWGEBGmw-124C-1667-GW	01/20/11	12:02
MDJNL	007	FWGEBGmw-124C-1667-GF	01/20/11	12:02
MDJNM	008	FWGEBGmw-123C-1666-GW	01/20/11	13:06
MDJNN	009	FWGEBGmw-123C-1666-GF	01/20/11	13:06
MDJNP	010	FWGTEAM2-TRIP	01/20/11	08:00
MDJNQ	011	FWGCPmw-002C-1660-GW	01/20/11	09:10
MDJNR	012	FWGCPmw-002C-1660-GF	01/20/11	09:10
MDJNT	013	FWGCPmw-006C-1662-GW	01/20/11	10:40
MDJNV	014	FWGCPmw-006C-1662-GF	01/20/11	10:40
MDJNW	015	FWGCPmw-DUP4-1695-GW	01/20/11	12:00
MDJNX	016	FWGCPmw-DUP4-1695-GF	01/20/11	12:00
MDJN0	017	FWGCBPmw-004C-1656-GW	01/20/11	12:30
MDJN1	018	FWGCBPmw-004C-1656-GF	01/20/11	12:30
MDJN2	019	FWGEQUIPRINSE4-1701-GW	01/20/11	14:30
MDJN3	020	FWGTEAM3-TRIP	01/20/11	08:00
MDJN4	021	FWGCPmw-005C-1661-GW	01/20/11	09:10
MDJN5	022	FWGCPmw-005C-1661-GF	01/20/11	09:10
MDJN6	023	FWGCBPmw-001C-1655-GW	01/20/11	12:35
MDJN7	024	FWGCBPmw-001C-1655-GF	01/20/11	12:35
MDJPA	025	FWGCBPmw-007C-1658-GW	01/20/11	14:20
MDJPC	026	FWGCBPmw-007C-1658-GF	01/20/11	14:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica 20
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: Team1-1/20/11
Address: 1800 Carillon Blvd.	Telephone:	Telephone:	Telephone:	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com			
Phone: 513-825-7500		TAT if different from below Per SOW ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Courier			
Project Number: 030240.0006	Shipping/Tracking No: NA			
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Field Filtered	Lab Perform MS/MSD	Analyses: VOCs 8260	SVOCs 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	metals 6010/6020A 7470			Sample Specific Notes / Special Instructions:
FWGTeam1-Trip	1/20/11	0800		X						2					N	G	X										L227
FWGEBGmw-126C-1668-GW	1/20/11	0923		X						3	1		9		N	G	X	X	X	X	X	X	X				L227
FWGEBGmw-126C-1668-GF	1/20/11	0923		X					1						Y	G								X			L227
FWGEBGmw-129C-1669-GW	1/20/11	1042		X						3	1		9		N	G	X	X	X	X	X	X	X				A115
FWGEBGmw-129C-1669-GF	1/20/11	1042		X					1						Y	G								X			A115
FWGEBGmw-124C-1667-GW	1/20/11	1202		X						3	1		9		N	G	X	X	X	X	X	X	X				A580
FWGEBGmw-124C-1667-GF	1/20/11	1202		X					1						Y	G								X			A580
FWGEBGmw-123C-1666-GW	1/20/11	1306		X						3	1		9		N	G	X	X	X	X	X	X	X				L458
FWGEBGmw-123C-1666-GF	1/20/11	1306		X					1						Y	G								X			L458
					EC			1/20/11																			

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 are field filtered. Temperatures may not meet requirements if collection times are close to lab pick up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/20/11 15:15	JC	TAL-NC	1/20/11 1515
JC	TAL-NC	1/20/11 1626			
			Received in Laboratory by: JL	TA NC	1/20/11 1626

All VOCs in Cooler L227

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

21

TAL-4142 (0408)

Client: EQM	Project Manager: J Miller	Date: 1-20-11	Chain of Custody Number: 000456
Address: 1800 CARILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 825 7500 (7495)	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 Ravenna OH	Carrier/Waybill Number: LAB PICKUP		
Contract/Purchase Order/Quote No.: PN 30240.0006.22 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	EXPLO 8330	Propellants	Cyanide 9012	Metals 6020A/7470A	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team2-Trip	1/20/11	0800		X						2			X								L692
FWGCPmw-002C-1660-GW	1/20/11	0910		X			9			3	1		X	X	X	X	X	X	X		L692
FWGCPMW-002C-1660-GF	1	1		X					1											X	L692
FWGCPMW-006C-1662-GW	1	1040		X			9			3	1		X	X	X	X	X	X	X		A235
FWGCPMW-006C-1662--GF	1	1		X					1											X	A235
FWGCPMW-DUP4-1695-GW	1	1200		X			9			3	1		X	X	X	X	X	X	X		L649
FWGCPMW-DUP4-1695-GF	1	1		X					1											X	L649
FWGCBPmw-004C-16656-GW	1	1230		X			9			3	1		X	X	X	X	X	X	X		A166
FWGCBPmw-004C-16656-GF	1	1		X					1											X	A166
FWGEQUIPRINS4-1701-GW	1	1430		X			9		1	3	1		X	X	X	X	X	X	X	X	NOT FILTERED A260

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PERSON

QC Requirements (Specify): (GF) Metals were field filtered.

	Date	Time		Date	Time
1. Relinquished By: Eric Corbin EQ	1/20/11	1815	1. Received By: [illegible]	1/20/11	1515
2. Relinquished By: [illegible]	1/20/11	1626	2. Received By: [illegible]	1/20/11	1626
3. Relinquished By			3. Received By		

Comments: TEMPS ON SAMPLES COLLECTED CLOSE TO LAB PICK UP MAY NOT MEET REQUIREMENTS.

ALL VOAS IN L692

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	Project Manager	Date	Chain of Custody Number
EQM	John Miller	1/20/11	000460
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
1800 Carillon Blvd	513 825 7500	330-497-9396	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Cincinnati / OH / 45240	Erik Corbin	M. Loeb	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP (OH)	Lab Pick UP		
Contract/Purchase Order/Quote No.			
0302A0.0006 PN 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	Filtered 6010	Filtered 7470	Dissolved Metals 6010	Special Instructions/ Conditions of Receipt
FWG Team 3 - Trip	1/20/11	0800		X						2			X							6 Cooler ID: A247
FWGCPMW-005C-11061-GW		0910		X						3			X	X	X	X	X	X	X	NHB, A247, A217
FWGCPMW-005C-11061-GF		0910		X						3									X	A43, A247, A217
FWGCBPMW-001C-11655-GW		1235		X			9			3	1		X	X	X	X	X	X	X	L488
FWGCBPMW-001C-11655-GF		1235		X						1									X	L488
FWGCBPMW-007C-11604-GW		1420		X			9			3	1		X	X	X	X	X	X	X	L774
FWGCBPMW-007C-11604-GF		1420		X						1									X	L774

1/19/11

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 PER SOW ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Erik Corbin EQ	1/20/11	15:15	FC Fedex	1/20/11	1515
2.	FC Fedex	1/20/11	1626	M Miller	1/20/11	1626
3.						

Comments
Metals are field filtered

* ALL VOAS IN COOLER A247 *

Temps may not meet requirements if sample collection is close to pickup time.

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

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number: 440200532**
North Canton Facility

Client EQM Project RVAAP (OH) By: Terry Burns (Signature)
Cooler Received on 1/20/11 Opened on 1/21/11
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 1 each Quantity Unsalvageable ____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☑ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? ____
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☑
3. Did custody papers accompany the sample(s)? Yes ☑ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☑ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other ____
6. Cooler temperature upon receipt ____ °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ ____
   COOLANT: Wet Ice ☑ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☐ No ☒
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☑ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☑ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☑ No ☐ Were VOAs on the COC? Yes ☑ No ☐

Contacted PM MJL Date 1/21/11 by TB via Verbal ☑ Voice Mail ☐ Other ☐
Concerning #14

14. CHAIN OF CUSTODY

The following discrepancies occurred:
COC ID = FWGCBPMW-007C-1664-GW, Label ID = FWGCBPMW-007C-1658-GW
COC ID = FWGCBPMW-007C-1664-GF, Label ID = FWGCBPMW-007C-1658-GF
Will log ID's per 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
1668-GW	≥ 12	1/21/11	TB
-GF	< 2		
1669-GW	> 12		
-GF	< 2		
1667-GW	> 12		
-GF	< 2		
1666-GW	> 12		
-GF	< 2		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1660-GW	>12	1/21/11	TB
-GF	<2		
1662-GW	>12		
-GF	<2		
1695-GW	>12		
-GF	<2		
1656-GW	>12		
1701-GW	<2, >12		
1656-GF	<2		
1661-GW	>12, >12, >12		
-GF	<2, <2, <2		
1655-GW	>12		
-GF	<2		
1658-GW	>12		
-GF	<2		

Cooler #	Temp. °C	Method	Coolant
L227	2.2°C	IR	wet ice
A115	3.3°C		
A580	2.5°C		
L458	3.1°C		
L692	2.4°C		
A235	2.6°C		
L649	3.2°C		
A166	3.0°C		
A260	1.7°C		
A43	1.7°C		
A247	2.1°C		
A217	3.3°C		
Discrepancies Cont'd:			
L488	2.1°C		
L774	2.2°C		

CASE NARRATIVE

A1A200532

The following report contains the analytical results for twenty-three water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 030240.0006. The samples were received January 20, 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 February 09, 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 1.7 to 3.3°C.

See TestAmerica's Cooler Receipt Form for additional information.

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.

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.

The matrix spike/matrix spike duplicate(s) for FWGCPmw-005C-1661-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.

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.

CASE NARRATIVE (continued)

PESTICIDES-8081 (continued)

For sample(s) FWGEBGmw-126C-1668-GW, FWGEBGmw-129C-1669-GW, FWGEBGmw-124C-1667-GW, FWGEBGmw-123C-1666-GW, FWGCPmw-002C-1660-GW, FWGCPmw-006C-1662-GW, FWGCPmw-DUP4-1695-GW, FWGCBPmw-004C-1656-GW, FWGCBPmw-001C-1655-GW, and FWGCBPmw-007C-1658-GW, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

The opening CCV passed average, but failed alpha-BHC, beta-BHC, delta-BHC, Aldrin, alpha-Chlordane, DDE, and Dieldrin, but since the associated sample(s) FWGEBGmw-126C-1668-GW, FWGEBGmw-129C-1669-GW, FWGEBGmw-124C-1667-GW, FWGEBGmw-123C-1666-GW, FWGCPmw-002C-1660-GW, FWGCPmw-006C-1662-GW, FWGCPmw-DUP4-1695-GW, FWGCBPmw-004C-1656-GW, FWGEQUIPRINSE4-1701-GW, FWGCPmw-005C-1661-GW, FWGCBPmw-001C-1655-GW, and FWGCBPmw-007C-1658-GW were non-detect or J-flag hits for these compounds, no further corrective action was necessary for these samples.

The closing CCV failed high, but since the associated sample(s) FWGEBGmw-126C-1668-GW, FWGEBGmw-129C-1669-GW, FWGEBGmw-124C-1667-GW, FWGEBGmw-123C-1666-GW, FWGCPmw-002C-1660-GW, FWGCPmw-006C-1662-GW, FWGCPmw-DUP4-1695-GW, FWGCBPmw-004C-1656-GW, FWGEQUIPRINSE4-1701-GW, FWGCPmw-005C-1661-GW, FWGCBPmw-001C-1655-GW, and FWGCBPmw-007C-1658-GW were non-detect or J-flag hits, no further corrective action was necessary for these samples.

The opening MRL passed average, but failed beta-BHC biased high, but since the associated sample(s) FWGEBGmw-126C-1668-GW, FWGEBGmw-129C-1669-GW, FWGEBGmw-124C-1667-GW, FWGEBGmw-123C-1666-GW, FWGCPmw-002C-1660-GW, FWGCPmw-006C-1662-GW, FWGCPmw-DUP4-1695-GW, FWGCBPmw-004C-1656-GW, FWGEQUIPRINSE4-1701-GW, FWGCPmw-005C-1661-GW, FWGCBPmw-001C-1655-GW, and FWGCBPmw-007C-1658-GW were non-detect or J-flag hits for beta-BHC, no further corrective action was necessary for these samples.

CASE NARRATIVE (continued)

POLYCHLORINATED BIPHENYLS-8082

Surrogate recoveries were outside criteria for sample(s) FWGEBGmw-126C-1668-GW, FWGEBGmw-129C-1669-GW, FWGEBGmw-124C-1667-GW, FWGEBGmw-123C-1666-GW, FWGCPmw-002C-1660-GW, FWGCPmw-006C-1662-GW, FWGCPmw-DUP4-1695-GW, FWGCBPmw-004C-1656-GW, FWGCBPmw-001C-1655-GW, and FWGCBPmw-007C-1658-GW. Since the method criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required.

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 sample duplicate RPD was outside the acceptance limits for some analytes. The result is less than five times the reporting limit; therefore, no corrective action is required. Refer to the sample duplicate report for RPDS that exceed 20%.

GENERAL CHEMISTRY

The matrix spike/matrix spike duplicate(s) for FWGEBGmw-126C-1668-GW and FWGCPmw-005C-1661-GW had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

For batch(es) 1027316, the CCB for Cyanide analysis was analyzed first instead of the CCV as required by the SOP. Samples were reported.

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.
California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

MANUAL INTEGRATION SUMMARY

Lot A1A200532

Client ID: FWGCPmw-005C-1661-G
Compound Name: Decachlorobiphenyl
Instrument ID: a2hp9.i
File Name: 018F1801.D
Inj. Date and Time: 04-FEB-2011 14:32
Manual Integration Reason: Baseline Event

Client ID: FWGCPmw-005C-1661-G
Compound Name: Decachlorobiphenyl
Instrument ID: a2hp9.i
File Name: 019F1901.D
Inj. Date and Time: 04-FEB-2011 14:55
Manual Integration Reason: Baseline Event

Client ID: FWGCPmw-005C-1661-G
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 021F2101.D
Inj. Date and Time: 31-JAN-2011 19:34
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGCPmw-005C-1661-G
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 022F2201.D
Inj. Date and Time: 31-JAN-2011 19:51
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGEBGmw-124C-1667-
Compound Name: Tetrachloro-m-xylene
Instrument ID: a2hp9.i
File Name: 010F1001.D
Inj. Date and Time: 04-FEB-2011 11:25
Manual Integration Reason: Split Peak

Client ID: FWGEBGmw-129C-1669-
Compound Name: Tetrachloro-m-xylene
Instrument ID: a2hp9.i
File Name: 009F0901.D
Inj. Date and Time: 04-FEB-2011 11:01
Manual Integration Reason: Poor Chromatography

Client ID: FWGCPmw-005C-1661-G
Compound Name: bis(2-ethylhexyl)Phthalate
Instrument ID: a4hp9.i
File Name: MDJN41AF.D
Inj. Date and Time: 01-FEB-2011 17:01
Manual Integration Reason: Peak not found

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.9 and 3.3 °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– Jan 13, 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 methylene chloride 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?	✓			1/24/2011	LCG Table 1 R
15. Was a MRL Level Verification run at the beginning and end of every daily	✓				LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
sequence or every 12 hours?					
16. Were the QC/MRL recoveries 70-130%?		✓		• The closing MRL check analyzed 1/24/2011 at 1900 had methylene chloride recover above control limits at 159% and acetone below control limits at 66%. The acetone results were qualified as estimated, "J/UJ". No additional qualifications were made as there were no detected concentrations of methylene chloride in the bracketed samples.	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed? Were results 80-120%?	✓			1/13/2011 @1314	LCG Table 1, <60%=J/R >120%=J; 60-80%=J/UJ
18. Was a CCV run every 12 hours?	✓			1/24/2011 @ 1022	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%?		✓		For the CCV analyzed at 1022 on 1/24/11, the %D was above control limits for acetone at 21%, bromoform at 22%. The acetone results for FWGTeam1-Trip, FWGTeam2-Trip, FWGEQUIPRinse4-1701-GW and FWGTeam3-Trip were qualified as estimated, "J". No detected bromoform concentrations were reported so no bromoform qualifications were necessary.	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.	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse4-1701-GW	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGTEAM1-Trip had acetone detected at 13ug/L, 2-butanone at 0.68ug/L and 4-methyl-2-pentanone at 0.37ug/L. • FWGTEAM2-Trip had acetone detected at 12ug/L and 4-methyl-2-pentanone at 0.33ug/L. • FWGTEAM3-Trip had acetone detected at 12ug/L. • Acetone was detected in FWGEQUIPRinse4-1701-GW at 7.7ug/L, chloroform at 0.73ug/L and 2-butanone at 2.3ug/L. The acetone result for sample FWGEQUIPRinse4-1701-GW was qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations 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;	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent sample a Ravenna sample?	✓				
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?	✓			ADR checked section;	LCG Table 1 Pj
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% - 50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A200532-001 **Work Order #...:** MDJNA1AA **Matrix.....:** WQ
Date Sampled...: 01/20/11 08:00 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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	13	10	**ug/L**	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	0.68 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	0.37 J	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 #...: A1A200532-001 **Work Order #...:** MDJNA1AA **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	79	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-126C-1668-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-002 **Work Order #...:** MDJNC1AA **Matrix.....:** WG
Date Sampled...: 01/20/11 09:23 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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: FWGEBGmw-126C-1668-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-002 **Work Order #...:** MDJNC1AA **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	79	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-129C-1669-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-004 **Work Order #...:** MDJNF1AA **Matrix.....:** WG
Date Sampled...: 01/20/11 10:42 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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: FWGEBGmw-129C-1669-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-004 **Work Order #...:** MDJNF1AA **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	79	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-124C-1667-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-006 **Work Order #...:** MDJNH1AA **Matrix.....:** WG
Date Sampled...: 01/20/11 12:02 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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: FWGEBGmw-124C-1667-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-006 **Work Order #...:** MDJNH1AA **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	78	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-123C-1666-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-008 **Work Order #...:** MDJNM1AA **Matrix.....:** WG
Date Sampled...: 01/20/11 13:06 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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: FWGEBGmw-123C-1666-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-008 **Work Order #...:** MDJNM1AA **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	77	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A200532-010 **Work Order #...:** MDJNP1AA **Matrix.....:** WQ
Date Sampled...: 01/20/11 08:00 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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	**12**	**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	**0.33 J**	**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: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A200532-010 **Work Order #...:** MDJNP1AA **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	78	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-002C-1660-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-011 **Work Order #...:** MDJNQ1AA **Matrix.....:** WG
Date Sampled...: 01/20/11 09:10 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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: FWGCPmw-002C-1660-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-011 **Work Order #...:** MDJNQ1AA **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	77	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-006C-1662-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-013 **Work Order #...:** MDJNT1AA **Matrix.....:** WG
Date Sampled...: 01/20/11 10:40 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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: FWGCPmw-006C-1662-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-013 **Work Order #...:** MDJNT1AA **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	78	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-DUP4-1695-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-015 **Work Order #...:** MDJNW1AA **Matrix.....:** WG
Date Sampled...: 01/20/11 12:00 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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: FWGCPmw-DUP4-1695-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-015 **Work Order #...:** MDJNW1AA **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	79	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-004C-1656-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-017 **Work Order #...:** MDJN01AA **Matrix.....:** WG
Date Sampled...: 01/20/11 12:30 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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: FWGCBPmw-004C-1656-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-017 **Work Order #...:** MDJN01AA **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	78	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1701-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-019 Work Order #...: MDJN21AA Matrix.....: WQ
Date Sampled...: 01/20/11 14:30 Date Received..: 01/20/11
Prep Date.....: 01/24/11 Analysis Date..: 01/24/11
Prep Batch #...: 1024163
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	**7.7 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	**0.73 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	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: FWGEQUIPRINSE4-1701-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-019 **Work Order #...:** MDJN21AA **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	77	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	86	(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 #...: A1A200532-020 **Work Order #...:** MDJN31AA **Matrix.....:** WQ
Date Sampled...: 01/20/11 08:00 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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	12	**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: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A200532-020 **Work Order #...:** MDJN31AA **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	78	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-005C-1661-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-021 **Work Order #...:** MDJN41AA **Matrix.....:** WG
Date Sampled...: 01/20/11 09:10 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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: FWGCPmw-005C-1661-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-021 **Work Order #...:** MDJN41AA **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	79	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-001C-1655-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-023 **Work Order #...:** MDJN61AA **Matrix.....:** WG
Date Sampled...: 01/20/11 12:35 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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: FWGCBPmw-001C-1655-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-023 **Work Order #...:** MDJN61AA **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	79	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-007C-1658-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-025 **Work Order #...:** MDJPA1AA **Matrix.....:** WG
Date Sampled...: 01/20/11 14:20 **Date Received..:** 01/20/11
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1024163
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: FWGCBPmw-007C-1658-GW

GC/MS Volatiles

Lot-Sample #...: A1A200532-025 **Work Order #...:** MDJPA1AA **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	76	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A200532 **Work Order #...:** MDMF41AA **Matrix.....:** WATER
MB Lot-Sample #: A1A240000-163

Prep Date.....: 01/24/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/24/11 **Prep Batch #...:** 1024163
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A200532 **Work Order #...:** MDMF41AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	85	(50 - 150)
1,2-Dichloroethane-d4	80	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200532 Work Order #...: MDMF41AC Matrix.....: WATER
LCS Lot-Sample#: A1A240000-163
Prep Date.....: 01/24/11 Analysis Date..: 01/24/11
Prep Batch #...: 1024163
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
cis-1,2-Dichloroethene	96	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	94	(75 - 134)	SW846 8260B
1,2-Dibromoethane	95	(75 - 127)	SW846 8260B
Bromochloromethane	101	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	92	(75 - 122)	SW846 8260B
o-Xylene	94	(75 - 118)	SW846 8260B
Chloromethane	84	(58 - 135)	SW846 8260B
Bromomethane	82	(35 - 153)	SW846 8260B
Vinyl chloride	102	(73 - 134)	SW846 8260B
Chloroethane	88	(72 - 129)	SW846 8260B
Methylene chloride	88	(69 - 118)	SW846 8260B
Acetone	153	(51 - 157)	SW846 8260B
Carbon disulfide	96	(74 - 123)	SW846 8260B
1,1-Dichloroethene	94	(75 - 125)	SW846 8260B
1,1-Dichloroethane	95	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	95	(85 - 111)	SW846 8260B
Chloroform	97	(74 - 127)	SW846 8260B
1,2-Dichloroethane	96	(67 - 132)	SW846 8260B
2-Butanone	89	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	94	(70 - 127)	SW846 8260B
Carbon tetrachloride	96	(71 - 132)	SW846 8260B
Bromodichloromethane	98	(70 - 130)	SW846 8260B
1,2-Dichloropropane	96	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	94	(73 - 132)	SW846 8260B
Trichloroethene	100	(67 - 128)	SW846 8260B
Dibromochloromethane	97	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	94	(75 - 136)	SW846 8260B
Benzene	96	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	95	(74 - 131)	SW846 8260B
Bromoform	105	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	91	(59 - 150)	SW846 8260B
2-Hexanone	86	(53 - 139)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200532 **Work Order #...:** MDMF41AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A240000-163

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	91	(75 - 129)	**SW846 8260B**
1,1,2,2-Tetrachloroethane	80	(68 - 129)	**SW846 8260B**
Toluene	92	(75 - 125)	**SW846 8260B**
Chlorobenzene	95	(75 - 127)	**SW846 8260B**
Ethylbenzene	94	(75 - 120)	**SW846 8260B**
Styrene	94	(75 - 130)	**SW846 8260B**
Xylenes (total)	93	(90 - 114)	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	87	(50 - 150)
1,2-Dichloroethane-d4	80	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	90	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200532 Work Order #...: MDJN41AC-MS Matrix.....: WG
MS Lot-Sample #: A1A200532-021 MDJN41AD-MSD
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11
Prep Date.....: 01/24/11 Analysis Date..: 01/24/11
Prep Batch #...: 1024163
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	92	(70 - 130)			SW846 8260B
	97	(70 - 130)	5.0	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	91	(70 - 130)			SW846 8260B
	94	(70 - 130)	3.4	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(70 - 130)			SW846 8260B
	95	(70 - 130)	6.0	(0-30)	SW846 8260B
Bromochloromethane	96	(70 - 130)			SW846 8260B
	100	(70 - 130)	4.0	(0-30)	SW846 8260B
m-Xylene & p-Xylene	90	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.2	(0-30)	SW846 8260B
o-Xylene	91	(70 - 130)			SW846 8260B
	95	(70 - 130)	4.2	(0-30)	SW846 8260B
Chloromethane	81	(70 - 130)			SW846 8260B
	84	(70 - 130)	3.3	(0-30)	SW846 8260B
Bromomethane	81	(70 - 130)			SW846 8260B
	70	(70 - 130)	14	(0-30)	SW846 8260B
Vinyl chloride	102	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.6	(0-30)	SW846 8260B
Chloroethane	88	(70 - 130)			SW846 8260B
	81	(70 - 130)	8.6	(0-30)	SW846 8260B
Methylene chloride	81	(70 - 130)			SW846 8260B
	82	(70 - 130)	1.8	(0-30)	SW846 8260B
Acetone	78	(70 - 130)			SW846 8260B
	78	(70 - 130)	0.76	(0-30)	SW846 8260B
Carbon disulfide	89	(70 - 130)			SW846 8260B
	88	(70 - 130)	0.05	(0-30)	SW846 8260B
1,1-Dichloroethene	92	(70 - 130)			SW846 8260B
	89	(70 - 130)	3.7	(0-30)	SW846 8260B
1,1-Dichloroethane	93	(70 - 130)			SW846 8260B
	96	(70 - 130)	3.2	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	92	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.2	(0-30)	SW846 8260B
Chloroform	94	(70 - 130)			SW846 8260B
	99	(70 - 130)	5.0	(0-30)	SW846 8260B
1,2-Dichloroethane	92	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.7	(0-30)	SW846 8260B
2-Butanone	86	(70 - 130)			SW846 8260B
	89	(70 - 130)	3.2	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200532 **Work Order #...:** MDJN41AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200532-021 MDJN41AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	88	(70 - 130)			SW846 8260B
	89	(70 - 130)	1.1	(0-30)	SW846 8260B
Carbon tetrachloride	90	(70 - 130)			SW846 8260B
	89	(70 - 130)	1.3	(0-30)	SW846 8260B
Bromodichloromethane	94	(70 - 130)			SW846 8260B
	99	(70 - 130)	5.9	(0-30)	SW846 8260B
1,2-Dichloropropane	96	(70 - 130)			SW846 8260B
	100	(70 - 130)	3.8	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	87	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.9	(0-30)	SW846 8260B
Trichloroethene	96	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.3	(0-30)	SW846 8260B
Dibromochloromethane	91	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.4	(0-30)	SW846 8260B
1,1,2-Trichloroethane	91	(70 - 130)			SW846 8260B
	94	(70 - 130)	2.8	(0-30)	SW846 8260B
Benzene	94	(70 - 130)			SW846 8260B
	99	(70 - 130)	4.9	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	89	(70 - 130)			SW846 8260B
	95	(70 - 130)	6.6	(0-30)	SW846 8260B
Bromoform	92	(70 - 130)			SW846 8260B
	101	(70 - 130)	9.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	89	(70 - 130)			SW846 8260B
	93	(70 - 130)	5.4	(0-30)	SW846 8260B
2-Hexanone	86	(70 - 130)			SW846 8260B
	86	(70 - 130)	0.10	(0-30)	SW846 8260B
Tetrachloroethene	90	(70 - 130)			SW846 8260B
	89	(70 - 130)	0.79	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	77	(70 - 130)			SW846 8260B
	82	(70 - 130)	6.1	(0-30)	SW846 8260B
Toluene	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	3.8	(0-30)	SW846 8260B
Chlorobenzene	91	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.5	(0-30)	SW846 8260B
Ethylbenzene	92	(70 - 130)			SW846 8260B
	94	(70 - 130)	2.2	(0-30)	SW846 8260B
Styrene	91	(70 - 130)			SW846 8260B
	97	(70 - 130)	5.7	(0-30)	SW846 8260B
Xylenes (total)	90	(70 - 130)			SW846 8260B
	94	(70 - 130)	4.2	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200532 **Work Order #...:** MDJN41AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200532-021 MDJN41AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	85	(50 - 150)
	85	(50 - 150)
1,2-Dichloroethane-d4	81	(50 - 150)
	83	(50 - 150)
Toluene-d8	85	(50 - 150)
	83	(50 - 150)
4-Bromofluorobenzene	89	(50 - 150)
	89	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

1/24/11 @ 1900

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10124A.b\UXJ5153.D
Report Date: 25-Jan-2011 08:21

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10124A.b\8260LLUX11.m
Misc Info: J10124A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	0.9361	93.61	70-130
	42	Trichloroethene	1.000	1.116	111.65	70-130
	59	Chlorobenzene	1.000	1.144	114.41	70-130
	50	Toluene	1.000	1.100	109.99	70-130
	41	Benzene	1.000	1.202	120.21	70-130
	16	Acetone	2.000	1.326	66.31*	70-130
	20	Carbon Disulfide	1.000	0.8818	88.18	70-130
	9	Chloromethane	1.000	0.9734	97.34	70-130
	11	Bromomethane	1.000	0.7961	79.61	70-130
	10	Vinyl Chloride	1.000	1.070	106.96	70-130
	12	Chloroethane	1.000	0.9481	94.81	70-130
	21	Methylene Chloride	1.000	1.588	158.83*	70-130
	28	1,1-Dichloroethane	1.000	1.074	107.40	70-130
M	31	1,2-Dichloroethene	2.000	2.128	106.40	70-130
	35	Chloroform	1.000	1.112	111.18	70-130
	40	1,2-Dichloroethane	1.000	1.141	114.13	70-130
	30	2-Butanone	2.000	1.954	97.69	70-130
	37	1,1,1-Trichloroeth	1.000	0.9489	94.89	70-130
	39	Carbon Tetrachlori	1.000	0.9051	90.51	70-130
	46	Bromodichlorometha	1.000	1.000	100.06	70-130
	43	1,2-Dichloropropan	1.000	1.110	110.96	70-130
	48	cis-1,3-Dichloropr	1.000	1.003	100.33	70-130
	54	1,3-Dichloropropan	1.000	1.077	107.75	70-130
	57	Dibromochlorometha	1.000	0.9488	94.89	70-130
	53	1,1,2-Trichloroeth	1.000	1.144	114.42	70-130
	51	trans-1,3-Dichloro	1.000	0.8787	87.87	70-130
	49	4-Methyl-2-pentano	2.000	1.783	89.17	70-130
	56	2-Hexanone	2.000	1.721	86.04	70-130
	55	Tetrachloroethene	1.000	1.026	102.58	70-130
	68	1,1,2,2-Tetrachlor	1.000	1.060	106.04	70-130
	66	Bromoform	1.000	0.8553	85.53	70-130
	61	Ethylbenzene	1.000	1.066	106.59	70-130
	65	Styrene	1.000	1.036	103.55	70-130
M	63	Xylenes (total)	3.000	3.162	105.40	70-130
	32	cis-1,2-dichloroet	1.000	1.089	108.91	70-130
	25	trans-1,2-Dichloro	1.000	1.039	103.90	70-130
	8	Dichlorodifluorome	1.000	0.8943	89.43	70-130
	13	Trichlorofluoromet	1.000	0.7830	78.30	70-130

70	1,2,3-Trichloropro	1.000	0.8619	86.19	70-130
18	Freon-113	1.000	0.8279	82.79	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10124A.b\UXJ5153.D
Report Date: 25-Jan-2011 08:21

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	1.003	100.32	70-130
58 1,2-Dibromoethane	1.000	1.045	104.51	70-130
67 Isopropylbenzene	1.000	1.032	103.20	70-130
80 1,3-Dichlorobenzen	1.000	1.057	105.73	70-130
81 1,4-Dichlorobenzen	1.000	1.117	111.68	70-130
83 1,2-Dichlorobenzen	1.000	1.190	118.96	70-130
84 1,2-Dibromo-3-chlo	1.000	0.7103	71.03	70-130
85 1,2,4-Trichloroben	1.000	0.7646	76.46	70-130
98 Cyclohexane	1.000	0.8951	89.51	70-130
143 Methyl Acetate	2.000	2.070	103.51	70-130
144 Methylcyclohexane	1.000	0.8936	89.37	70-130
71 Bromobenzene	1.000	0.9663	96.63	70-130
34 Bromochloromethane	1.000	1.205	120.53	70-130
82 n-Butylbenzene	1.000	0.9419	94.19	70-130
78 sec-Butylbenzene	1.000	0.8634	86.34	70-130
76 tert-Butylbenzene	1.000	0.8580	85.80	70-130
73 2-Chlorotoluene	1.000	0.9435	94.35	70-130
75 4-Chlorotoluene	1.000	0.9084	90.84	70-130
45 Dibromomethane	1.000	1.156	115.61	70-130
33 2,2-Dichloropropan	1.000	0.8178	81.79	70-130
38 1,1-Dichloropropen	1.000	1.010	100.99	70-130
86 Hexachlorobutadien	1.000	0.6926	69.26*	70-130
19 Iodomethane	1.000	1.062	106.24	70-130
79 4-Isopropyltoluene	1.000	0.8648	86.48	70-130
87 Naphthalene	1.000	0.6996	69.96*	70-130
72 n-Propylbenzene	1.000	0.7945	79.45	70-130
60 1,1,1,2-Tetrachlor	1.000	1.014	101.38	70-130
88 1,2,3-Trichloroben	1.000	0.7189	71.89	70-130
77 1,2,4-Trimethylben	1.000	0.9016	90.16	70-130
74 1,3,5-Trimethylben	1.000	0.8545	85.45	70-130
150 Vinyl Acetate-86	1.000	0.3438	34.38*	70-130
62 m + p-Xylene	2.000	2.095	104.75	70-130
64 Xylene-o	1.000	1.067	106.71	70-130
49 4-Methyl-2-pentano	2.000	1.783	89.17	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	8.415	84.15	75-121
$ 5 1,2-Dichloroethane	10.000	7.822	78.22	63-129
$ 6 Toluene-d8	10.000	8.482	84.82	74-115
$ 7 Bromofluorobenzene	10.000	8.798	87.98	66-117

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10124A.b\UXJ5130.D
Report Date: 24-Jan-2011 11:04

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 24-JAN-2011 10:22
Lab File ID: UXJ5130.D Init. Cal. Date(s): 17-JUN-2010 13-JAN-2011
Analysis Type: WATER Init. Cal. Times: 12:26 12:51
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10124A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 4 Dibromofluoromethane	0.24903	0.21672	0.21672	0.010	12.97231	50.00000	Averaged	
$ 5 1,2-Dichloroethane-d4	0.36095	0.28713	0.28713	0.010	20.45328	50.00000	Averaged	
$ 6 Toluene-d8	1.48909	1.21388	1.21388	0.010	18.48175	50.00000	Averaged	
$ 7 Bromofluorobenzene	0.50167	0.43007	0.43007	0.010	14.27310	50.00000	Averaged	
8 Dichlorodifluoromethane	0.14711	0.13831	0.13831	0.010	5.98091	50.00000	Averaged	
9 Chloromethane	0.30282	0.26098	0.26098	0.100	13.81736	50.00000	Averaged	
10 Vinyl Chloride	0.27707	0.26455	0.26455	0.010	4.51954	20.00000	Averaged	
11 Bromomethane	0.13161	0.10746	0.10746	0.010	18.34849	50.00000	Averaged	
12 Chloroethane	0.14785	0.12755	0.12755	0.010	13.72588	50.00000	Averaged	
13 Trichlorofluoromethane	0.29270	0.23082	0.23082	0.010	21.14021	50.00000	Averaged	
15 Acrolein	0.03561	0.03220	0.03220	0.010	9.57767	50.00000	Averaged	
16 Acetone	100	121	0.09487	0.010	-20.62731	0.000e+000	Wt Linear	
17 1,1-Dichloroethene	0.21872	0.19810	0.19810	0.010	9.42652	20.00000	Averaged	
18 Freon-113	0.12016	0.10482	0.10482	0.010	12.76845	50.00000	Averaged	
19 Iodomethane	0.26267	0.26638	0.26638	0.010	-1.41422	50.00000	Averaged	
20 Carbon Disulfide	0.54866	0.54169	0.54169	0.010	1.27040	50.00000	Averaged	
21 Methylene Chloride	50.00000	47.79140	0.23452	0.010	4.41721	0.000e+000	Wt Linear	
22 Acetonitrile	0.02786	0.02379	0.02379	0.010	14.60646	50.00000	Averaged	
23 Acrylonitrile	0.08858	0.08590	0.08590	0.010	3.01664	50.00000	Averaged	
24 Methyl tert-butyl ether	0.79526	0.75322	0.75322	0.010	5.28600	50.00000	Averaged	
25 trans-1,2-Dichloroethene	0.28264	0.28336	0.28336	0.010	-0.25207	50.00000	Averaged	
26 Hexane	0.07934	0.07102	0.07102	0.010	10.48695	20.00000	Averaged	
27 Vinyl acetate	0.40247	0.39470	0.39470	0.010	1.93167	50.00000	Averaged	
28 1,1-Dichloroethane	0.49684	0.51236	0.51236	0.100	-3.12503	50.00000	Averaged	
29 tert-Butyl Alcohol	0.01907	0.01671	0.01671	0.010	12.38902	50.00000	Averaged	
30 2-Butanone	0.11159	0.11693	0.11693	0.010	-4.78835	50.00000	Averaged	
M 31 1,2-Dichloroethene (total)	0.28935	0.29931	0.29931	0.010	-3.44364	50.00000	Averaged	
32 cis-1,2-dichloroethene	0.29605	0.31526	0.31526	0.010	-6.49070	50.00000	Averaged	
33 2,2-Dichloropropane	0.29625	0.24132	0.24132	0.010	18.54183	50.00000	Averaged	
34 Bromochloromethane	0.13541	0.14600	0.14600	0.010	-7.82385	50.00000	Averaged	
35 Chloroform	0.46541	0.50148	0.50148	0.010	-7.75019	20.00000	Averaged	
36 Tetrahydrofuran	0.07688	0.07521	0.07521	0.010	2.17977	50.00000	Averaged	
37 1,1,1-Trichloroethane	0.36552	0.32925	0.32925	0.010	9.92371	50.00000	Averaged	
38 1,1-Dichloropropene	0.40421	0.40807	0.40807	0.010	-0.95480	50.00000	Averaged	
39 Carbon Tetrachloride	0.32778	0.30908	0.30908	0.010	5.70591	50.00000	Averaged	
40 1,2-Dichloroethane	0.41241	0.43159	0.43159	0.010	-4.64996	50.00000	Averaged	
41 Benzene	1.16071	1.22627	1.22627	0.010	-5.64792	50.00000	Averaged	
42 Trichloroethene	0.29439	0.31056	0.31056	0.010	-5.49076	50.00000	Averaged	
43 1,2-Dichloropropane	0.28755	0.30749	0.30749	0.010	-6.93274	20.00000	Averaged	
44 1,4-Dioxane	0.00234	0.00199	0.00199	0.010	15.15049	50.00000	Averaged	<-
45 Dibromomethane	0.15874	0.16759	0.16759	0.010	-5.57757	50.00000	Averaged	
46 Bromodichloromethane	0.33142	0.37903	0.37903	0.010	-14.36487	50.00000	Averaged	
47 2-Chloroethyl vinyl ether	0.17455	0.17104	0.17104	0.010	2.01232	50.00000	Averaged	

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10124A.b\UXJ5130.D
Report Date: 24-Jan-2011 11:04

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 24-JAN-2011 10:22
Lab File ID: UXJ5130.D Init. Cal. Date(s): 17-JUN-2010 13-JAN-2011
Analysis Type: WATER Init. Cal. Times: 12:26 12:51
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10124A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
48 cis-1,3-Dichloropropene	0.42697	0.47202	0.47202	0.010	-10.55082	50.00000	Averaged
49 4-Methyl-2-pentanone	0.23371	0.22362	0.22362	0.010	4.31576	50.00000	Averaged
50 Toluene	1.75446	1.78069	1.78069	0.010	-1.49477	20.00000	Averaged
51 trans-1,3-Dichloropropene	0.51970	0.57406	0.57406	0.010	-10.46047	50.00000	Averaged
52 Ethyl Methacrylate	0.48698	0.47518	0.47518	0.010	2.42293	50.00000	Averaged
53 1,1,2-Trichloroethane	0.32381	0.32620	0.32620	0.010	-0.73621	50.00000	Averaged
54 1,3-Dichloropropane	0.60931	0.61419	0.61419	0.010	-0.80057	50.00000	Averaged
55 Tetrachloroethene	0.32386	0.32442	0.32442	0.010	-0.17014	50.00000	Averaged
56 2-Hexanone	0.21564	0.19644	0.19644	0.010	8.90131	50.00000	Averaged
57 Dibromochloromethane	0.31437	0.35663	0.35663	0.010	-13.44123	50.00000	Averaged
58 1,2-Dibromoethane	0.31507	0.32365	0.32365	0.010	-2.72344	50.00000	Averaged
59 Chlorobenzene	1.08411	1.13047	1.13047	0.300	-4.27593	50.00000	Averaged
60 1,1,1,2-Tetrachloroethane	0.35234	0.37566	0.37566	0.010	-6.61776	50.00000	Averaged
61 Ethylbenzene	0.59455	0.61198	0.61198	0.010	-2.93127	20.00000	Averaged
62 m + p-Xylene	0.75868	0.76227	0.76227	0.010	-0.47317	50.00000	Averaged
M 63 Xylenes (total)	0.74401	0.75072	0.75072	0.010	-0.90165	50.00000	Averaged
64 Xylene-o	0.71467	0.72762	0.72762	0.010	-1.81139	50.00000	Averaged
65 Styrene	1.13529	1.25786	1.25786	0.010	-10.79699	50.00000	Averaged
66 Bromoform	0.16749	0.20450	0.20450	0.100	-22.09968	50.00000	Averaged
67 Isopropylbenzene	1.81338	1.86069	1.86069	0.010	-2.60884	50.00000	Averaged
68 1,1,2,2-Tetrachloroethane	0.86453	0.76329	0.76329	0.300	11.71122	50.00000	Averaged
69 1,4-Dichloro-2-butene	50.00000	55.57937	0.23479	0.010	-11.15874	0.000e+000	Wt Linear
70 1,2,3-Trichloropropane	0.30139	0.24879	0.24879	0.010	17.45335	50.00000	Averaged
71 Bromobenzene	1.04387	0.94314	0.94314	0.010	9.64959	50.00000	Averaged
72 n-Propylbenzene	1.21740	1.05128	1.05128	0.010	13.64528	50.00000	Averaged
73 2-Chlorotoluene	1.02828	0.93062	0.93062	0.010	9.49774	50.00000	Averaged
74 1,3,5-Trimethylbenzene	3.43147	3.05323	3.05323	0.010	11.02280	50.00000	Averaged
75 4-Chlorotoluene	1.05740	0.97624	0.97624	0.010	7.67511	50.00000	Averaged
76 tert-Butylbenzene	2.96050	2.61895	2.61895	0.010	11.53690	50.00000	Averaged
77 1,2,4-Trimethylbenzene	3.32668	3.18616	3.18616	0.010	4.22400	50.00000	Averaged
78 sec-Butylbenzene	4.08908	3.62322	3.62322	0.010	11.39287	50.00000	Averaged
79 4-Isopropyltoluene	3.16892	2.98634	2.98634	0.010	5.76159	50.00000	Averaged
80 1,3-Dichlorobenzene	1.65207	1.64850	1.64850	0.010	0.21618	50.00000	Averaged
81 1,4-Dichlorobenzene	1.64353	1.66007	1.66007	0.010	-1.00653	50.00000	Averaged
82 n-Butylbenzene	2.46859	2.41331	2.41331	0.010	2.23961	50.00000	Averaged
83 1,2-Dichlorobenzene	1.35463	1.43095	1.43095	0.010	-5.63442	50.00000	Averaged
84 1,2-Dibromo-3-chloropropane	0.08117	0.07146	0.07146	0.010	11.96175	50.00000	Averaged
85 1,2,4-Trichlorobenzene	0.69024	0.54350	0.54350	0.010	21.25983	50.00000	Averaged
86 Hexachlorobutadiene	0.27406	0.20145	0.20145	0.010	26.49487	50.00000	Averaged
87 Naphthalene	1.56286	1.19746	1.19746	0.010	23.38008	50.00000	Averaged
88 1,2,3-Trichlorobenzene	0.62745	0.46483	0.46483	0.010	25.91662	50.00000	Averaged
98 Cyclohexane	0.45337	0.37365	0.37365	0.010	17.58427	50.00000	Averaged
143 Methyl Acetate	0.20799	0.19982	0.19982	0.010	3.92779	50.00000	Averaged

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 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 1.7 and 3.3°C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP9-1/31/2011 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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			Benzoic acid, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, bis(2-ethylhexyl)phthalate 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%?	✓				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%?	✓			1/31/11 @ 1411	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?	✓			2/1/11 @ 1056	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
25. Were the retention times for all IS compounds within ±30 seconds from the	✓				LCG Table 2 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
RT of the mid-point ICAL std?					
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%?		✓		The field duplicate RPDs for samples FWGCPmw-Dup4-1695-GW and FWGCPmw-006c-1662-GW were above control limits for bis (2-ethylhexyl) phthalate at 200%. The bis (2-ethylhexyl) phthalate results for samples FWGCPmw-Dup4-1695-GW and FWGCPmw-006c-1662-GW were qualified as estimated, "J/UJ".	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. Both the matrix spike and matrix spike duplicate analyzed on sample FWGCPmw-005c-1661-GW recovered below control limits for 3,3'-dichlorobenzidine at 34%. The MS and MSD for hexachlorocyclopentadiene recovered below control limits at 21%and 20%. No qualification was made for the MS and MSD outliers as there were no other QC outliers.	LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?	✓			Checked by ADR.	LCG Table 2 >150%=J; 10% -50%=J/UJ; <10%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 R0
Analysis: SW846 8270C (including PAHs)

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:
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: FWGEBGmw-126C-1668-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-002 **Work Order #...:** MDJNC1AC **Matrix.....:** WG
Date Sampled...: 01/20/11 09:23 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-126C-1668-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-002 Work Order #...: MDJNC1AC 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: FWGEBGmw-126C-1668-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-002 **Work Order #...:** MDJNC1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	65	(50 - 150)
2,4,6-Tribromophenol	80	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-129C-1669-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-004 **Work Order #...:** MDJNF1AC **Matrix.....:** WG
Date Sampled...: 01/20/11 10:42 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-129C-1669-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-004 Work Order #...: MDJNF1AC 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: FWGEBGmw-129C-1669-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-004 **Work Order #...:** MDJNF1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	73	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-124C-1667-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-006 **Work Order #...:** MDJNH1AC **Matrix.....:** WG
Date Sampled...: 01/20/11 12:02 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-124C-1667-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-006 **Work Order #...:** MDJNH1AC **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: FWGEBGmw-124C-1667-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-006 **Work Order #...:** MDJNH1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	53	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	80	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-123C-1666-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-008 **Work Order #...:** MDJNM1AC **Matrix.....:** WG
Date Sampled...: 01/20/11 13:06 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-123C-1666-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-008 Work Order #...: MDJNM1AC 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: FWGEBGmw-123C-1666-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-008 Work Order #...: MDJNM1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	52	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	72	(50 - 150)
2,4,6-Tribromophenol	89	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-002C-1660-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-011 **Work Order #...:** MDJNQ1AC **Matrix.....:** WG
Date Sampled...: 01/20/11 09:10 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-002C-1660-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-011 Work Order #...: MDJNQ1AC 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: FWGCPmw-002C-1660-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-011 **Work Order #...:** MDJNQ1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	61	(50 - 150)
Phenol-d5	59	(50 - 150)
2-Fluorophenol	59	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-006C-1662-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-013 **Work Order #...:** MDJNT1AC **Matrix.....:** WG
Date Sampled...: 01/20/11 10:40 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
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	**2.2 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-006C-1662-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-013 **Work Order #...:** MDJNT1AC **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: FWGCPmw-006C-1662-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-013 Work Order #...: MDJNT1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	79	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-DUP4-1695-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-015 **Work Order #...:** MDJNW1AC **Matrix.....:** WG
Date Sampled...: 01/20/11 12:00 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-DUP4-1695-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-015 **Work Order #...:** MDJNW1AC **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: FWGCPmw-DUP4-1695-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-015 Work Order #...: MDJNW1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(50 - 150)
2-Fluorobiphenyl	59	(50 - 150)
Terphenyl-d14	69	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	65	(50 - 150)
2,4,6-Tribromophenol	74	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-004C-1656-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-017 **Work Order #...:** MDJN01AC **Matrix.....:** WG
Date Sampled...: 01/20/11 12:30 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
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**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-004C-1656-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-017 **Work Order #...:** MDJN01AC **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: FWGCBPmw-004C-1656-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-017 **Work Order #...:** MDJN01AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	65	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1701-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-019 **Work Order #...:** MDJN21AC **Matrix.....:** WQ
Date Sampled...: 01/20/11 14:30 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
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	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1701-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-019 **Work Order #...:** MDJN21AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1701-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-019 **Work Order #...:** MDJN21AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-005C-1661-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-021 **Work Order #...:** MDJN41AE **Matrix.....:** WG
Date Sampled...: 01/20/11 09:10 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-005C-1661-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-021 **Work Order #...:** MDJN41AE **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: FWGCPmw-005C-1661-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-021 **Work Order #...:** MDJN41AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	77	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	75	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-001C-1655-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-023 **Work Order #...:** MDJN61AC **Matrix.....:** WG
Date Sampled...: 01/20/11 12:35 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-001C-1655-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-023 Work Order #...: MDJN61AC 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: FWGCBPmw-001C-1655-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-023 **Work Order #...:** MDJN61AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	57	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	75	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-007C-1658-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-025 **Work Order #...:** MDJPA1AC **Matrix.....:** WG
Date Sampled...: 01/20/11 14:20 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1021024
Dilution Factor: 1 **Initial Wgt/Vol:** 890 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-007C-1658-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-025 Work Order #...: MDJPA1AC 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: FWGCBPmw-007C-1658-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200532-025 **Work Order #...:** MDJPA1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	56	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	79	(50 - 150)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200532 **Work Order #...:** MDJRD1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A210000-024

Prep Date.....: 01/21/11 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 02/01/11 **Prep Batch #...:** 1021024
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

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
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

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200532 **Work Order #...:** MDJRD1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
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
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
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-propylamine	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-Trichlorobenzene	ND	1.0	ug/L	SW846 8270C
2,4,5-Trichlorophenol	ND	5.0	ug/L	SW846 8270C
2,4,6-Trichlorophenol	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	66	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	58	(50 - 150)
2-Fluorophenol	58	(50 - 150)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200532 **Work Order #...:** MDJRD1AA **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.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200532 Work Order #...: MDJRD1AC Matrix.....: WATER
LCS Lot-Sample#: A1A210000-024
Prep Date.....: 01/21/11 Analysis Date..: 02/01/11
Prep Batch #...: 1021024
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
bis(2-Chloroethyl)-ether	62	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	59	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	69	(30 - 154)	SW846 8270C
2,4,6-Trichloro-phenol	71	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	70	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	50	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	50	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	72	(43 - 122)	SW846 8270C
2-Chloronaphthalene	61	(35 - 115)	SW846 8270C
2-Methylnaphthalene	70	(32 - 115)	SW846 8270C
2-Methylphenol	65	(30 - 116)	SW846 8270C
2-Nitroaniline	66	(36 - 140)	SW846 8270C
2-Nitrophenol	70	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	42	(30 - 160)	SW846 8270C
3-Nitroaniline	58	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	69	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	70	(43 - 118)	SW846 8270C
4-Chloroaniline	52	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	66	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	68	(37 - 136)	SW846 8270C
Carbazole	64	(49 - 126)	SW846 8270C
Chrysene	62	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	68	(38 - 130)	SW846 8270C
Dibenzofuran	64	(40 - 115)	SW846 8270C
Diethyl phthalate	70	(43 - 132)	SW846 8270C
Dimethyl phthalate	68	(42 - 116)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200532 Work Order #...: MDJRD1AC Matrix.....: WATER
LCS Lot-Sample#: A1A210000-024

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Di-n-octyl phthalate	66	(36 - 151)	SW846 8270C
Fluoranthene	69	(47 - 132)	SW846 8270C
Fluorene	63	(41 - 115)	SW846 8270C
Hexachlorobenzene	69	(42 - 123)	SW846 8270C
Hexachlorobutadiene	53	(30 - 120)	SW846 8270C
Hexachloroethane	51	(30 - 120)	SW846 8270C
Isophorone	67	(33 - 115)	SW846 8270C
Naphthalene	59	(30 - 119)	SW846 8270C
Nitrobenzene	72	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	59	(35 - 124)	SW846 8270C
Phenanthrene	64	(45 - 117)	SW846 8270C
Indeno(1,2,3-cd)pyrene	66	(37 - 130)	SW846 8270C
Di-n-butyl phthalate	68	(46 - 123)	SW846 8270C
Hexachlorocyclopenta-diene	31	(30 - 115)	SW846 8270C
Benzoic acid	45	(30 - 136)	SW846 8270C
Benzyl alcohol	69	(29 - 115)	SW846 8270C
1,2,4-Trichloro-benzene	55	(30 - 120)	SW846 8270C
Acenaphthene	62	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	72	(34 - 151)	SW846 8270C
Pyrene	62	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	62	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	56	(30 - 115)	SW846 8270C
Pentachlorophenol	49	(30 - 150)	SW846 8270C
Phenol	67	(30 - 115)	SW846 8270C
2-Chlorophenol	69	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	72	(31 - 121)	SW846 8270C
4-Nitrophenol	84	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	56	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	53	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	70	(36 - 135)	SW846 8270C
4-Methylphenol	67	(31 - 115)	SW846 8270C
4-Nitroaniline	61	(30 - 140)	SW846 8270C
Acenaphthylene	63	(37 - 115)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200532 **Work Order #...:** MDJRD1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A210000-024

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Anthracene	66	(45 - 118)	SW846 8270C
Benzo(a)anthracene	63	(43 - 138)	SW846 8270C
Benzo(a)pyrene	56	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	65	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	67	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	66	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	66	(30 - 115)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(50 - 150)
2-Fluorobiphenyl	62	(50 - 150)
Terphenyl-d14	73	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	76	(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 #...: A1A200532 Work Order #...: MDJN41AF-MS Matrix.....: WG
MS Lot-Sample #: A1A200532-021 MDJN41AG-MSD
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11
Prep Date.....: 01/21/11 Analysis Date..: 02/01/11
Prep Batch #...: 1021024
Dilution Factor: 1 Initial Wgt/Vol: 450 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	60	(45 - 135)			SW846 8270C
	61	(45 - 135)	2.5	(0-40)	SW846 8270C
Acenaphthene	66	(45 - 135)			SW846 8270C
	68	(45 - 135)	3.2	(0-40)	SW846 8270C
2,4-Dinitrotoluene	77	(45 - 135)			SW846 8270C
	81	(45 - 135)	5.4	(0-40)	SW846 8270C
Pyrene	67	(45 - 135)			SW846 8270C
	70	(45 - 135)	4.3	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	68	(45 - 135)			SW846 8270C
	68	(45 - 135)	0.97	(0-40)	SW846 8270C
1,4-Dichlorobenzene	60	(45 - 135)			SW846 8270C
	57	(45 - 135)	5.4	(0-40)	SW846 8270C
Pentachlorophenol	48	(45 - 135)			SW846 8270C
	44 a	(45 - 135)	7.6	(0-40)	SW846 8270C
Phenol	72	(45 - 135)			SW846 8270C
	71	(45 - 135)	1.1	(0-40)	SW846 8270C
2-Chlorophenol	76	(45 - 135)			SW846 8270C
	73	(45 - 135)	3.1	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	79	(45 - 135)			SW846 8270C
	82	(45 - 135)	3.7	(0-40)	SW846 8270C
4-Nitrophenol	86	(45 - 135)			SW846 8270C
	88	(45 - 135)	1.7	(0-40)	SW846 8270C
Acenaphthylene	66	(45 - 135)			SW846 8270C
	67	(45 - 135)	1.4	(0-40)	SW846 8270C
Anthracene	66	(45 - 135)			SW846 8270C
	68	(45 - 135)	3.2	(0-40)	SW846 8270C
Benzo(a)anthracene	66	(45 - 135)			SW846 8270C
	67	(45 - 135)	1.0	(0-40)	SW846 8270C
Benzo(b)fluoranthene	73	(45 - 135)			SW846 8270C
	68	(45 - 135)	7.3	(0-40)	SW846 8270C
Benzo(k)fluoranthene	69	(45 - 135)			SW846 8270C
	74	(45 - 135)	7.2	(0-40)	SW846 8270C
Benzo(ghi)perylene	71	(45 - 135)			SW846 8270C
	71	(45 - 135)	0.09	(0-40)	SW846 8270C
Benzo(a)pyrene	60	(45 - 135)			SW846 8270C
	61	(45 - 135)	1.2	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200532 **Work Order #...:** MDJN41AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200532-021 MDJN41AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	71	(45 - 135)			SW846 8270C
	76	(45 - 135)	7.1	(0-40)	SW846 8270C
bis(2-Chloroethyl)- ether	71	(45 - 135)			SW846 8270C
	68	(45 - 135)	3.9	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	66	(45 - 135)			SW846 8270C
	65	(45 - 135)	0.63	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	74	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.21	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	74	(45 - 135)			SW846 8270C
	77	(45 - 135)	3.2	(0-40)	SW846 8270C
Butyl benzyl phthalate	73	(45 - 135)			SW846 8270C
	75	(45 - 135)	2.4	(0-40)	SW846 8270C
Carbazole	67	(45 - 135)			SW846 8270C
	68	(45 - 135)	1.7	(0-40)	SW846 8270C
4-Chloroaniline	53	(45 - 135)			SW846 8270C
	54	(45 - 135)	2.5	(0-40)	SW846 8270C
2-Chloronaphthalene	66	(45 - 135)			SW846 8270C
	68	(45 - 135)	4.0	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	71	(45 - 135)			SW846 8270C
	74	(45 - 135)	4.1	(0-40)	SW846 8270C
Chrysene	66	(45 - 135)			SW846 8270C
	67	(45 - 135)	1.2	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	71	(45 - 135)			SW846 8270C
	73	(45 - 135)	3.1	(0-40)	SW846 8270C
Dibenzofuran	67	(45 - 135)			SW846 8270C
	69	(45 - 135)	3.0	(0-40)	SW846 8270C
Di-n-butyl phthalate	72	(45 - 135)			SW846 8270C
	76	(45 - 135)	4.3	(0-40)	SW846 8270C
1,2-Dichlorobenzene	61	(45 - 135)			SW846 8270C
	57	(45 - 135)	6.7	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200532 **Work Order #...:** MDJN41AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200532-021 MDJN41AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	56	(45 - 135)			SW846 8270C
	56	(45 - 135)	0.65	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	34 a	(45 - 135)			SW846 8270C
	34 a	(45 - 135)	0.79	(0-40)	SW846 8270C
2,4-Dichlorophenol	76	(45 - 135)			SW846 8270C
	75	(45 - 135)	1.6	(0-40)	SW846 8270C
Diethyl phthalate	74	(45 - 135)			SW846 8270C
	76	(45 - 135)	3.3	(0-40)	SW846 8270C
2,4-Dimethylphenol	58	(45 - 135)			SW846 8270C
	59	(45 - 135)	2.5	(0-40)	SW846 8270C
Dimethyl phthalate	71	(45 - 135)			SW846 8270C
	75	(45 - 135)	5.0	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	73	(45 - 135)			SW846 8270C
	73	(45 - 135)	0.69	(0-40)	SW846 8270C
2,4-Dinitrophenol	49	(45 - 135)			SW846 8270C
	50	(45 - 135)	2.9	(0-40)	SW846 8270C
2,6-Dinitrotoluene	75	(45 - 135)			SW846 8270C
	78	(45 - 135)	4.1	(0-40)	SW846 8270C
Di-n-octyl phthalate	70	(45 - 135)			SW846 8270C
	71	(45 - 135)	1.8	(0-40)	SW846 8270C
Fluoranthene	71	(45 - 135)			SW846 8270C
	73	(45 - 135)	4.0	(0-40)	SW846 8270C
Fluorene	66	(45 - 135)			SW846 8270C
	69	(45 - 135)	4.6	(0-40)	SW846 8270C
Hexachlorobenzene	72	(45 - 135)			SW846 8270C
	75	(45 - 135)	3.2	(0-40)	SW846 8270C
Hexachlorobutadiene	54	(45 - 135)			SW846 8270C
	57	(45 - 135)	4.6	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	32 a	(45 - 135)			SW846 8270C
	33 a	(45 - 135)	4.7	(0-40)	SW846 8270C
Hexachloroethane	54	(45 - 135)			SW846 8270C
	52	(45 - 135)	3.1	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	70	(45 - 135)			SW846 8270C
	72	(45 - 135)	2.2	(0-40)	SW846 8270C
Isophorone	73	(45 - 135)			SW846 8270C
	74	(45 - 135)	2.1	(0-40)	SW846 8270C
2-Methylnaphthalene	77	(45 - 135)			SW846 8270C
	79	(45 - 135)	2.4	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200532 **Work Order #...:** MDJN41AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200532-021 MDJN41AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	71	(45 - 135)			SW846 8270C
	70	(45 - 135)	2.2	(0-40)	SW846 8270C
4-Methylphenol	70	(45 - 135)			SW846 8270C
	67	(45 - 135)	4.4	(0-40)	SW846 8270C
Naphthalene	66	(45 - 135)			SW846 8270C
	66	(45 - 135)	1.1	(0-40)	SW846 8270C
2-Nitroaniline	69	(45 - 135)			SW846 8270C
	71	(45 - 135)	2.9	(0-40)	SW846 8270C
3-Nitroaniline	59	(45 - 135)			SW846 8270C
	62	(45 - 135)	5.4	(0-50)	SW846 8270C
4-Nitroaniline	64	(45 - 135)			SW846 8270C
	65	(45 - 135)	2.4	(0-40)	SW846 8270C
Nitrobenzene	79	(45 - 135)			SW846 8270C
	81	(45 - 135)	2.0	(0-40)	SW846 8270C
2-Nitrophenol	78	(45 - 135)			SW846 8270C
	81	(45 - 135)	3.7	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	59	(45 - 135)			SW846 8270C
	61	(45 - 135)	3.3	(0-40)	SW846 8270C
Phenanthrene	65	(45 - 135)			SW846 8270C
	69	(45 - 135)	5.9	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	75	(45 - 135)			SW846 8270C
	75	(45 - 135)	0.06	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	77	(45 - 135)			SW846 8270C
	75	(45 - 135)	2.2	(0-40)	SW846 8270C
Benzoic acid	45	(45 - 135)			SW846 8270C
	43 a	(45 - 135)	4.1	(0-40)	SW846 8270C
Benzyl alcohol	73	(45 - 135)			SW846 8270C
	73	(45 - 135)	0.71	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(50 - 150)
	78	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
	67	(50 - 150)
Terphenyl-d14	78	(50 - 150)
	78	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200532 **Work Order #...:** MDJN41AF-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200532-021 MDJN41AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	70	(50 - 150)
	69	(50 - 150)
2-Fluorophenol	70	(50 - 150)
	70	(50 - 150)
2,4,6-Tribromophenol	82	(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.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 0.9 and 3.3 °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 1/31/11 1/25/11 (toxaphene) 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?	✓			12/24/10	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%?		✓		• The MRL check analyzed 2/4/11 at 0951 had alpha-BHC recover above control limits at 226% and beta-BHC at 132%. • The MRL check analyzed 2/4/11 at 1922 had alpha-BHC recover above control limits at 213%. • The beta-BHC result for FWGCBP-007c-1658-GW was qualified as estimated, "J". No qualifications made for alpha-BHC as there were no reported alpha-BHC concentrations.	LCG Table 4 >130%=J; 65-70%%=J/UJ; <65%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was a second source (ICV) verification analyzed after the ICAL? Were results 85-115%?		✓		1/31/11 @1743 Tox 1/25/11 @1729	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R
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%?		✓		• The CCV analyzed 2/4/11 @ 0904 was above control limits with an average %D of 17%, with the delta-BHC %D above limits at 32% • The CCV analyzed 2/4/11 @ 1859(pest 9) was above control limits with an average %D of 18% and the alpha-BHC %D was above limits at 31%. • The CCV analyzed 2/4/11 @ 1859(pest 9r) was above control limits with an average %D of 16%. The beta-BHC result for FWGCBP-007c-1658-GW was qualified as estimated, "J". No additional qualifications were made as there were no other detected concentrations reported.	LCG Table 4 D>30% (neg) =J/R D>30% (pos) = J
17. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 4
18. Were target analytes < ½ the MRL?	✓				LCG Table 4 <5x=B
19. Was a field blank collected and analyzed?	✓				
20. Were target analytes in the field blank analyses (equipment) <1/2 the MRL?	✓				<5x =B
21. Was an LCS prepared and analyzed with each batch?	✓				LCG Table 4
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				LCG Table 4
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 50-150% and RPD ≤20%?	✓				*Was QAPP Table 3-2*, Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits for FWGCBPmw-001c-1655-GW at 41%, FWGCBPmw-004c-1656-GW at 19%, FWGCBPmw-007c-1658-GW at 36%, FWGCPmw-002c-1660-GW at 28%, FWGCPmw-006c-1662-GW at 22%, FWGCPmw-DUP4c-1695-GW at 21%, FWGEBGmw-123c-1666-GW at 22%, FWGEBGmw-124c-1667-GW at 21%, FWGEBGmw-126c-1668-GW at 18% and FWGEBGmw-129c-1669-GW at 31%. The results for FWGCBPmw-001c-1655-GW, FWGCBPmw-004c-1656-GW, FWGCBPmw-007c-1658-GW, FWGCPmw-002c-1660-GW, FWGCPmw-006c-1662-GW, FWGCPmw-DUP4c-1695-GW, FWGEBGmw-123c-1666-GW, FWGEBGmw-124c-1667-GW, FWGEBGmw-126c-1668-GW and FWGEBGmw-129c-1669-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%?	✓				QAPP Table 3-2 RPD >30=J
28. Were all positive results verified by a second column confirmation? Were the RPD's ≤ 40?		✓		The second column confirmation for sample FWGCBPmw-007-1658-GW had an RPD of 45% for beta-BHC. The beta-BHC result was qualified as estimated, "J".	LCG Table 4 >40 RPD=J
29. Were reported sample concentrations within calibration range?			✓		
30. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
31. Were lab comments included in report? If yes, summarize contents.	✓				

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

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-126C-1668-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-002 **Work Order #...:** MDJNC1AD **Matrix.....:** WG
Date Sampled...: 01/20/11 09:23 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1022011
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	18 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-129C-1669-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-004 **Work Order #...:** MDJNF1AD **Matrix.....:** WG
Date Sampled...: 01/20/11 10:42 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1022011
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	72	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-124C-1667-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-006 **Work Order #...:** MDJNH1AD **Matrix.....:** WG
Date Sampled...: 01/20/11 12:02 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1022011
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	21 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-123C-1666-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-008 **Work Order #...:** MDJNM1AD **Matrix.....:** WG
Date Sampled...: 01/20/11 13:06 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1022011
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	68	(50 - 150)
Decachlorobiphenyl	22 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-002C-1660-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-011 **Work Order #...:** MDJNQ1AD **Matrix.....:** WG
Date Sampled...: 01/20/11 09:10 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1022011
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	63	(50 - 150)
Decachlorobiphenyl	28 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-006C-1662-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-013 **Work Order #...:** MDJNT1AD **Matrix.....:** WG
Date Sampled...: 01/20/11 10:40 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1022011
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	76	(50 - 150)
Decachlorobiphenyl	22 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-DUP4-1695-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-015 **Work Order #...:** MDJNW1AD **Matrix.....:** WG
Date Sampled...: 01/20/11 12:00 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1022011
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	70	(50 - 150)
Decachlorobiphenyl	21 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-004C-1656-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-017 **Work Order #...:** MDJN01AD **Matrix.....:** WG
Date Sampled...: 01/20/11 12:30 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1022011
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	64	(50 - 150)
Decachlorobiphenyl	19 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1701-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-019 **Work Order #...:** MDJN21AD **Matrix.....:** WQ
Date Sampled...: 01/20/11 14:30 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1022011
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	71	(50 - 150)
Decachlorobiphenyl	62	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-005C-1661-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-021 **Work Order #...:** MDJN41AH **Matrix.....:** WG
Date Sampled...: 01/20/11 09:10 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1022011
Dilution Factor: 1 **Initial Wgt/Vol:** 930 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	55	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-001C-1655-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-023	**Work Order #...:** MDJN61AD	**Matrix.....:** WG	
Date Sampled...: 01/20/11 12:35	**Date Received..:** 01/20/11		
Prep Date.....: 01/22/11	**Analysis Date..:** 02/04/11		
Prep Batch #...: 1022011			
Dilution Factor: 1	**Initial Wgt/Vol:** 930 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-007C-1658-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-025 **Work Order #...:** MDJPA1AD **Matrix.....:** WG
Date Sampled...: 01/20/11 14:20 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1022011
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	**0.017 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	80	(50 - 150)
Decachlorobiphenyl	36 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1A200532 **Work Order #...:** MDLHL1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A220000-011

Prep Date.....: 01/22/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 02/04/11 **Prep Batch #...:** 1022011
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	87	(50 - 150)
Decachlorobiphenyl	97	(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 #...: A1A200532 Work Order #...: MDLHL1AC Matrix.....: WATER
LCS Lot-Sample#: A1A220000-011
Prep Date.....: 01/22/11 Analysis Date..: 02/04/11
Prep Batch #...: 1022011
Dilution Factor: 2 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	92	(50 - 135)	**SW846 8081A**
delta-BHC	83	(58 - 160)	**SW846 8081A**
gamma-BHC (Lindane)	95	(58 - 127)	**SW846 8081A**
Heptachlor	79	(48 - 150)	**SW846 8081A**
Aldrin	95	(53 - 128)	**SW846 8081A**
Heptachlor epoxide	94	(50 - 127)	**SW846 8081A**
Endosulfan I	56	(50 - 160)	**SW846 8081A**
Dieldrin	100	(50 - 124)	**SW846 8081A**
4,4'-DDE	102	(50 - 130)	**SW846 8081A**
Endrin	82	(50 - 137)	**SW846 8081A**
Endosulfan II	65	(50 - 144)	**SW846 8081A**
4,4'-DDD	99	(50 - 137)	**SW846 8081A**
Endosulfan sulfate	97	(50 - 160)	**SW846 8081A**
4,4'-DDT	82	(50 - 145)	**SW846 8081A**
Methoxychlor	86	(50 - 160)	**SW846 8081A**
Endrin ketone	87	(50 - 150)	**SW846 8081A**
Endrin aldehyde	73	(30 - 160)	**SW846 8081A**
alpha-Chlordane	95	(50 - 122)	**SW846 8081A**
gamma-Chlordane	96	(50 - 130)	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	93	(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 #...: A1A200532 Work Order #...: MDJN41AJ-MS Matrix.....: WG
MS Lot-Sample #: A1A200532-021 MDJN41AK-MSD
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11
Prep Date.....: 01/22/11 Analysis Date..: 02/04/11
Prep Batch #...: 1022011
Dilution Factor: 2 Initial Wgt/Vol: 450 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	101	(50 - 150)			SW846 8081A
	99	(50 - 150)	2.3	(0-50)	SW846 8081A
beta-BHC	106	(50 - 150)			SW846 8081A
	101	(50 - 150)	4.5	(0-50)	SW846 8081A
delta-BHC	96	(50 - 150)			SW846 8081A
	94	(50 - 150)	2.4	(0-50)	SW846 8081A
gamma-BHC (Lindane)	111	(50 - 150)			SW846 8081A
	106	(50 - 150)	4.0	(0-50)	SW846 8081A
Heptachlor	92	(50 - 150)			SW846 8081A
	88	(50 - 150)	4.3	(0-50)	SW846 8081A
Aldrin	105	(50 - 150)			SW846 8081A
	103	(50 - 150)	2.1	(0-50)	SW846 8081A
Heptachlor epoxide	107	(50 - 150)			SW846 8081A
	105	(50 - 150)	2.3	(0-50)	SW846 8081A
Endosulfan I	68	(50 - 150)			SW846 8081A
	67	(50 - 150)	1.1	(0-50)	SW846 8081A
Dieldrin	113	(50 - 150)			SW846 8081A
	108	(50 - 150)	4.4	(0-50)	SW846 8081A
4,4'-DDE	114	(50 - 150)			SW846 8081A
	110	(50 - 150)	3.2	(0-50)	SW846 8081A
Endrin	96	(50 - 150)			SW846 8081A
	92	(50 - 150)	4.2	(0-50)	SW846 8081A
Endosulfan II	75	(50 - 150)			SW846 8081A
	73	(50 - 150)	3.9	(0-50)	SW846 8081A
4,4'-DDD	117	(50 - 150)			SW846 8081A
	110	(50 - 150)	5.7	(0-50)	SW846 8081A
Endosulfan sulfate	106	(50 - 150)			SW846 8081A
	104	(50 - 150)	2.4	(0-50)	SW846 8081A
4,4'-DDT	95	(50 - 150)			SW846 8081A
	89	(50 - 150)	6.9	(0-50)	SW846 8081A
Methoxychlor	95	(50 - 150)			SW846 8081A
	91	(50 - 150)	4.9	(0-50)	SW846 8081A
Endrin ketone	97	(50 - 150)			SW846 8081A
	91	(50 - 150)	5.6	(0-50)	SW846 8081A
Endrin aldehyde	83	(50 - 150)			SW846 8081A
	79	(50 - 150)	4.6	(0-50)	SW846 8081A
alpha-Chlordane	108	(50 - 150)			SW846 8081A
	104	(50 - 150)	4.2	(0-50)	SW846 8081A
gamma-Chlordane	110	(50 - 150)			SW846 8081A
	106	(50 - 150)	3.5	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1A200532 **Work Order #...:** MDJN41AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200532-021 MDJN41AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	101	(50 - 150)
	94	(50 - 150)
Decachlorobiphenyl	111	(50 - 150)
	100	(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\GCS\a2hp9.i\110204-1.b\004F0401.D Page 1
Report Date: 04-Feb-2011 09:20

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 04-FEB-2011 09:04
Lab File ID: 004F0401.D Init. Cal. Date(s): 15-DEC-2010 31-JAN-2011
Analysis Type: Init. Cal. Times: 12:37 17:20
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\PEST9.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	59095449	63907760	63907760	0.000	-8.14328	15.00000	Averaged	
4 alpha-BHC	0.02500	0.03121	119448840	0.010	-24.84537	0.000e+000	Linear	
5 gamma-BHC (Lindane)	47584539	54708960	54708960	0.010	-14.97213	15.00000	Averaged	
6 beta-BHC	36066303	43973080	43973080	0.010	-21.92289	15.00000	Averaged	<-
7 delta-BHC	0.02500	0.03316	104190880	0.010	-32.64332	0.000e+000	Quadratic	
8 Heptachlor	80656599	85018920	85018920	0.010	-5.40851	15.00000	Averaged	
10 Aldrin	37840080	44517160	44517160	0.010	-17.64552	15.00000	Averaged	<-
12 Heptachlor epoxide	25077703	28800000	28800000	0.010	-14.84306	15.00000	Averaged	
13 gamma-Chlordane	26777567	31338520	31338520	0.010	-17.03274	15.00000	Averaged	<-
14 alpha-Chlordane	28159995	33331400	33331400	0.010	-18.36437	15.00000	Averaged	<-
15 Endosulfan I	74346287	83782240	83782240	0.010	-12.69190	15.00000	Averaged	
16 4,4'-DDE	86281014	108173880	108173880	0.010	-25.37391	15.00000	Averaged	<-
17 Dieldrin	30853326	36267160	36267160	0.010	-17.54700	15.00000	Averaged	<-
18 Endrin	27833898	31430640	31430640	0.010	-12.92217	15.00000	Averaged	
20 4,4'-DDD	52503270	62357440	62357440	0.010	-18.76868	15.00000	Averaged	<-
22 Endosulfan II	29222613	33868680	33868680	0.010	-15.89887	15.00000	Averaged	<-
23 4,4'-DDT	59086707	65046040	65046040	0.010	-10.08574	15.00000	Averaged	
25 Endrin aldehyde	22043850	25270960	25270960	0.010	-14.63950	15.00000	Averaged	
27 Methoxychlor	30076656	35207520	35207520	0.010	-17.05929	15.00000	Averaged	<-
28 Endosulfan sulfate	29287313	34198440	34198440	0.010	-16.76879	15.00000	Averaged	<-
29 Endrin ketone	33662696	38406680	38406680	0.010	-13.41885	15.00000	Averaged	
$ 30 Decachlorobiphenyl	34680842	43777680	43777680	0.010	-26.23015	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 17.14664
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

2/4/11 @ 0951

Data File: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\006F0601.D Page 1
Report Date: 04-Feb-2011 10:23

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa00713
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\PEST9.m
Misc Info:

SPIKE	COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4	alpha-BHC	0.005000	0.01126	225.26*	70-130
5	gamma-BHC (Lindane	0.005000	0.006194	123.87	70-130
6	beta-BHC	0.005000	0.006623	132.47*	70-130
7	delta-BHC	0.005000	0.005795	115.89	70-130
8	Heptachlor	0.005000	0.006156	123.13	70-130
10	Aldrin	0.005000	0.006308	126.16	70-130
12	Heptachlor epoxide	0.005000	0.006187	123.74	70-130
13	gamma-Chlordane	0.005000	0.006004	120.08	70-130
14	alpha-Chlordane	0.005000	0.006140	122.80	70-130
15	Endosulfan I	0.005000	0.006046	120.91	70-130
16	4,4'-DDE	0.005000	0.006266	125.32	70-130
17	Dieldrin	0.005000	0.005899	117.98	70-130
18	Endrin	0.005000	0.005801	116.03	70-130
20	4,4'-DDD	0.005000	0.005637	112.74	70-130
22	Endosulfan II	0.005000	0.005763	115.27	70-130
23	4,4'-DDT	0.005000	0.005060	101.19	70-130
25	Endrin aldehyde	0.005000	0.005259	105.18	70-130
27	Methoxychlor	0.005000	0.006048	120.95	70-130
28	Endosulfan sulfate	0.005000	0.005736	114.73	70-130
29	Endrin ketone	0.005000	0.005565	111.30	70-130

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 04-FEB-2011 18:59
Lab File ID: 029F2901.D Init. Cal. Date(s): 15-DEC-2010 31-JAN-2011
Analysis Type: Init. Cal. Times: 12:37 17:20
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\PEST9.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	59095449	68172640	68172640	0.000	-15.36022	15.00000	Averaged	<-
4 alpha-BHC	0.02500	0.03282	127159080	0.010	-31.27435	0.000e+000	Linear	
5 gamma-BHC (Lindane)	47584539	58003640	58003640	0.010	-21.89598	15.00000	Averaged	<-
6 beta-BHC	36066303	43220800	43220800	0.010	-19.83707	15.00000	Averaged	<-
7 delta-BHC	0.02500	0.03412	107225720	0.010	-36.49423	0.000e+000	Quadratic	
8 Heptachlor	80656599	91830080	91830080	0.010	-13.85315	15.00000	Averaged	
10 Aldrin	37840080	47517600	47517600	0.010	-25.57479	15.00000	Averaged	<-
12 Heptachlor epoxide	25077703	29981840	29981840	0.010	-19.55577	15.00000	Averaged	<-
13 gamma-Chlordane	26777567	31527640	31527640	0.010	-17.73900	15.00000	Averaged	<-
14 alpha-Chlordane	28159995	33690040	33690040	0.010	-19.63795	15.00000	Averaged	<-
15 Endosulfan I	74346287	84182000	84182000	0.010	-13.22960	15.00000	Averaged	
16 4,4'-DDE	86281014	110890640	110890640	0.010	-28.52264	15.00000	Averaged	<-
17 Dieldrin	30853326	36386560	36386560	0.010	-17.93400	15.00000	Averaged	<-
18 Endrin	27833898	32028760	32028760	0.010	-15.07106	15.00000	Averaged	<-
20 4,4'-DDD	52503270	62305640	62305640	0.010	-18.67002	15.00000	Averaged	<-
22 Endosulfan II	29222613	32617000	32617000	0.010	-11.61562	15.00000	Averaged	
23 4,4'-DDT	59086707	63387240	63387240	0.010	-7.27834	15.00000	Averaged	
25 Endrin aldehyde	22043850	24355200	24355200	0.010	-10.48524	15.00000	Averaged	
27 Methoxychlor	30076656	32690640	32690640	0.010	-8.69107	15.00000	Averaged	
28 Endosulfan sulfate	29287313	32365440	32365440	0.010	-10.51011	15.00000	Averaged	
29 Endrin ketone	33862696	36105760	36105760	0.010	-6.62400	15.00000	Averaged	
$ 30 Decachlorobiphenyl	34680842	40864040	40864040	0.010	-17.82886	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 17.62196
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

TestAmerica North Canton

RECOVERY REPORT

2/4/11 @ 1422

Client Name: Client SDG: SDGa00713
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\PEST9.m
Misc Info:

SPIKE	COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4	alpha-BHC	0.005000	0.01065	212.97*	70-130
5	gamma-BHC (Lindane	0.005000	0.005311	106.22	70-130
6	beta-BHC	0.005000	0.005755	115.09	70-130
7	delta-BHC	0.005000	0.005106	102.12	70-130
8	Heptachlor	0.005000	0.005267	105.35	70-130
10	Aldrin	0.005000	0.005725	114.50	70-130
12	Heptachlor epoxide	0.005000	0.005588	111.76	70-130
13	gamma-Chlordane	0.005000	0.005421	108.42	70-130
14	alpha-Chlordane	0.005000	0.005672	113.45	70-130
15	Endosulfan I	0.005000	0.005436	108.72	70-130
16	4,4'-DDE	0.005000	0.005901	118.02	70-130
17	Dieldrin	0.005000	0.005549	110.99	70-130
18	Endrin	0.005000	0.005452	109.05	70-130
20	4,4'-DDD	0.005000	0.005647	112.94	70-130
22	Endosulfan II	0.005000	0.005542	110.84	70-130
23	4,4'-DDT	0.005000	0.004681	93.62	70-130
25	Endrin aldehyde	0.005000	0.005332	106.64	70-130
27	Methoxychlor	0.005000	0.005702	114.04	70-130
28	Endosulfan sulfate	0.005000	0.005667	113.34	70-130
29	Endrin ketone	0.005000	0.005421	108.41	70-130

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 04-FEB-2011 09:04
Lab File ID: 004F0401.D Init. Cal. Date(s): 15-DEC-2010 31-JAN-2011
Analysis Type: Init. Cal. Times: 12:37 17:20
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\PEST9.m\PEST9r.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	55508805	58412080	58412080	0.000	-5.23030	15.00000	Averaged	
4 alpha-BHC	96790282	113619480	113619480	0.010	-17.38728	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	80506127	91585320	91585320	0.010	-13.76193	15.00000	Averaged	
6 beta-BHC	15030233	17669840	17669840	0.010	-17.56199	15.00000	Averaged	<-
7 delta-BHC	82408586	95822360	95822360	0.010	-16.27716	15.00000	Averaged	<-
8 Heptachlor	80036901	81584800	81584800	0.010	-1.93398	15.00000	Averaged	
10 Aldrin	96112506	110802200	110802200	0.010	-15.28385	15.00000	Averaged	<-
12 Heptachlor epoxide	27429668	30797280	30797280	0.010	-12.27726	15.00000	Averaged	
13 gamma-Chlordane	28612927	32589760	32589760	0.010	-13.89873	15.00000	Averaged	
14 alpha-Chlordane	72741141	84253880	84253880	0.010	-15.82700	15.00000	Averaged	<-
15 Endosulfan I	26503379	28997040	28997040	0.010	-9.40884	15.00000	Averaged	
16 4,4'-DDE	28215398	33619440	33619440	0.010	-19.15281	15.00000	Averaged	<-
17 Dieldrin	72530529	84003600	84003600	0.010	-15.81826	15.00000	Averaged	<-
18 Endrin	26771362	29438480	29438480	0.010	-9.96258	15.00000	Averaged	
21 4,4'-DDD	20828548	23561200	23561200	0.010	-13.11974	15.00000	Averaged	
22 Endosulfan II	29663011	33091560	33091560	0.010	-11.55833	15.00000	Averaged	
24 4,4'-DDT	20952748	22286680	22286680	0.010	-6.36638	15.00000	Averaged	
25 Endrin aldehyde	20116298	22262040	22262040	0.010	-10.66669	15.00000	Averaged	
26 Endosulfan sulfate	26179615	30013280	30013280	0.010	-14.64370	15.00000	Averaged	
27 Methoxychlor	24006083	27216880	27216880	0.010	-13.37493	15.00000	Averaged	
29 Endrin ketone	29120147	31818400	31818400	0.010	-9.26593	15.00000	Averaged	
$ 30 Decachlorobiphenyl	28990364	35943800	35943800	0.010	-23.98533	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 13.03468
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: 029F2901.D
Report Date: 07-Feb-2011 07:22

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i
Lab File ID: 029F2901.D
Analysis Type:
Lab Sample ID: AB3 E212
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\PEST9.m\PEST9r.m

Injection Date: 04-FEB-2011 18:59
Init. Cal. Date(s): 15-DEC-2010 31-JAN-2011
Init. Cal. Times: 12:37 17:20
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	55508805	63436600	63436600	0.000	-14.28205	15.00000	Averaged	
4 alpha-BHC	96790282	122441560	122441560	0.010	-26.50192	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	80506127	95918040	95918040	0.010	-19.14378	15.00000	Averaged	<-
6 beta-BHC	15030233	18404200	18404200	0.010	-22.44787	15.00000	Averaged	<-
7 delta-BHC	82408586	99741440	99741440	0.010	-21.03283	15.00000	Averaged	<-
8 Heptachlor	80036901	86865320	86865320	0.010	-8.53159	15.00000	Averaged	
10 Aldrin	96112506	117335920	117335920	0.010	-22.08184	15.00000	Averaged	<-
12 Heptachlor epoxide	27429668	32407800	32407800	0.010	-18.14871	15.00000	Averaged	<-
13 gamma-Chlordane	28612927	33597920	33597920	0.010	-17.42217	15.00000	Averaged	<-
14 alpha-Chlordane	72741141	86215840	86215840	0.010	-18.52418	15.00000	Averaged	<-
15 Endosulfan I	26503379	29863480	29863480	0.010	-12.67801	15.00000	Averaged	
16 4,4'-DDE	28215398	36664400	36664400	0.010	-29.94465	15.00000	Averaged	<-
17 Dieldrin	72530529	86171880	86171880	0.010	-18.80774	15.00000	Averaged	<-
18 Endrin	26771362	29766480	29766480	0.010	-11.18777	15.00000	Averaged	
21 4,4'-DDD	20828548	24292600	24292600	0.010	-16.63127	15.00000	Averaged	<-
22 Endosulfan II	29663011	32326080	32326080	0.010	-8.97774	15.00000	Averaged	
24 4,4'-DDT	20952748	21836000	21836000	0.010	-4.21545	15.00000	Averaged	
25 Endrin aldehyde	20116298	22028400	22028400	0.010	-9.50524	15.00000	Averaged	
26 Endosulfan sulfate	26179615	28997480	28997480	0.010	-10.76358	15.00000	Averaged	
27 Methoxychlor	24006083	26219080	26219080	0.010	-9.21848	15.00000	Averaged	
29 Endrin ketone	29120147	30719840	30719840	0.010	-5.49342	15.00000	Averaged	
$ 30 Decachlorobiphenyl	28990364	34340080	34340080	0.010	-18.45343	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 15.63608
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

PESTICIDES IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

FWGCBPMW-007C-1658-

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1A200532

Lab Sample ID: MDJPA1AD Date(s) Analyzed: 02/04/11 02/04/11

Instrument ID (1): A2HP9 Instrument ID (2): A2HP9

GC Column(1): CLP PESTICIDES I ID: 0.53(mm) GC Column(2): CLP PESTICIDES II ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
beta-BHC	1	5.06	5.04	5.10	0.01738	
	2	6.04	5.99	6.05	0.02523	45.2
Endrin	1	9.43	9.39	9.45	0.004480	
	2	10.74	10.69	10.75	0.007175	60.2
Endrin ketone	1	11.68	11.66	11.72	0.0007024	
	2	12.79	12.76	12.82	0.001485	111.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

BDL ND 3/2/11 <MDL

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 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 1.7 and 3.3°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 1/19/11 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?	✓			No data provided for evaluation.	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			1/19/11@ 2317	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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 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?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A200532 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits for FWGCBPmw-001c-1655-GW at 37%, FWGCBPmw-004c-1656-GW at 17%, FWGCBPmw-007c-1658-GW at 28%, FWGCPmw-002c-1660-GW at 25%, FWGCPmw-006c-1662-GW at 19%, FWGCPmw-DUP4c-1695-GW at 18%, FWGEBGmw-123c-1666-GW at 20%, FWGEBGmw-124c-1667-GW at 19%, FWGEBGmw-126c-1668-GW at 17% and FWGEBGmw-129c-1669-GW at 28%. The results for FWGCBPmw-001c-1655-GW, FWGCBPmw-004c-1656-GW, FWGCBPmw-007c-1658-GW, FWGCPmw-002c-1660-GW, FWGCPmw-006c-1662-GW, FWGCPmw-DUP4c-1695-GW, FWGEBGmw-123c-1666-GW, FWGEBGmw-124c-1667-GW, FWGEBGmw-126c-1668-GW and FWGEBGmw-129c-1669-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
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: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-126C-1668-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-002	**Work Order #...:** MDJNC1AF	**Matrix.....:** WG	
Date Sampled...: 01/20/11 09:23	**Date Received..:** 01/20/11		
Prep Date.....: 01/22/11	**Analysis Date..:** 01/31/11		
Prep Batch #...: 1022012			
Dilution Factor: 1	**Initial Wgt/Vol:** 1050 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(50 - 150)
Decachlorobiphenyl	17 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-129C-1669-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-004 **Work Order #...:** MDJNF1AF **Matrix.....:** WG
Date Sampled...: 01/20/11 10:42 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1022012
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	78	(50 - 150)
Decachlorobiphenyl	28 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-124C-1667-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-006 **Work Order #...:** MDJNH1AF **Matrix.....:** WG
Date Sampled...: 01/20/11 12:02 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1022012
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	19 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-123C-1666-GW

GC Semivolatiles

Lot-Sample #...:	A1A200532-008	**Work Order #...:**	MDJNM1AF	**Matrix.....:**	WG
Date Sampled...:	01/20/11 13:06	**Date Received..:**	01/20/11		
Prep Date.....:	01/22/11	**Analysis Date..:**	01/31/11		
Prep Batch #...:	1022012				
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	74	(50 - 150)
Decachlorobiphenyl	20 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-002C-1660-GW

GC Semivolatiles

Lot-Sample #...:	A1A200532-011	**Work Order #...:**	MDJNQ1AF	**Matrix.....:**	WG
Date Sampled...:	01/20/11 09:10	**Date Received..:**	01/20/11		
Prep Date.....:	01/22/11	**Analysis Date..:**	01/31/11		
Prep Batch #...:	1022012				
Dilution Factor:	1	**Initial Wgt/Vol:**	920 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	75	(50 - 150)
Decachlorobiphenyl	25 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-006C-1662-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-013	**Work Order #...:** MDJNT1AF	**Matrix.....:** WG	
Date Sampled...: 01/20/11 10:40	**Date Received..:** 01/20/11		
Prep Date.....: 01/22/11	**Analysis Date..:** 01/31/11		
Prep Batch #...: 1022012			
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	80	(50 - 150)
Decachlorobiphenyl	19 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-DUP4-1695-GW

GC Semivolatiles

Lot-Sample #...:	A1A200532-015	**Work Order #...:**	MDJNW1AF	**Matrix.....:**	WG
Date Sampled...:	01/20/11 12:00	**Date Received..:**	01/20/11		
Prep Date.....:	01/22/11	**Analysis Date..:**	01/31/11		
Prep Batch #...:	1022012				
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	75	(50 - 150)
Decachlorobiphenyl	18 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-004C-1656-GW

GC Semivolatiles

Lot-Sample #...:	A1A200532-017	**Work Order #...:**	MDJN01AF	**Matrix.....:**	WG
Date Sampled...:	01/20/11 12:30	**Date Received..:**	01/20/11		
Prep Date.....:	01/22/11	**Analysis Date..:**	01/31/11		
Prep Batch #...:	1022012				
Dilution Factor:	1	**Initial Wgt/Vol:**	1030 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	72	(50 - 150)
Decachlorobiphenyl	17 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1701-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-019 **Work Order #...:** MDJN21AF **Matrix.....:** WQ
Date Sampled...: 01/20/11 14:30 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1022012
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	63	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-005C-1661-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-021 **Work Order #...:** MDJN41AP **Matrix.....:** WG
Date Sampled...: 01/20/11 09:10 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1022012
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	89	(50 - 150)
Decachlorobiphenyl	55	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-001C-1655-GW

GC Semivolatiles

Lot-Sample #...: A1A200532-023 **Work Order #...:** MDJN61AF **Matrix.....:** WG
Date Sampled...: 01/20/11 12:35 **Date Received..:** 01/20/11
Prep Date.....: 01/22/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1022012
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	86	(50 - 150)
Decachlorobiphenyl	37 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-007C-1658-GW

GC Semivolatiles

Lot-Sample #...:	A1A200532-025	**Work Order #...:**	MDJPA1AF	**Matrix.....:**	WG
Date Sampled...:	01/20/11 14:20	**Date Received..:**	01/20/11		
Prep Date.....:	01/22/11	**Analysis Date..:**	01/31/11		
Prep Batch #...:	1022012				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(50 - 150)
Decachlorobiphenyl	28 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1A200532 **Work Order #...:** MDLHM1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A220000-012

Prep Date.....: 01/22/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/31/11 **Prep Batch #...:** 1022012
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	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 #...: A1A200532 **Work Order #...:** MDLHM1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A220000-012
Prep Date.....: 01/22/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1022012
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**89**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**104**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(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 #...:	A1A200532	**Work Order #...:**	MDJN41AQ-MS	**Matrix.....:**	WG
MS Lot-Sample #:	A1A200532-021		MDJN41AR-MSD		
Date Sampled...:	01/20/11 09:10	**Date Received..:**	01/20/11		
Prep Date.....:	01/22/11	**Analysis Date..:**	01/31/11		
Prep Batch #...:	1022012				
Dilution Factor:	2	**Initial Wgt/Vol:**	440 mL	**Final Wgt/Vol..:**	5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**87**	**(50 - 150)**			**SW846 8082**
	73	**(50 - 150)**	17	(0-50)	**SW846 8082**
Aroclor 1260	**99**	**(50 - 150)**			**SW846 8082**
	84	**(50 - 150)**	17	(0-50)	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
	76	(50 - 150)
Decachlorobiphenyl	93	(50 - 150)
	78	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** March 1, 2011
Sample Delivery Group: A1A190402 **Revision:** 0

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

QA/QC Summary

On Jan. 18, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1A190402.

Field Sample ID	Analytes	Method
FWGMBSmw-001c-1681-GW	VOCs	SW846 8260B
FWGNTAmw-112c-1679-GW	SVOCs	SW846 8270C
FWGNTAmw-113c-1680-GW	Pesticides	SW846 8081A
FWGFBQmw-169c-1670-GW	PCBs	SW846 8082
FWGFBQmw-172c-1671-GW	Cyanide	SW846 9012A
FWGFBQmw-173c-1672-GW		
FWGSCFmw-001-1682-GW		
FWGSCFmw-002-1683-GW		
FWGSCFmw-004-1685-GW		
FWGSCFmw-DUP1-1697-GW		
FWGLL3mw-237c-1649-GW		
FWGEQUIPRinse2-1699-GW		
FWGLL2mw-266c-1645-GW		
FWGLL2mw-267c-1646-GW		
FWGLL2mw-DUP3-1694-GW		
FWGLL2mw-269c-1647-GW		
FWGLL3mw-236c-1648-GW		
FWGLL3mw-242c-1652-GW		
FWGLL3mw-243c-1703-GW		
FWGEQUIPRinse2-1699-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGMBSmw-001c-1681-GF	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGNTAmw-112c-1679-GF		
FWGNTAmw-113c-1680-GF		
FWGFBQmw-169c-1670-GF		
FWGFBQmw-172c-1671-GF		
FWGFBQmw-173c-1672-GF		
FWGSCFmw-001-1682-GF		
FWGSCFmw-002-1683-GF		
FWGSCFmw-004-1685-GF		
FWGSCFmw-DUP1-1697-GF		
FWGLL3mw-237c-1649-GF		
FWGLL2mw-267c-1646-GF		
FWGLL2mw-DUP3-1694-GF		
FWGLL2mw-269c-1647-GF		
FWGLL3mw-236c-1648-GF		
FWGLL3mw-242c-1652-GF		
FWGLL3mw-243c-1703-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.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** March 1, 2011
Sample Delivery Group: A1A190402 **Revision:** 0

The cooler temperatures were documented as being received from 1.7°C – 4.0°C. Samples received by the laboratory from COC # 003149 had a discrepancy between the COC and bottle labels. The samples were logged per the bottle labels.

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

Blanks

- FWGTEAM1-Trip had acetone detected at 14ug/L, 2-butanone at 0.68ug/L and 4-methyl-2-pentanone at 0.38ug/L.
- FWGTEAM3-Trip had acetone detected at 14ug/L and 2-butanone at 0.61ug/L.
- FWGTEAM2-Trip had acetone detected at 12ug/L.
- 2-butanone was detected in FWGEQUIPRinse2-1699-GW at 5.1ug/L, acetone at 11ug/L and chloroform at 0.59ug/L.

The acetone result for sample FWGEQUIPRinse2-1699-GW was qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.

Field Duplicate RPD
The field duplicate RPD for samples FWGSCFmw-004-168-GW and FWGSCFmw-DUP1-1697-GW was above control limits for carbon disulfide at 50%. The carbon disulfide results for samples FWGSCFmw-004-168-GW and FWGSCFmw-DUP1-1697-GW were qualified as estimated, "J".

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: Jan 2011 **Date:** March 1, 2011
Sample Delivery Group: A1A190402 **Revision:** 0

MRL Recovery
The closing MRL analyzed 1/26/11 at 2003 recovered below control limits for 2,4-dinitrophenol at 68%. The dinitrophenol results were qualified as estimated, "UJ".
Blanks

- bis(2-ethylhexyl)phthalate was detected in the method blank at 0.93ug/L and di-n-butyl phthalate at 0.69ug/L. All the bis (2-ethylhexyl) phthalate results with the exception of samples FWGMBSmw-001c-1681-GW, FWGNTAmw-112c-1679-GW and FWGLL3mw-242c-1652-GW and all the di-n-butyl phthalate results with the exception of FWGMBSmw-001c-1681-GW, FWGNTAmw-112c-1679-GW, FWGNTAmw-113c-1680-GW, FWGFBQmw-169c-1670-GW and FWGLL2mw-DUP3-1694-GW were qualified "B".
- bis(2-ethylhexyl)phthalate was detected in FWGEQUIPRinse2-1699-GW at 0.2.2ug/L and di-n-butyl phthalate at 0.92ug/L. Associated bis (2-ethylhexyl) phthalate results with the exception of samples FWGMBSmw-001c-1681-GW, FWGNTAmw-112c-1679-GW and FWGLL3mw-242c-1652-GW and di-n-butyl phthalate results with the exception of FWGMBSmw-001c-1681-GW, FWGNTAmw-112c-1679-GW, FWGNTAmw-113c-1680-GW, FWGFBQmw-169c-1670-GW and FWGLL2mw-DUP3-1694-GW were qualified "B".

Field Duplicate RPD
The field duplicate RPDs for samples FWGLL2mw-Dup3-1694-GW and FWGLL2mw-267c-1646-GW were above control limits for bis (2-ethylhexyl) phthalate at 72% and for di-n-butyl phthalate at 200%. The bis (2-ethylhexyl) phthalate and di-n-butyl phthalate results for samples FWGLL2mw-Dup3-1694-GW and FWGLL2mw-267c-1646-GW were qualified as estimated, "J/UJ".

LCS Recovery
Hexachlorocyclopentadiene recovered below control limits at 29% in the LCS for batch 1019065. The hexachlorocyclopentadiene results were qualified as estimated, "UJ".

Matrix Spike Recovery
The matrix spike and matrix spike duplicate analyzed on sample FWGLL2mw-269c-1647-GW recovered below control limits for 3,3'-dichlorobenzidine at 41% and 37%, 2,4-dinitrophenol at 29% and 31%, hexachlorocyclopentadiene at 21%and 20%. The MS/MSD RPD for 4-chloroanailine was above control limits at 44%. The 2,4-dinitrophenol and hexachlorocyclopentadiene results for sample FWGLL2mw-269c-1647-GW were qualified as estimated, "UJ". No qualification was made for the 3,3'-dichlorobenzidine or 4-chloroanailine result as there were no other QC outliers associated with these analytes.

Surrogate Recovery
The surrogate nitrobenzene-d5 recovered below control limits in sample FWGSCFmw-001-1682-GW at 49%. No qualification was made as LCG allows for one surrogate outliers from each fraction 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

Samples FWGLL3mw-237c-1649-GW, FWGSCFmw-001-1682-GW , FWGSCFmw-002-1683-GW, FWGSCFmw-004-1685-GW, FWGSCFmw-DUP1-1697-GW and FWGLL2mw-Dup3-1964-GW were diluted, elevating reporting limits

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** March 1, 2011
Sample Delivery Group: A1A190402 **Revision:** 0

ICV
The toxaphene ICV (3r) analyzed 1/20/10 had a %D above control limits. No qualification required as there were no detected toxaphene concentrations reported.

MRL Recovery
- The opening and closing MRLs for the analytical sequence 1/21/11 had delta-BHC recover above control limits at 162% and 176%. 4,4'-DDD recovered above control limits at 133% and 152%. No qualifications were made as there were no detected concentrations of these analytes.
- On 2/4/11, the MRL at 1058 had delta-BHC recover above control limits at 161%. The MRL analyzed at 1702 had delta-BHC recover above control limits at 170%, 4,4'-DDD at 144% and endosulfan sulfate at 135%. No qualifications were made as there were no detected concentrations reported.

CCV
- The CCV analyzed on 1/21/11 @ 1023 had an avg %D < 15%, but 4,4'DDD recovered below control limits with a %D of 24%. The bracketed 4,4'-DDD results were qualified as estimated.
- The tox CCV analyzed 1/21/11 at 1052 had a %D above limits at 17%. No qualifications were made as there were no detected toxaphene concentrations.
- The CCV analyzed 1/22/11 at 0056 had %D for all targets above control limits. No qualifications were made as there were no detected concentrations reported.
- The CCV analyzed 2/4/11 @ 1632 had an average %D of 17.5%. All target analytes with outlier %D were above control limits and no detected concentrations were reported, so no qualifications were required.

Surrogate Recovery
The surrogate, DCB, recovered below control limits for FWGFBQmw-169c-1670-GW at 23%, FWGLL2mw-266c-1645-GW at 42%, FWGLL2mw-267c-1646-GW at 19%, FWGLL2mw-DUP3-1694-GW at 32%, FWGLL3mw-237c-1649-GW at 192%, FWGNTAmw-112c-1679-GW at 22%, FWGNTAmw-113c-1680-GW at 23% and FWGSCFmw-001-1682-GW at 36%. The results for FWGFBQmw-169c-1670-GW, FWGLL2mw-266c-1645-GW, FWGLL2mw-267c-1646-GW, FWGLL2mw-DUP3-1694-GW, FWGNTAmw-112c-1679-GW, FWGNTAmw-113c-1680-GW and FWGSCFmw-001-1682-GW were qualified as estimated, "UJ". No qualification was made for sample FWGLL3mw-237c-1649-GW as there were no detected pesticide concentrations reported for this sample.

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

CCV
The CCV analyzed 1/26/11 at 1748 had aroclor 1260 with a %D above control limits at 17%. No qualification was made as there were no detected 1260 concentrations reported for the field samples.

Surrogate Recovery
The surrogate, DCB, recovered below control limits for FWGFBQmw-169c-1670-GW at 31%, FWGLL2mw-266c-1645-GW at 48%, FWGLL2mw-267c-1646-GW at 19%, FWGLL2mw-DUP3-1694-GW at 36%, FWGLL3mw-237c-1649-GW at 34%, FWGNTAmw-112c-1679-GW at 34%, FWGNTAmw-113c-1680-GW at 25%, FWGSCFmw-001-1682-GW at 23% and above control limits for FWGSCFmw-DUP1-1697-GW at 234%. The results for FWGFBQmw-169c-1670-GW, FWGLL2mw-266c-1645-GW, FWGLL2mw-267c-1646-GW, FWGLL2mw-DUP3-1694-GW, FWGNTAmw-112c-1679-GW, FWGNTAmw-113c-1680-GW, FWGSCFmw-001-1682-GW and FWGLL3mw-237c-1649-GW were qualified as estimated, "UJ". No qualification was made for sample FWGSCFmw-DUP1-1697-GW as there were no detected PCB concentrations reported for this sample.

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** March 1, 2011
Sample Delivery Group: A1A190402 **Revision:** 0

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
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 CCBs analyzed 1/21/11 had detected thallium from 0.19ug/L to 0.36ug/L and sodium at 8.5ug/L to 13ug/L. The thallium results for samples FWGMBSmw-001c-1681-GF and FWGLL3mw-236c-1648-GF were <5x the CCB contamination and were qualified, "U". No sodium qualifications were made as the detected sodium concentrations were >5 x contamination.
- The ICB analyzed 1/21/11 had thallium detected at 0.31ug/L. The thallium results for samples FWGMBSmw-001c-1681-GF and FWGLL3mw-236c-1648-GF were <5x the ICB contamination and were qualified, "U".

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
The field duplicate RPD for samples FWGSCFmw-004-168-GF and FWGSCFmw-DUP1-1697-GF was above control limits for zinc at 200%. The zinc result for sample FWGSCFmw-DUP1-1697-GF was 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

Matrix Spike
The matrix spike analyzed on sample FWGLL2mw-269c-1647-GF recovered above control limits at 121%. No qualifications were made as there were no detected mercury concentrations reported.

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

Matrix Spike
The MS and MSD analyzed on sample FWGLL2mw-269-1647-GW recovered below control limits at 50% and 54%, respectively. All cyanide results were qualified as estimated, "J/UJ".

Field Duplicate RPD
The field duplicate RPD for samples FWGLL2mw-Dup3-1694-GW and FWGLL2mw-267c-1646-GW was above control limits for cyanide at 200%. The cyanide results for samples FWGLL2mw-Dup3-1694-GW and FWGLL2mw-267c-1646-GW were qualified as estimated, "J/UJ".

Nitrate
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 QC Outliers were noted.

SAMPLE SUMMARY

A1A190402

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDF2Q	001	FWGTEAM1-TRIP	01/18/11	08:00
MDF2T	002	FWGMBSmw-001C-1681-GW	01/18/11	09:34
MDF2V	003	FWGMBSmw-001C-1681-GF	01/18/11	09:34
MDF2W	004	FWGNTAmw-112C-1679-GW	01/18/11	10:58
MDF2X	005	FWGNTAmw-112C-1679-GF	01/18/11	10:58
MDF20	006	FWGNTAmw-113C-1680-GW	01/18/11	12:12
MDF21	007	FWGNTAmw-113C-1680-GF	01/18/11	12:12
MDF22	008	FWGFBQmw-169C-1670-GW	01/18/11	13:43
MDF24	009	FWGFBQmw-169C-1670-GF	01/18/11	13:43
MDF25	010	FWGFBQmw-172C-1671-GW	01/18/11	14:54
MDF26	011	FWGFBQmw-172C-1671-GF	01/18/11	14:54
MDF27	012	FWGFBQmw-173C-1672-GW	01/18/11	16:17
MDF28	013	FWGFBQmw-173C-1672-GF	01/18/11	16:17
MDF29	014	FWGTEAM2-TRIP	01/18/11	08:00
MDF3A	015	FWGSCFmw-001-1682-GW	01/18/11	09:30
MDF3C	016	FWGSCFmw-001-1682-GF	01/18/11	09:30
MDF3F	017	FWGSCFmw-002-1683-GW	01/18/11	11:25
MDF3G	018	FWGSCFmw-002-1683-GF	01/18/11	11:25
MDF3H	019	FWGSCFmw-004-1685-GW	01/18/11	13:10
MDF3J	020	FWGSCFmw-004-1685-GF	01/18/11	13:10
MDF3K	021	FWGSCFmw-DUP1-1697-GW	01/18/11	14:00
MDF3L	022	FWGSCFmw-DUP1-1697-GF	01/18/11	14:00
MDF3M	023	FWGLL3mw-237C-1649-GW	01/18/11	15:20
MDF3N	024	FWGLL3mw-237C-1649-GF	01/18/11	15:20
MDF3P	025	FWGEQUIPRINSE2-1699-GW	01/18/11	16:30
MDF3Q	026	FWGTEAM3-TRIP	01/18/11	08:00
MDF3R	027	FWGLL2mw-266C-1645-GW	01/18/11	09:10
MDF3T	028	FWGLL2mw-266C-1645-GF	01/18/11	09:10
MDF3V	029	FWGLL2mw-267C-1646-GW	01/18/11	10:20
MDF3W	030	FWGLL2mw-267C-1646-GF	01/18/11	10:20
MDF3X	031	FWGLL2mw-DUP3-1694-GW	01/18/11	11:20
MDF30	032	FWGLL2mw-DUP3-1694-GF	01/18/11	11:20
MDF31	033	FWGLL2mw-269C-1647-GW	01/18/11	12:05
MDF33	034	FWGLL2mw-269C-1647-GF	01/18/11	12:05
MDF34	035	FWGLL3mw-236C-1648-GW	01/18/11	14:20
MDF35	036	FWGLL3mw-236C-1648-GF	01/18/11	14:20

(Continued on next page)

SAMPLE SUMMARY

A1A190402

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDF36	037	FWGLL3mw-242C-1652-GW	01/18/11	15:25
MDF37	038	FWGLL3mw-242C-1652-GF	01/18/11	15:25
MDF38	039	FWGLL3mw-243C-1703-GW	01/18/11	16:30
MDF39	040	FWGLL3mw-243C-1703-GF	01/18/11	16:30

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica 28
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Erik Corbin	Mark Loeb	Team 1-1/18/11-1
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone:	1 of 2 COCs
City/State/Zip: Cincinnati OH 45240	Email: ECorbin@eqm.com	TAT if different from below per SOW		
Phone: 513-825-7500	Method of Shipment/Carrier: Lab Courier	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP (OH)	Shipping/Tracking No: NA			
Project Number: 030240.0006				
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:			Analyses: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/6020/7473			Sample Specific Notes / Special Instructions: Cooler ID
FWG Team 1 - Trip	1/18/11	08:00		X						2					N	G	X										A328
FWGMBSmw-001C-1681-GW	1/18/11	09:34		X						3	1		9		N	G	X	X	X	X	X	X	X				L397
FWGMBSmw-001C-1681-GF	1/18/11	09:34		X					1						Y	G								X			L397
FWGNTAmw-112C-1679-GW	1/18/11	10:58		X						3	1		9		N	G	X	X	X	X	X	X	X				L903
FWGNTAmw-112C-1679-GF	1/18/11	10:58		X					1						Y	G								X			L903
FWGNTAmw-113C-1680-GW	1/18/11	12:12		X						3	1		9		N	G	X	X	X	X	X	X	X				A313
FWGNTAmw-113C-1680-GF	1/18/11	12:12		X					1						Y	G								X			A313
FWGFBQmw-169C-1670-GW	1/18/11	13:43		X						3	1		9		N	G	X	X	X	X	X	X	X				A328
FWGFBQmw-169C-1670-GF	1/18/11	13:43		X					1						Y	G								X			A328
FWGFBQmw-172C-1671-GW	1/18/11	14:54		X						3	1		9		N	G	X	X	X	X	X	X	X				A323

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Metals are field filtered. Temps may not meet requirements if sample collection time is close to lab pick-up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/18/11 18:00	AC Todd	TAL-NC	1/18/11 1800
AC Todd	TAL-NC	1/18/11 1912			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Debra Burns	TA	1/19/11 7:00

TAL-0018 (1008)

All VOCs in cooler A328

North Canton

©2006, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

Chain of Custody Record

TestAmerica 29
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: Team 1-1/18/11-2
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone:	2 of 2 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com			
Phone: 513-825-7500		TAT if different from below Per SOW ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab courier			
Project Number: 030240.0006	Shipping/Tracking No: NA			
PO# 16726				

Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:			VOCs 8260	SVOCs 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010/6020/7470		Sample Specific Notes / Special Instructions:
FWGFBQmw-172C-1671-GF	1/18/11	14:54		X					1						Y	G								X		Cooler #0 A323
FWGFBQmw-173C-1672-GW	1/18/11	16:17		X						3	1		9		N	G	X	X	X	X	X	X	X			L467
FWGFBQmw-173C-1672-GF	1/18/11	16:17		X					1						Y	G								X		L467
							EC		1/18/11																	

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 are field filtered. Temps may not meet requirements if sample collection time is close to lab pick-up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/18/11 18:00		TALNC	1/18/11 1800
	TALNC	1/18/11 1912			
			Received in Laboratory by:		1/19/11 7:10

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

TAL-0018 (1008)

All VOCs in cooler A328

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EDM	Project Manager: John Miller	Date: 1-18-11	Chain of Custody Number: 000453
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (7495)	Lab Number: 330497396	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 Ohio	Carrier/Waybill Number: LAB PICKUP	
Contract/Purchase Order/Quote No.: PM30240.0006 PO# 16726		

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

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	DRO 8330	Perchlorate 6850	Cyanide 9012	NO2/NO3 353.2	Metals (complete list)	
FWG Team 2 - Trip	1-18-11	0800		X						2			X									L776
FWGSCFmw-001-1682-GW		0930		X			9	1		3	1		X	X	X	X	X	X	X	X		A183
FWGSCFmw-001-1682-GF				X					1												X	A183
FWGSCFmw-002-1683-GW		1125		X			9	1		3	1		X	X	X	X	X	X	X	X		A192
FWGSCFmw002-1683-GF				X					1												X	A192
FWGSCFmw004-1685-GW		1310		X			9	1		3	1		X	X	X	X	X	X	X	X		L499
FWGSCFmw004-1685-GF				X					1												X	L499
FWGSCFmw-DUP1-1697-GW		1400		X			9	1		3	1		X	X	X	X	X	X	X	X		L917
FWGSCFmw-DUP1-1697-GF				X					1												X	L917
FWGU3mw-237C-1649-GW		1520		X			9			3	1		X	X	X	X	X	X	X			L776
FWGU3mw-237C-1649-GF				X					1												X	L776
FWGEQUIPBlank2-1699-GW		1630		X			9	1	1	3	1		X	X	X	X	X	X	X	X	X	NOT FILTERED L899

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
[ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other per SOW

QC Requirements (Specify)
GF Metals were field filtered.

	Date	Time		Date	Time
1. Relinquished By	1/18/11	1800	1. Received By	1/18/11	1850
2. Relinquished By	1/18/11	1912	2. Received By	1/19/11	7:10
3. Relinquished By			3. Received By		

Comments
Analysis L776

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

Page 2 CoC 3148

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 1/18/11	Chain of Custody Number: 003149
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500	Lab Number: 330197 (1/18/11)	Page 1 of 2
City: Cincinnati / State: OH / Zip Code: 45240	Site Contact: Gak Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP (OH)	Carrier/Waybill Number: Lab Pick UP		
Contract/Purchase Order/Quote No.: 30240.0006 PO# 167216			

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	Nitroaromatics 8330	RCRA 8082	Explosives 8330	Propellants 8330	Cyanide 9012	Metals 6010/7470	Perchlorates 314.0	Special Instructions/ Conditions of Receipt
FWG Team 3 - Trip	1/18/11	0800		X						2			X									COOLER ID
FWGLL2-2066C-11045-GW	1/18/11	0910		X			9		X	3	1		X	X	X	X	X	X	X			L872
FWGLL2-2066C-11045-GF	1/18/11	0910		X			1		1											X	X	L872
FWGLL2-2067C-11046-GW	1/18/11	1020		X			9		X	3	1		X	X	X	X	X	X	X			L165
FWGLL2-2067C-11046-GF	1/18/11	1020		X			1		1											X	X	L165
FWGLL2-DUP3-11044-GW	1/18/11	1120		X			9		X	3	1		X	X	X	X	X	X	X			A45
FWGLL2-DUP3-11044-GF	1/18/11	1120		X			1		1											X	X	A45
FWGLL2-2069C-11047-GW	1/18/11	1205		X			27			9	3		X	X	X	X	X	X	X			L890, L1185, L1461 MS/MSD
FWGLL2-2069C-11047-GF	1/18/11	1205		X			3		3											X	X	L890, L1185, L1461
FWGLL3-2320C-11048-GW	1/18/11	1420		X			9			3	1		X	X	X	X	X	X	X			A28
FWGLL3-2321C-11048-GF	1/18/11	1420		X			1		1											X	X	A28
							EC		1/18/11													

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 [ ] Other PER SOW

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Gak Corbin EQ	1/18/11	18:00	PC	1/18/11	1800
2.	PC	1/18/11	1912	Danny Burns	1/19/11	7:06
3.		Date	Time		Date	Time

Comments: Metals + Perchlorates Field filtered *ALL VOAS IN COOLER L872*

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

• Temps may not meet requirements if Sample Collection time is close to Lab Pick UP •

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

pg 1 COC 003149

Client: EQM	Project Manager: John Muller	Date: 1/18/11	Chain of Custody Number: 003148
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500	Lab Number: 320-497-9316	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 Pick UP		
Contract/Purchase Order/Quote No.: 030240.0006 PO# 116726			

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	EXD 8330	Propellants	Cyanide 9012	Metals (6010)	Perchlorates
FWGLL3MW-242C-1652-GW	1/18/11	1525		X			9			3	1		X	X	X	X	X	X	X		
FWGLL3MW-242C-1652-GF	1/18/11	1525		X					1											X	
FWGLL3MW-243C-1703-GW	1/18/11	1680		X			9			3	1		X	X	X	X	X	X	X		
FWGLL3MW-243C-1703-GF	1/18/11	1680		X					1											X	

EC 1/18/11

Special Instructions/ Conditions of Receipt

• COOLER ID •
L589
L589
A5
A5

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 PER SOW ☐ Other _____

QC Requirements (Specify)

1. Relinquished By: Emily Corbin EQ	Date: 1/18/11	Time: 18:00	1. Received By: TC Fabian	Date: 1/19/11	Time: 1880
2. Relinquished By: TC Fabian	Date: 1/18/11	Time: 1912	2. Received By: Jerry Burns	Date: 1/19/11	Time: 7:05
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments
Metals + Perchlorates field filtered

* ALL VOAS IN COOLER L872 *

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

North Canton

*Temps may not meet requirements if Sample Collection is close to Lab Pick Up *

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Lot Number: A1A190402

Client EQM Project RVAAP By: (Signature)
Cooler Received on 1/19/11 Opened on 1/19/11
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 23 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 ☒ SEE Attached
   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:

COC ID = FWGLL3-236C-1648-GW 1x40 vial ID = FWGLL3mw-236C-1658-GW
COC ID = FWGLL2-266C-1645-GW/GF Label IDs = FWGLL2mw-266C-1645-GW/GF
COC ID = FWGLL2-267C-1646-GW/GF Label IDs = FWGLL2mw-267C-1646-GW/GF
COC ID = FWGLL2-DUP3-1694-GW/GF Label IDs = FWGLL2mw-DUP3-1694-GW/GF
COC ID = FWGLL2-269C-1647-GW/GF Label IDs = FWGLL2mw-269C-1647-GW/GF
COC ID = FWGLL3-236C-1648-GW/GF Label IDs = FWGLL3mw-236C-1648-GW/GF OVER

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
001C-1681	<2 >12	1/19/11	gm
112C-1679	<2 >12		
113C-1680	<2 >12		
169C-1670	<2 >12		
172C-1671	<2 >12		
173C-1672	<2 >12		
001-1682	<2 <2 >12		
002-1683	<2 <2 >12		

TestAmerica Multiple Cooler Receipt Form/Narrative — Lot Number: A1A190402
North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
L397	2.9	IR	Ice	
L903	3.8			
A313	2.9			
A328	2.9			
A323	2.2			
L467	2.8			
A183	2.6			
A192	2.1			
L499	3.7			
L917	3.4			
L776	3.1			
L899	2.4			
L872	1.7			
L165	2.0			
A45	3.8			
L685	4.0			
A28	2.1			
L539	3.9			
A5	3.6			
L461	2.1			
L890	2.4			

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
004-1685	<2 <2 >12	1/19/11	gm
DUP1-1697	<2 <2 >12		
237C-1649	<2 >12		
EquipRinse2-1699	<2 <2 >12		
266C-1645	<2 >12		
267C-1646	<2 >12		
DUP3-1694	<2 >12		
269C-1647	<2 <2 <2 >12 >12 >12		
236C-1648	<2 >12		
242C-1652	<2 >12		
243C-1703	<2 >12		

Cooler #	Temp. °C	Method	Coolant

Discrepancies Cont'd:

Will log IDs per Label IDs

CASE NARRATIVE

A1A190402

The following report contains the analytical results for thirty-seven water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 030240.0006. The samples were received January 19, 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 February 09, 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 1.7 to 4.0°C.

See TestAmerica's Cooler Receipt Form for additional information.

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.

The matrix spike/matrix spike duplicate(s) for batch(es) 1020121 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GC/MS SEMIVOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for FWGLL2mw-269C-1647-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

Sample(s) FWGSCFmw-001-1682-GW had up to one surrogate recovery per fraction outside acceptance limits. However, since the recovery was greater than 10% and all associated QC met criteria, no corrective action was taken.

CASE NARRATIVE (continued)

GC/MS SEMIVOLATILES (continued)

The LCS associated with QC batch(es) 1019065 had a recovery of 28.5% for Hexachlorocyclopentadiene below acceptance criteria. As per client, no corrective action need be initiated. Also, sample(s) FWGLL3mw-236C-1648-GW appears to have been double surrogated and recoveries have been adjusted accordingly. The method blank associated with batch(es) 1019065 had a Di-n-butylphthalate level of 0.69 ug/L (with RL of 1 ug/L). In both instances, as per client, no corrective action need be initiated.

PESTICIDES-8081

Sample(s) FWGLL2mw-DUP3-1694-GW, FWGLL3mw-237C-1649-GW, FWGSCFmw-001-1682-GW, FWGSCFmw-002-1683-GW, FWGSCFmw-004-1685-GW, and FWGSCFmw-DUP1-1697-GW had elevated reporting limits due to matrix interferences.

For sample(s) FWGNTAmw-112C-1679-GW, FWGNTAmw-113C-1680-GW, FWGFBQmw-169C-1670-GW, FWGLL2mw-266C-1645-GW, and FWGLL2mw-267C-1646-GW, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limit, but above 10%.)

The opening Toxaphene CCV failed criteria biased high. Since the associated sample(s) FWGMBSmw-001C-1681-GW, FWGNTAmw-112C-1679-GW, FWGNTAmw-113C-1680-GW, FWGFBQmw-169C-1670-GW, FWGFBQmw-172C-1671-GW, FWGFBQmw-173C-1672-GW, FWGEQUIPRINSE2-1699-GW, FWGLL2mw-266C-1645-GW, FWGLL2mw-267C-1646-GW, FWGLL3mw-236C-1648-GW, FWGLL3mw-242C-1652-GW, and FWGLL3mw-243C-1703-GW were non-detect for Toxaphene, no further corrective action was necessary.

The closing CCV failed biased high. Since the associated sample(s) FWGSCFmw-001-1682-GW, FWGSCFmw-002-1683-GW, FWGSCFmw-004-1685-GW, FWGSCFmw-DUP1-1697-GW, FWGLL2mw-269C-1647-GW, FWGL3mw-236C-1648-GW, FWGLL3mw-242C-1652-GW, and FWGLL3mw-243C-1703-GW were non-detect or J-flag hits, no further corrective action was necessary.

CASE NARRATIVE (continued)

PESTICIDES-8081 (continued)

The closing MRL passed average, but failed delta-BHC and DDD biased high. Since the associated sample(s) FWGMBSmw-001C-1681-GW, FWGNTAmw-112C-1679-GW, FWGNTAmw-113C-1680-GW, FWGFBQmw-169C-1670-GW, FWGFBQmw-172C-1671-GW, FWGFBQmw-173C-1672-GW, FWGEQUIPRINSE2-1699-GW, FWGLL2mw-266C-1645-GW, FWGLL2mw-267C-1646-GW, FWGLL3mw-236C-1648-GW, FWGLL3mw-242C-1652-GW, FWGLL3mw-243C-1703-GW, and FWGLL2mw-269C-1647-GW were non-detect or J-flag hits for these compounds, no further corrective action was necessary.

The closing MRL failed high. Since the associated sample(s) FWGSCFmw-001-1682-GW, FWGSCFmw-002-1683-GW, FWGSCFmw-004-1685-GW, and FWGSCFmw-DUP1-1697-GW were non-detect or J-flag hits, no further corrective action was necessary.

The opening CCV passed average, but failed Heptachlor biased high. Since the associated sample(s) FWGLL3mw-237C-1649-GW and FWGLL2mw-DUP3-1694-GW were non-detect or J-flag hits for Heptachlor, no corrective action was necessary.

POLYCHLORINATED BIPHENYLS-8082

For sample(s) FWGNTAmw-112C-1679-GW, FWGNTAmw-113C-1680-GW, FWGFBQmw-169C-1670-GW, FWGSCFmw-001-1682-GW, FWGSCFmw-DUP1-1697-GW, FWGLL3mw-237C-1649-GW, FWGLL2mw-266C-1645-GW, FWGLL2mw-267C-1646-GW, FWGLL2mw-DUP-1694-GW, the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required. (Surrogate was below acceptance limits, but above 10%.)

The closing CCV failed high. Since the associated sample(s) FWGSCFmw-004-1685-GW, FWGSCFmw-DUP1-1697-GW, FWGLL3mw-237C-1649-GW, FWGEQUIPRINSE2-1699-GW, FWGLL2mw-266C-1645-GW, FWGLL2mw-267C-1646-GW, FWGLL2mw-DUP3-1694-GW, and FWGLL2mw-269C-1647-GW were non-detect, no corrective action was necessary.

The opening CCV failed high. Since the associated sample(s) FWGLL3mw-236C-1648-GW, FWGLL3mw-242C-1652-GW, and FWGLL3mw-243C-1703-GW were non-detect, no corrective action was necessary.

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 matrix spike/matrix spike duplicate(s) for FWGLL2mw-269C-1647-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 matrix spike associated with sample(s) FWGLL2mw-269C-1647-GF was outside (high) acceptance limits for Mercury. A post digestion spike was not performed. Since the associated sample was below the requested reporting limit the result was accepted.

GENERAL CHEMISTRY

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The matrix spike/matrix spike duplicate(s) for FWGLL2mw-269C-1647-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, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

MANUAL INTEGRATION SUMMARY

Lot A1A190402

Client ID: FWGNTAmw-113C-1680-
Compound Name: TCMX
Instrument ID: a2hp13.i
File Name: 020F1301.D
Inj. Date and Time: 26-JAN-2011 12:34
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB BLANK
Compound Name: TCMX
Instrument ID: a2hp13.i
File Name: 048F4101.D
Inj. Date and Time: 26-JAN-2011 20:16
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1016
Instrument ID: a2hp13.i
File Name: 049F4201.D
Inj. Date and Time: 26-JAN-2011 20:33
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGLL2mw-269C-1647-
Compound Name: TCMX
Instrument ID: a2hp13.i
File Name: 036F2901.D
Inj. Date and Time: 26-JAN-2011 16:58
Manual Integration Reason: Baseline Event

Client ID: FWGLL2mw-269C-1647-
Compound Name: beta-BHC
Instrument ID: a2hp3.i
File Name: 030F3001.D
Inj. Date and Time: 21-JAN-2011 23:27
Manual Integration Reason: Baseline Event

Client ID: FWGLL2mw-269C-1647-
Compound Name: delta-BHC
Instrument ID: a2hp3.i
File Name: 030F3001.D
Inj. Date and Time: 21-JAN-2011 23:27
Manual Integration Reason: Baseline Event

Client ID: FWGLL2mw-269C-1647-
Compound Name: Heptachlor
Instrument ID: a2hp3.i
File Name: 030F3001.D
Inj. Date and Time: 21-JAN-2011 23:27
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Lot A1A190402 (Continued)

Client ID: FWGLL2mw-269C-1647-
Compound Name: beta-BHC
Instrument ID: a2hp3.i
File Name: 031F3101.D
Inj. Date and Time: 21-JAN-2011 23:57
Manual Integration Reason: Baseline Event

Client ID: FWGLL2mw-269C-1647-
Compound Name: delta-BHC
Instrument ID: a2hp3.i
File Name: 031F3101.D
Inj. Date and Time: 21-JAN-2011 23:57
Manual Integration Reason: Baseline Event

Client ID: FWGLL2mw-269C-1647-
Compound Name: Heptachlor
Instrument ID: a2hp3.i
File Name: 031F3101.D
Inj. Date and Time: 21-JAN-2011 23:57
Manual Integration Reason: Baseline Event

Client ID: FWGLL2mw-269C-1647-
Compound Name: Aldrin
Instrument ID: a2hp3.i
File Name: 031F3101.D
Inj. Date and Time: 21-JAN-2011 23:57
Manual Integration Reason: Baseline Event

Client ID: FWGLL3mw-242C-1652-
Compound Name: DCB
Instrument ID: a2hp13.i
File Name: 041F3401.D
Inj. Date and Time: 26-JAN-2011 18:21
Manual Integration Reason: Baseline Event

Client ID: FWGEQUIPRINSE2-1699
Compound Name: TCMX
Instrument ID: a2hp13.i
File Name: 032F2501.D
Inj. Date and Time: 26-JAN-2011 15:52
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-004-1685-G
Compound Name: Carbon Disulfide
Instrument ID: a3ux10.i
File Name: UXX8178.D
Inj. Date and Time: 20-JAN-2011 14:18
Manual Integration Reason: Poor Chromatography

MANUAL INTEGRATION SUMMARY

Lot A1A190402 (Continued)

Client ID: FWGSCFmw-DUP1-1697-
Compound Name: Carbon Disulfide
Instrument ID: a3ux10.i
File Name: UXX8179.D
Inj. Date and Time: 20-JAN-2011 14:40
Manual Integration Reason: Poor Chromatography

Client ID: FWGFBQmw-172C-1671-
Compound Name: TCMX
Instrument ID: a2hp13.i
File Name: 022F1501.D
Inj. Date and Time: 26-JAN-2011 13:07
Manual Integration Reason: Baseline Event

ANALYTICAL METHODS SUMMARY

A1A190402

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
Nitrate-Nitrite	MCAWW 353.2
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:

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.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A180421 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 1.7 and 4.0 °C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3.3
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-3
7. Was the GC/MS system tuned with bromofluorobenzene (BFB)?	✓				LCG Table 1
8. Was the criteria met during each 12 hour shift (prior to ICAL and Cal Ver.)?	✓				SW846 8260B 7.3.1
9. Did the initial calibration curve consist of 5 concentration levels?	✓			Instrument A3UX10– Jan 20, 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?	✓			Bromoform and methylene chloride 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?	✓			12/16/10	LCG Table 1 R
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓			1/20/11 @ 1252, 2026	LCG Table 1

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A180421 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
16. Were the QC/MRL recoveries 70-130%?	✓				LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed? Were results 80-120%?	✓			1/20/2011 @1209	LCG Table 1, <60%=J/R >120%=J; 60-80%=J/UJ
18. Was a CCV run every 12 hours?			✓	Samples were analyzed on the same day as the curve and ICV.	LCG Table 1
19. Did the CCCs have a %Difference < 20%?			✓		LCG Table 1
20. Were the minimum RFs for the SPCCs within limits?			✓		LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?			✓		LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1
26. Were target analytes detected in the method blank >1/2 the MRL?	✓			Checked by ADR. Methylene chloride was detected at 0.66ug/L in the method blank, however no qualifications were made as there we no detected methylene chloride concentrations reported for the field samples <5x blank contamination.	LCG Table 1 <5/10X =B
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse2-1699-GW/GF	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A180421 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGTEAM1-Trip had acetone detected at 14ug/L, 2-butanone at 0.68ug/L and 4-methyl-2-pentanone at 0.38ug/L. • FWGTEAM3-Trip had acetone detected at 14ug/L and 2-butanone at 0.61ug/L. • FWGTEAM2-Trip had acetone detected at 12ug/L. • 2-butanone was detected in FWGEQUIPRinse2-1699-GW at 5.1ug/L, acetone at 11ug/L and chloroform at 0.59ug/L. The acetone result for sample FWGEQUIPRinse2-1699-GW was 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; The field duplicate RPD for samples FWGSCFmw-004-168-GW and FWGSCFmw-DUP1-1697-GW was above control limits for carbon disulfide at 50%. The carbon disulfide results for samples FWGSCFmw-004-168-GW and FWGSCFmw-DUP1-1697-GW were qualified as estimated, "J".	QAPP Table 3-2 RPD >30=J
31. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 1
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?	✓			ADR checked section;	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent sample a Ravenna sample?	✓				
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?	✓			Only the matrix spike with the parent from this SDG was evaluated. No outliers were noted.	LCG Table 1 Pj
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% - 50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A180421 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A190402-001 **Work Order #...:** MDF2Q1AA **Matrix.....:** WQ
Date Sampled...: 01/18/11 08:00 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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	14	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	0.68 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	0.38 J	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 #...: A1A190402-001 **Work Order #...:** MDF2Q1AA **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	80	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGMBSmw-001C-1681-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-002 **Work Order #...:** MDF2T1AA **Matrix.....:** WG
Date Sampled...: 01/18/11 09:34 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGMBSmw-001C-1681-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-002 **Work Order #...:** MDF2T1AA **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	77	(50 - 150)
Toluene-d8	86	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-112C-1679-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-004 **Work Order #...:** MDF2W1AA **Matrix.....:** WG
Date Sampled...: 01/18/11 10:58 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGNTAmw-112C-1679-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-004 **Work Order #...:** MDF2W1AA **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	77	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-113C-1680-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-006 **Work Order #...:** MDF201AA **Matrix.....:** WG
Date Sampled...: 01/18/11 12:12 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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
Bromochloromethane	ND	1.0	ug/L	0.29
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	**0.21 J**	**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: FWGNTAmw-113C-1680-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-006 **Work Order #...:** MDF201AA **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	80	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-169C-1670-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-008 **Work Order #...:** MDF221AA **Matrix.....:** WG
Date Sampled...: 01/18/11 13:43 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGFBQmw-169C-1670-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-008 **Work Order #...:** MDF221AA **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	78	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-010 **Work Order #...:** MDF251AA **Matrix.....:** WG
Date Sampled...: 01/18/11 14:54 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGFBQmw-172C-1671-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-010 **Work Order #...:** MDF251AA **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	78	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-173C-1672-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-012 **Work Order #...:** MDF271AA **Matrix.....:** WG
Date Sampled...: 01/18/11 16:17 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGFBQmw-173C-1672-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-012 **Work Order #...:** MDF271AA **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	78	(50 - 150)
Toluene-d8	86	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A190402-014 **Work Order #...:** MDF291AA **Matrix.....:** WQ
Date Sampled...: 01/18/11 08:00 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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	**12**	**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: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A190402-014 **Work Order #...:** MDF291AA **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	76	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1682-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-015 **Work Order #...:** MDF3A1AA **Matrix.....:** WG
Date Sampled...: 01/18/11 09:30 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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
Bromochloromethane	ND	1.0	ug/L	0.29
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	**5.7**	**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: FWGSCFmw-001-1682-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-015 **Work Order #...:** MDF3A1AA **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	79	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1683-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-017 **Work Order #...:** MDF3F1AA **Matrix.....:** WG
Date Sampled...: 01/18/11 11:25 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020121
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
Bromochloromethane	ND	1.0	ug/L	0.29
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	1.2	**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: FWGSCFmw-002-1683-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-017 **Work Order #...:** MDF3F1AA **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	78	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1685-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-019 **Work Order #...:** MDF3H1AA **Matrix.....:** WG
Date Sampled...: 01/18/11 13:10 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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
Bromochloromethane	ND	1.0	ug/L	0.29
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	**0.53 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1685-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-019 **Work Order #...:** MDF3H1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	94	(50 - 150)
4-Bromofluorobenzene	92	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1697-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-021 **Work Order #...:** MDF3K1AA **Matrix.....:** WG
Date Sampled...: 01/18/11 14:00 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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
Bromochloromethane	ND	1.0	ug/L	0.29
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	**0.88 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1697-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-021 **Work Order #...:** MDF3K1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	92	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-237C-1649-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-023 **Work Order #...:** MDF3M1AA **Matrix.....:** WG
Date Sampled...: 01/18/11 15:20 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGLL3mw-237C-1649-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-023 **Work Order #...:** MDF3M1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1699-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-025 **Work Order #...:** MDF3P1AA **Matrix.....:** WQ
Date Sampled...: 01/18/11 16:30 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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	11	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	0.40 J	1.0	**ug/L**	**0.16**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	5.1 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1699-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-025 **Work Order #...:** MDF3P1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	96	(50 - 150)
4-Bromofluorobenzene	90	(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 #...: A1A190402-026 **Work Order #...:** MDF3Q1AA **Matrix.....:** WQ
Date Sampled...: 01/18/11 08:00 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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	**14**	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	0.61 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A190402-026 **Work Order #...:** MDF3Q1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(50 - 150)
1,2-Dichloroethane-d4	89	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	90	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1645-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-027 **Work Order #...:** MDF3R1AA **Matrix.....:** WG
Date Sampled...: 01/18/11 09:10 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGLL2mw-266C-1645-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-027 **Work Order #...:** MDF3R1AA **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	92	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1646-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-029 **Work Order #...:** MDF3V1AA **Matrix.....:** WG
Date Sampled...: 01/18/11 10:20 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGLL2mw-267C-1646-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-029 **Work Order #...:** MDF3V1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	95	(50 - 150)
4-Bromofluorobenzene	89	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1694-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-031 **Work Order #...:** MDF3X1AA **Matrix.....:** WG
Date Sampled...: 01/18/11 11:20 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGLL2mw-DUP3-1694-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-031 **Work Order #...:** MDF3X1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	94	(50 - 150)
4-Bromofluorobenzene	88	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1647-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-033 **Work Order #...:** MDF311AA **Matrix.....:** WG
Date Sampled...: 01/18/11 12:05 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGLL2mw-269C-1647-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-033 **Work Order #...:** MDF311AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	90	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1648-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-035 **Work Order #...:** MDF341AA **Matrix.....:** WG
Date Sampled...: 01/18/11 14:20 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGLL3mw-236C-1648-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-035 **Work Order #...:** MDF341AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	89	(50 - 150)
4-Bromofluorobenzene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-037 Work Order #...: MDF361AA Matrix.....: WG
Date Sampled...: 01/18/11 15:25 Date Received..: 01/19/11
Prep Date.....: 01/20/11 Analysis Date..: 01/20/11
Prep Batch #...: 1020164
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGLL3mw-242C-1652-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-037 **Work Order #...:** MDF361AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	94	(50 - 150)
Toluene-d8	92	(50 - 150)
4-Bromofluorobenzene	89	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-039 **Work Order #...:** MDF381AA **Matrix.....:** WG
Date Sampled...: 01/18/11 16:30 **Date Received..:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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
Bromochloromethane	ND	1.0	ug/L	0.29
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: FWGLL3mw-243C-1703-GW

GC/MS Volatiles

Lot-Sample #...: A1A190402-039 **Work Order #...:** MDF381AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	95	(50 - 150)
Toluene-d8	96	(50 - 150)
4-Bromofluorobenzene	89	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 **Work Order #...:** MDHXP1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A200000-121

Prep Date.....: 01/20/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/20/11 **Prep Batch #...:** 1020121
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	**0.66 J**	**2.0**	**ug/L**	**SW846 8260B**
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 **Work Order #...:** MDHXP1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	85	(50 - 150)
1,2-Dichloroethane-d4	78	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 **Work Order #...:** MDH351AA **Matrix.....:** WATER
MB Lot-Sample #: A1A200000-164

Prep Date.....: 01/20/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/20/11 **Prep Batch #...:** 1020164
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 **Work Order #...:** MDH351AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	95	(50 - 150)
4-Bromofluorobenzene	91	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 Work Order #...: MDHXP1AC Matrix.....: WATER
LCS Lot-Sample#: A1A200000-121
Prep Date.....: 01/20/11 Analysis Date..: 01/20/11
Prep Batch #...: 1020121
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
cis-1,2-Dichloroethene	96	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	93	(75 - 134)	SW846 8260B
1,2-Dibromoethane	91	(75 - 127)	SW846 8260B
Bromochloromethane	98	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	92	(75 - 122)	SW846 8260B
o-Xylene	93	(75 - 118)	SW846 8260B
Chloromethane	76	(58 - 135)	SW846 8260B
Bromomethane	78	(35 - 153)	SW846 8260B
Vinyl chloride	92	(73 - 134)	SW846 8260B
Chloroethane	84	(72 - 129)	SW846 8260B
Methylene chloride	95	(69 - 118)	SW846 8260B
Acetone	73	(51 - 157)	SW846 8260B
Carbon disulfide	94	(74 - 123)	SW846 8260B
1,1-Dichloroethene	93	(75 - 125)	SW846 8260B
1,1-Dichloroethane	94	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	94	(85 - 111)	SW846 8260B
Chloroform	97	(74 - 127)	SW846 8260B
1,2-Dichloroethane	93	(67 - 132)	SW846 8260B
2-Butanone	84	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	94	(70 - 127)	SW846 8260B
Carbon tetrachloride	97	(71 - 132)	SW846 8260B
Bromodichloromethane	95	(70 - 130)	SW846 8260B
1,2-Dichloropropane	94	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	93	(73 - 132)	SW846 8260B
Trichloroethene	98	(67 - 128)	SW846 8260B
Dibromochloromethane	95	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	91	(75 - 136)	SW846 8260B
Benzene	93	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	96	(74 - 131)	SW846 8260B
Bromoform	102	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	86	(59 - 150)	SW846 8260B
2-Hexanone	83	(53 - 139)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 **Work Order #...:** MDHXP1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A200000-121

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	93	(75 - 129)	**SW846 8260B**
1,1,2,2-Tetrachloroethane	85	(68 - 129)	**SW846 8260B**
Toluene	91	(75 - 125)	**SW846 8260B**
Chlorobenzene	92	(75 - 127)	**SW846 8260B**
Ethylbenzene	92	(75 - 120)	**SW846 8260B**
Styrene	94	(75 - 130)	**SW846 8260B**
Xylenes (total)	92	(90 - 114)	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	88	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	88	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 Work Order #...: MDH351AC Matrix.....: WATER
LCS Lot-Sample#: A1A200000-164
Prep Date.....: 01/20/11 Analysis Date..: 01/20/11
Prep Batch #...: 1020164
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
cis-1,2-Dichloroethene	102	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	106	(75 - 134)	SW846 8260B
1,2-Dibromoethane	104	(75 - 127)	SW846 8260B
Bromochloromethane	103	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	105	(75 - 122)	SW846 8260B
o-Xylene	106	(75 - 118)	SW846 8260B
Chloromethane	93	(58 - 135)	SW846 8260B
Bromomethane	91	(35 - 153)	SW846 8260B
Vinyl chloride	98	(73 - 134)	SW846 8260B
Chloroethane	98	(72 - 129)	SW846 8260B
Methylene chloride	103	(69 - 118)	SW846 8260B
Acetone	90	(51 - 157)	SW846 8260B
Carbon disulfide	106	(74 - 123)	SW846 8260B
1,1-Dichloroethene	108	(75 - 125)	SW846 8260B
1,1-Dichloroethane	103	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	104	(85 - 111)	SW846 8260B
Chloroform	102	(74 - 127)	SW846 8260B
1,2-Dichloroethane	102	(67 - 132)	SW846 8260B
2-Butanone	102	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	101	(70 - 127)	SW846 8260B
Carbon tetrachloride	100	(71 - 132)	SW846 8260B
Bromodichloromethane	100	(70 - 130)	SW846 8260B
1,2-Dichloropropane	102	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	97	(73 - 132)	SW846 8260B
Trichloroethene	103	(67 - 128)	SW846 8260B
Dibromochloromethane	99	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	106	(75 - 136)	SW846 8260B
Benzene	101	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	106	(74 - 131)	SW846 8260B
Bromoform	82	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	104	(59 - 150)	SW846 8260B
2-Hexanone	106	(53 - 139)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 **Work Order #...:** MDH351AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A200000-164

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	106	(75 - 129)	**SW846 8260B**
1,1,2,2-Tetrachloroethane	105	(68 - 129)	**SW846 8260B**
Toluene	106	(75 - 125)	**SW846 8260B**
Chlorobenzene	100	(75 - 127)	**SW846 8260B**
Ethylbenzene	105	(75 - 120)	**SW846 8260B**
Styrene	104	(75 - 130)	**SW846 8260B**
Xylenes (total)	105	(90 - 114)	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
Toluene-d8	100	(50 - 150)
4-Bromofluorobenzene	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/MS Volatiles

Client Lot #...: A1A190402 Work Order #...: MDE0G1AC-MS Matrix.....: WATER
MS Lot-Sample #: A1A180421-015 MDE0G1AD-MSD
Date Sampled...: 01/17/11 15:10 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/20/11
Prep Batch #...: 1020121
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	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.4	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	87	(70 - 130)			SW846 8260B
	91	(70 - 130)	4.7	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(70 - 130)			SW846 8260B
	87	(70 - 130)	4.1	(0-30)	SW846 8260B
Bromochloromethane	92	(70 - 130)			SW846 8260B
	97	(70 - 130)	5.8	(0-30)	SW846 8260B
m-Xylene & p-Xylene	86	(70 - 130)			SW846 8260B
	88	(70 - 130)	2.6	(0-30)	SW846 8260B
o-Xylene	86	(70 - 130)			SW846 8260B
	87	(70 - 130)	0.80	(0-30)	SW846 8260B
Chloromethane	72	(70 - 130)			SW846 8260B
	77	(70 - 130)	7.3	(0-30)	SW846 8260B
Bromomethane	69 a	(70 - 130)			SW846 8260B
	78	(70 - 130)	13	(0-30)	SW846 8260B
Vinyl chloride	85	(70 - 130)			SW846 8260B
	91	(70 - 130)	7.1	(0-30)	SW846 8260B
Chloroethane	75	(70 - 130)			SW846 8260B
	81	(70 - 130)	7.2	(0-30)	SW846 8260B
Methylene chloride	82	(70 - 130)			SW846 8260B
	83	(70 - 130)	0.85	(0-30)	SW846 8260B
Acetone	86	(70 - 130)			SW846 8260B
	75	(70 - 130)	12	(0-30)	SW846 8260B
Carbon disulfide	95	(70 - 130)			SW846 8260B
	92	(70 - 130)	3.3	(0-30)	SW846 8260B
1,1-Dichloroethene	91	(70 - 130)			SW846 8260B
	91	(70 - 130)	0.29	(0-30)	SW846 8260B
1,1-Dichloroethane	87	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.0	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.6	(0-30)	SW846 8260B
Chloroform	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.5	(0-30)	SW846 8260B
1,2-Dichloroethane	88	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.9	(0-30)	SW846 8260B
2-Butanone	93	(70 - 130)			SW846 8260B
	83	(70 - 130)	11	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 Work Order #...: MDE0G1AC-MS Matrix.....: WATER
MS Lot-Sample #: A1A180421-015 MDE0G1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	89	(70 - 130)			SW846 8260B
	92	(70 - 130)	3.0	(0-30)	SW846 8260B
Carbon tetrachloride	93	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.2	(0-30)	SW846 8260B
Bromodichloromethane	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.2	(0-30)	SW846 8260B
1,2-Dichloropropane	88	(70 - 130)			SW846 8260B
	90	(70 - 130)	2.2	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	84	(70 - 130)			SW846 8260B
	89	(70 - 130)	5.3	(0-30)	SW846 8260B
Trichloroethene	90	(70 - 130)			SW846 8260B
	95	(70 - 130)	5.6	(0-30)	SW846 8260B
Dibromochloromethane	90	(70 - 130)			SW846 8260B
	92	(70 - 130)	1.8	(0-30)	SW846 8260B
1,1,2-Trichloroethane	90	(70 - 130)			SW846 8260B
	87	(70 - 130)	3.1	(0-30)	SW846 8260B
Benzene	88	(70 - 130)			SW846 8260B
	91	(70 - 130)	3.3	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	87	(70 - 130)			SW846 8260B
	87	(70 - 130)	0.49	(0-30)	SW846 8260B
Bromoform	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.2	(0-30)	SW846 8260B
4-Methyl-2-pentanone	94	(70 - 130)			SW846 8260B
	88	(70 - 130)	6.7	(0-30)	SW846 8260B
2-Hexanone	94	(70 - 130)			SW846 8260B
	84	(70 - 130)	12	(0-30)	SW846 8260B
Tetrachloroethene	87	(70 - 130)			SW846 8260B
	88	(70 - 130)	1.1	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	81	(70 - 130)			SW846 8260B
	79	(70 - 130)	2.2	(0-30)	SW846 8260B
Toluene	84	(70 - 130)			SW846 8260B
	87	(70 - 130)	2.7	(0-30)	SW846 8260B
Chlorobenzene	86	(70 - 130)			SW846 8260B
	89	(70 - 130)	3.6	(0-30)	SW846 8260B
Ethylbenzene	89	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.4	(0-30)	SW846 8260B
Styrene	87	(70 - 130)			SW846 8260B
	90	(70 - 130)	2.8	(0-30)	SW846 8260B
Xylenes (total)	86	(70 - 130)			SW846 8260B
	88	(70 - 130)	2.0	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 **Work Order #...:** MDE0G1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A1A180421-015 MDE0G1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	85	(50 - 150)
	88	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
	84	(50 - 150)
Toluene-d8	84	(50 - 150)
	84	(50 - 150)
4-Bromofluorobenzene	87	(50 - 150)
	85	(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 #...: A1A190402 Work Order #...: MDF311AC-MS Matrix.....: WG
MS Lot-Sample #: A1A190402-033 MDF311AD-MSD
Date Sampled...: 01/18/11 12:05 Date Received..: 01/19/11
Prep Date.....: 01/20/11 Analysis Date..: 01/20/11
Prep Batch #...: 1020164
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
	98	(70 - 130)	1.4	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	103	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.95	(0-30)	SW846 8260B
1,2-Dibromoethane	94	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.8	(0-30)	SW846 8260B
Bromochloromethane	100	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.2	(0-30)	SW846 8260B
m-Xylene & p-Xylene	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.1	(0-30)	SW846 8260B
o-Xylene	102	(70 - 130)			SW846 8260B
	98	(70 - 130)	4.2	(0-30)	SW846 8260B
Chloromethane	90	(70 - 130)			SW846 8260B
	84	(70 - 130)	7.1	(0-30)	SW846 8260B
Bromomethane	92	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.4	(0-30)	SW846 8260B
Vinyl chloride	100	(70 - 130)			SW846 8260B
	95	(70 - 130)	4.6	(0-30)	SW846 8260B
Chloroethane	100	(70 - 130)			SW846 8260B
	94	(70 - 130)	6.1	(0-30)	SW846 8260B
Methylene chloride	92	(70 - 130)			SW846 8260B
	89	(70 - 130)	3.0	(0-30)	SW846 8260B
Acetone	92	(70 - 130)			SW846 8260B
	97	(70 - 130)	4.6	(0-30)	SW846 8260B
Carbon disulfide	109	(70 - 130)			SW846 8260B
	103	(70 - 130)	6.4	(0-30)	SW846 8260B
1,1-Dichloroethene	107	(70 - 130)			SW846 8260B
	108	(70 - 130)	0.13	(0-30)	SW846 8260B
1,1-Dichloroethane	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.3	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.2	(0-30)	SW846 8260B
Chloroform	99	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.2	(0-30)	SW846 8260B
1,2-Dichloroethane	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.5	(0-30)	SW846 8260B
2-Butanone	94	(70 - 130)			SW846 8260B
	100	(70 - 130)	6.1	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 Work Order #...: MDF311AC-MS Matrix.....: WG
MS Lot-Sample #: A1A190402-033 MDF311AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	100	(70 - 130)			SW846 8260B
	95	(70 - 130)	5.2	(0-30)	SW846 8260B
Carbon tetrachloride	97	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.7	(0-30)	SW846 8260B
Bromodichloromethane	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.0	(0-30)	SW846 8260B
1,2-Dichloropropane	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.1	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	83	(70 - 130)			SW846 8260B
	88	(70 - 130)	5.6	(0-30)	SW846 8260B
Trichloroethene	99	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.4	(0-30)	SW846 8260B
Dibromochloromethane	92	(70 - 130)			SW846 8260B
	90	(70 - 130)	1.6	(0-30)	SW846 8260B
1,1,2-Trichloroethane	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.56	(0-30)	SW846 8260B
Benzene	97	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.93	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	90	(70 - 130)			SW846 8260B
	93	(70 - 130)	3.3	(0-30)	SW846 8260B
Bromoform	73	(70 - 130)			SW846 8260B
	76	(70 - 130)	3.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	92	(70 - 130)			SW846 8260B
	106	(70 - 130)	14	(0-30)	SW846 8260B
2-Hexanone	92	(70 - 130)			SW846 8260B
	113	(70 - 130)	21	(0-30)	SW846 8260B
Tetrachloroethene	102	(70 - 130)			SW846 8260B
	97	(70 - 130)	5.8	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.23	(0-30)	SW846 8260B
Toluene	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.6	(0-30)	SW846 8260B
Chlorobenzene	98	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.8	(0-30)	SW846 8260B
Ethylbenzene	101	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.4	(0-30)	SW846 8260B
Styrene	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.14	(0-30)	SW846 8260B
Xylenes (total)	102	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.5	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A190402 **Work Order #...:** MDF311AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1A190402-033 MDF311AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
	94	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
	90	(50 - 150)
Toluene-d8	98	(50 - 150)
	95	(50 - 150)
4-Bromofluorobenzene	102	(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
THE LEADER IN ENVIRONMENTAL TESTING

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 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 1.7 and 4.0°C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP9-1/21/2011 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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 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, butylbenzyl phthalate 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 1/26/11 at 2003 recovered below control limits for 2,4-dinitrophenol at 68%. The 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%?	✓			1/21/11 @ 1259	LCG Table 2 >130%=J; 50-70%=J/UJ; <50%=J/R
20. Was a CCV analyzed every 12 hours?	✓			1/26/11 @ 1036	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
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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
26. Did the areas of all IS compounds vary by no more than -50% to +100% from the ICAL EICP area?	✓				LCG Table 2 R
27. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 2
28. Were all target analytes in the method blank <1/2 the MRL?	✓			Checked by ADR. bis(2-ethylhexyl)phthalate was detected in the method blank at 0.93ug/L and di-n-butyl phthalate at 0.69ug/L. All the bis (2-ethylhexyl) phthalate results with the exception of samples FWGMBSmw-001c-1681-GW, FWGNTAmw-112c-1679-GW and FWGLL3mw-242c-1652-GW and all the di-n-butyl phthalate results with the exception of FWGMBSmw-001c-1681-GW, FWGNTAmw-112c-1679-GW, FWGNTAmw-113c-1680-GW, FWGFBQmw-169c-1670-GW and FWGLL2mw-DUP3-1694-GW were qualified "B".	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?	✓			bis(2-ethylhexyl)phthalate was detected in FWGEQUIPRinse2-1699-GW at 0.2.2ug/L and di-n-butyl phthalate at 0.92ug/L. Associated bis (2-ethylhexyl) phthalate results with the exception of samples FWGMBSmw-001c-1681-GW, FWGNTAmw-112c-1679-GW and FWGLL3mw-242c-1652-GW and di-n-butyl phthalate results with the exception of FWGMBSmw-001c-1681-GW, FWGNTAmw-112c-1679-GW, FWGNTAmw-113c-1680-GW, FWGFBQmw-169c-1670-GW and FWGLL2mw-DUP3-1694-GW were qualified "B".	<5/10x blank = B
31. Was a field duplicate analyzed?	✓				
32. Were the field duplicate RPDs ≤30%?		✓		The field duplicate RPDs for samples FWGLL2mw-Dup3-1694-GW and FWGLL2mw-267c-1646-GW were above control limits for bis (2-ethylhexyl) phthalate at 72% and for di-n-butyl phthalate at 200%. The bis (2-ethylhexyl) phthalate and di-n-butyl phthalate results for samples FWGLL2mw-Dup3-1694-GW and FWGLL2mw-267c-1646-GW were qualified as estimated, "J/UJ".	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. Hexachlorocyclopentadiene recovered below control limits at 29% in the LCS for batch 1019065. The hexachlorocyclopentadiene results 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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
36. Was the MS/MSD parent a Ravenna sample?	✓				
37. Were MS/MSD recoveries 45-135% and RPD value ≤40%?		✓		Checked by ADR. The matrix spike and matrix spike duplicate analyzed on sample FWGLL2mw-269c-1647-GW recovered below control limits for 3,3'-dichlorobenzidine at 41% and 37%, 2,4-dinitrophenol at 29% and 31%, hexachlorocyclopentadiene at 21%and 20%. The MS/MSD RPD for 4-chloroanailine was above control limits at 44%. The 2,4-dinitrophenol and hexachlorocyclopentadiene results for sample FWGLL2mw-269c-1647-GW were qualified as estimated, "UJ". No qualification was made for the 3,3'-dichlorobenzidine or 4-chloroanailine result as there were no other QC outliers associated with these analytes.	LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?		✓		Checked by ADR. The surrogate nitrobenzene-d5 recovered below control limits in sample FWGSCFmw-001-1682-GW at 49%. No qualification was made as LCG allows for one surrogate outliers from each fraction 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
2,4-Dinitrophenol	0.050
4-Nitrophenol	0.050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGMBSmw-001C-1681-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-002 **Work Order #...:** MDF2T1AC **Matrix.....:** WG
Date Sampled...: 01/18/11 09:34 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGMBSmw-001C-1681-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-002 **Work Order #...:** MDF2T1AC **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: FWGMBSmw-001C-1681-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-002 **Work Order #...:** MDF2T1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(50 - 150)
2-Fluorobiphenyl	55	(50 - 150)
Terphenyl-d14	67	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	62	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-112C-1679-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-004 **Work Order #...:** MDF2W1AC **Matrix.....:** WG
Date Sampled...: 01/18/11 10:58 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-112C-1679-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-004 **Work Order #...:** MDF2W1AC **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: FWGNTAmw-112C-1679-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-004 **Work Order #...:** MDF2W1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-113C-1680-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-006 **Work Order #...:** MDF201AC **Matrix.....:** WG
Date Sampled...: 01/18/11 12:12 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**3.0 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-113C-1680-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-006 **Work Order #...:** MDF201AC **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: FWGNTAmw-113C-1680-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-006 **Work Order #...:** MDF201AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	53	(50 - 150)
2-Fluorobiphenyl	55	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	60	(50 - 150)
2,4,6-Tribromophenol	70	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-169C-1670-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-008 **Work Order #...:** MDF221AC **Matrix.....:** WG
Date Sampled...: 01/18/11 13:43 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
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	**0.83 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-169C-1670-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-008 **Work Order #...:** MDF221AC **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: FWGFBQmw-169C-1670-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-008 **Work Order #...:** MDF221AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	57	(50 - 150)
2-Fluorobiphenyl	57	(50 - 150)
Terphenyl-d14	66	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-010 **Work Order #...:** MDF251AC **Matrix.....:** WG
Date Sampled...: 01/18/11 14:54 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.6 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.77 J,B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-010 **Work Order #...:** MDF251AC **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: FWGFBQmw-172C-1671-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-010 Work Order #...: MDF251AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(50 - 150)
2-Fluorobiphenyl	58	(50 - 150)
Terphenyl-d14	72	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-173C-1672-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-012 **Work Order #...:** MDF271AC **Matrix.....:** WG
Date Sampled...: 01/18/11 16:17 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.69 J,B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-173C-1672-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-012 **Work Order #...:** MDF271AC **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: FWGFBQmw-173C-1672-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-012 **Work Order #...:** MDF271AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	71	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1682-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-015 **Work Order #...:** MDF3A1AC **Matrix.....:** WG
Date Sampled...: 01/18/11 09:30 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
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,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.72 J,B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1682-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-015 **Work Order #...:** MDF3A1AC **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: FWGSCFmw-001-1682-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-015 Work Order #...: MDF3A1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	49 *	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
Terphenyl-d14	71	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	66	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1683-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-017 **Work Order #...:** MDF3F1AC **Matrix.....:** WG
Date Sampled...: 01/18/11 11:25 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.2 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	**0.69 J,B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1683-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-017 **Work Order #...:** MDF3F1AC **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: FWGSCFmw-002-1683-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-017 **Work Order #...:** MDF3F1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	50	(50 - 150)
2-Fluorobiphenyl	51	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	57	(50 - 150)
2-Fluorophenol	57	(50 - 150)
2,4,6-Tribromophenol	59	(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-004-1685-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-019 **Work Order #...:** MDF3H1AC **Matrix.....:** WG
Date Sampled...: 01/18/11 13:10 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
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	**0.72 J,B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCEmw-004-1685-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-019 **Work Order #...:** MDF3H1AC **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: FWGSCFmw-004-1685-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-019 **Work Order #...:** MDF3H1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	81	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	73	(50 - 150)
2,4,6-Tribromophenol	69	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1697-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-021 **Work Order #...:** MDF3K1AC **Matrix.....:** WG
Date Sampled...: 01/18/11 14:00 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
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	**1.9 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.79 J,B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1697-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-021 **Work Order #...:** MDF3K1AC **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: FWGSCFmw-DUP1-1697-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-021 **Work Order #...:** MDF3K1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	52	(50 - 150)
2-Fluorobiphenyl	52	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	59	(50 - 150)
2-Fluorophenol	58	(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: FWGLL3mw-237C-1649-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-023 **Work Order #...:** MDF3M1AC **Matrix.....:** WG
Date Sampled...: 01/18/11 15:20 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.9 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.90 J,B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-237C-1649-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-023 **Work Order #...:** MDF3M1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-237C-1649-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-023 **Work Order #...:** MDF3M1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	55	(50 - 150)
2-Fluorobiphenyl	55	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	57	(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: FWGEQUIPRINSE2-1699-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-025 **Work Order #...:** MDF3P1AC **Matrix.....:** WQ
Date Sampled...: 01/18/11 16:30 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.2 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	**0.92 J,B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1699-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-025 **Work Order #...:** MDF3P1AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1699-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-025 Work Order #...: MDF3P1AC Matrix.....: WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	59	(50 - 150)
2-Fluorobiphenyl	60	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	69	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	62	(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-1645-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-027 **Work Order #...:** MDF3R1AC **Matrix.....:** WG
Date Sampled...: 01/18/11 09:10 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
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	**2.1 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.79 J,B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1645-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-027 **Work Order #...:** MDF3R1AC **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: FWGLL2mw-266C-1645-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-027 **Work Order #...:** MDF3R1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(50 - 150)
2-Fluorobiphenyl	58	(50 - 150)
Terphenyl-d14	73	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	58	(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-267C-1646-GW

GC/MS Semivolatiles

Lot-Sample #...:	A1A190402-029	**Work Order #...:**	MDF3V1AC	**Matrix.....:**	WG
Date Sampled...:	01/18/11 10:20	**Date Received..:**	01/19/11		
Prep Date.....:	01/19/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1019065				
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	**3.2 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	**0.76 J,B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1646-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-029 **Work Order #...:** MDF3V1AC **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: FWGLL2mw-267C-1646-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-029 **Work Order #...:** MDF3V1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
Terphenyl-d14	79	(50 - 150)
Phenol-d5	76	(50 - 150)
2-Fluorophenol	77	(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: FWGLL2mw-DUP3-1694-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-031 **Work Order #...:** MDF3X1AC **Matrix.....:** WG
Date Sampled...: 01/18/11 11:20 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)-ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**1.5 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1694-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-031 **Work Order #...:** MDF3X1AC **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: FWGLL2mw-DUP3-1694-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-031 Work Order #...: MDF3X1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(50 - 150)
2-Fluorobiphenyl	54	(50 - 150)
Terphenyl-d14	61	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	59	(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-269C-1647-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-033 **Work Order #...:** MDF311AE **Matrix.....:** WG
Date Sampled...: 01/18/11 12:05 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
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	**1.6 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**0.72 J,B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1647-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-033 Work Order #...: MDF311AE 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: FWGLL2mw-269C-1647-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-033 **Work Order #...:** MDF311AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	59	(50 - 150)
2-Fluorobiphenyl	56	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	66	(50 - 150)
2-Fluorophenol	65	(50 - 150)
2,4,6-Tribromophenol	60	(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-1648-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-035 **Work Order #...:** MDF341AC **Matrix.....:** WG
Date Sampled...: 01/18/11 14:20 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
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	**2.2 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	**1.0 B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1648-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-035 **Work Order #...:** MDF341AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1648-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-035 Work Order #...: MDF341AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	74	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	69	(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: FWGLL3mw-242C-1652-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-037 **Work Order #...:** MDF361AC **Matrix.....:** WG
Date Sampled...: 01/18/11 15:25 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
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	**29 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	**1.0 B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-037 **Work Order #...:** MDF361AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-037 **Work Order #...:** MDF361AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	60	(50 - 150)
2-Fluorobiphenyl	59	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	63	(50 - 150)

NOTE(S):

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-039 **Work Order #...:** MDF381AC **Matrix.....:** WG
Date Sampled...: 01/18/11 16:30 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019065
Dilution Factor: 1 **Initial Wgt/Vol:** 980 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	0.20	ug/L	0.10
Acenaphthylene	ND	0.20	ug/L	0.10
Anthracene	ND	0.20	ug/L	0.10
Benzo(a)anthracene	ND	0.20	ug/L	0.10
Benzo(b)fluoranthene	ND	0.20	ug/L	0.10
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	ND	5.0	ug/L	0.38
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	**2.8 J,B**	**10**	**ug/L**	**0.80**
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	**1.0 B**	**1.0**	**ug/L**	**0.67**
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-039 **Work Order #...:** MDF381AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A190402-039 Work Order #...: MDF381AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	62	(50 - 150)
2-Fluorobiphenyl	58	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	68	(50 - 150)
2-Fluorophenol	68	(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.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A190402 **Work Order #...:** MDF4L1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A190000-065

Prep Date.....: 01/19/11 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 01/26/11 **Prep Batch #...:** 1019065
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	**0.93 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	**0.69 J**	**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

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A190402 **Work Order #...:** MDF4L1AA **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	64	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	72	(50 - 150)
2-Fluorophenol	72	(50 - 150)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A190402 **Work Order #...:** MDF4L1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	68	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A190402 Work Order #...: MDF4L1AC Matrix.....: WATER
LCS Lot-Sample#: A1A190000-065
Prep Date.....: 01/19/11 Analysis Date..: 01/26/11
Prep Batch #...: 1019065
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2-Chloronaphthalene	68	(35 - 115)	SW846 8270C
1,2,4-Trichloro-benzene	59	(30 - 120)	SW846 8270C
Acenaphthene	69	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	75	(34 - 151)	SW846 8270C
Pyrene	68	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	69	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	60	(30 - 115)	SW846 8270C
Pentachlorophenol	39	(30 - 150)	SW846 8270C
Phenol	77	(30 - 115)	SW846 8270C
2-Chlorophenol	77	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	76	(31 - 121)	SW846 8270C
4-Nitrophenol	70	(30 - 138)	SW846 8270C
1,2-Dichlorobenzene	61	(30 - 120)	SW846 8270C
1,3-Dichlorobenzene	57	(30 - 120)	SW846 8270C
2,4,5-Trichloro-phenol	75	(36 - 135)	SW846 8270C
4-Methylphenol	74	(31 - 115)	SW846 8270C
4-Nitroaniline	64	(30 - 140)	SW846 8270C
Acenaphthylene	71	(37 - 115)	SW846 8270C
Anthracene	70	(45 - 118)	SW846 8270C
Benzo(a)anthracene	65	(43 - 138)	SW846 8270C
Benzo(a)pyrene	60	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	62	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	70	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	75	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	75	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	78	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	80	(50 - 150)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A190402 Work Order #...: MDF4L1AC Matrix.....: WATER
LCS Lot-Sample#: A1A190000-065

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
bis(2-Ethylhexyl) phthalate	76	(30 - 154)	SW846 8270C
2,4,6-Trichloro-phenol	73	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	74	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	55	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	46	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	74	(43 - 122)	SW846 8270C
2-Methylnaphthalene	78	(32 - 115)	SW846 8270C
2-Methylphenol	75	(30 - 116)	SW846 8270C
2-Nitroaniline	65	(36 - 140)	SW846 8270C
2-Nitrophenol	79	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	40	(30 - 160)	SW846 8270C
3-Nitroaniline	59	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	71	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	74	(43 - 118)	SW846 8270C
4-Chloroaniline	52	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	74	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	72	(37 - 136)	SW846 8270C
Carbazole	69	(49 - 126)	SW846 8270C
Chrysene	68	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	71	(38 - 130)	SW846 8270C
Dibenzofuran	71	(40 - 115)	SW846 8270C
Diethyl phthalate	73	(43 - 132)	SW846 8270C
Dimethyl phthalate	73	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	69	(36 - 151)	SW846 8270C
Fluoranthene	72	(47 - 132)	SW846 8270C
Fluorene	70	(41 - 115)	SW846 8270C
Hexachlorobenzene	70	(42 - 123)	SW846 8270C
Hexachlorobutadiene	53	(30 - 120)	SW846 8270C
Hexachloroethane	54	(30 - 120)	SW846 8270C
Isophorone	73	(33 - 115)	SW846 8270C
Naphthalene	68	(30 - 119)	SW846 8270C
Nitrobenzene	75	(31 - 115)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A190402 **Work Order #...:** MDF4L1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A190000-065

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
N-Nitrosodiphenylamine	63	(35 - 124)	SW846 8270C
Phenanthrene	69	(45 - 117)	SW846 8270C
Indeno(1,2,3-cd)pyrene	68	(37 - 130)	SW846 8270C
Di-n-butyl phthalate	76	(46 - 123)	SW846 8270C
Hexachlorocyclopenta-diene	29 a	(30 - 115)	SW846 8270C
Benzoic acid	61	(30 - 136)	SW846 8270C
Benzyl alcohol	78	(29 - 115)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	66	(50 - 150)
Terphenyl-d14	80	(50 - 150)
Phenol-d5	75	(50 - 150)
2-Fluorophenol	77	(50 - 150)
2,4,6-Tribromophenol	72	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A190402 Work Order #...: MDF311AX-MS Matrix.....: WG
MS Lot-Sample #: A1A190402-033 MDF311A0-MSD
Date Sampled...: 01/18/11 12:05 Date Received..: 01/19/11
Prep Date.....: 01/19/11 Analysis Date..: 01/26/11
Prep Batch #...: 1019065
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	55	(45 - 135)			SW846 8270C
	53	(45 - 135)	3.4	(0-40)	SW846 8270C
Acenaphthene	63	(45 - 135)			SW846 8270C
	58	(45 - 135)	9.0	(0-40)	SW846 8270C
2,4-Dinitrotoluene	68	(45 - 135)			SW846 8270C
	61	(45 - 135)	11	(0-40)	SW846 8270C
Pyrene	63	(45 - 135)			SW846 8270C
	57	(45 - 135)	10	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	65	(45 - 135)			SW846 8270C
	61	(45 - 135)	6.4	(0-40)	SW846 8270C
1,4-Dichlorobenzene	56	(45 - 135)			SW846 8270C
	56	(45 - 135)	0.86	(0-40)	SW846 8270C
Pentachlorophenol	33 a	(45 - 135)			SW846 8270C
	31 a	(45 - 135)	6.5	(0-40)	SW846 8270C
Phenol	75	(45 - 135)			SW846 8270C
	69	(45 - 135)	8.4	(0-40)	SW846 8270C
2-Chlorophenol	71	(45 - 135)			SW846 8270C
	67	(45 - 135)	6.3	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	71	(45 - 135)			SW846 8270C
	67	(45 - 135)	6.0	(0-40)	SW846 8270C
4-Nitrophenol	57	(45 - 135)			SW846 8270C
	53	(45 - 135)	6.2	(0-40)	SW846 8270C
Acenaphthylene	65	(45 - 135)			SW846 8270C
	58	(45 - 135)	10	(0-40)	SW846 8270C
Anthracene	63	(45 - 135)			SW846 8270C
	58	(45 - 135)	9.5	(0-40)	SW846 8270C
Benzo(a)anthracene	59	(45 - 135)			SW846 8270C
	53	(45 - 135)	9.7	(0-40)	SW846 8270C
Benzo(b)fluoranthene	54	(45 - 135)			SW846 8270C
	52	(45 - 135)	4.8	(0-40)	SW846 8270C
Benzo(k)fluoranthene	74	(45 - 135)			SW846 8270C
	64	(45 - 135)	15	(0-40)	SW846 8270C
Benzo(ghi)perylene	66	(45 - 135)			SW846 8270C
	59	(45 - 135)	11	(0-40)	SW846 8270C
Benzo(a)pyrene	57	(45 - 135)			SW846 8270C
	51	(45 - 135)	11	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A190402 **Work Order #...:** MDF311AX-MS **Matrix.....:** WG
MS Lot-Sample #: A1A190402-033 MDF311A0-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	69	(45 - 135)			SW846 8270C
	66	(45 - 135)	4.7	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	69	(45 - 135)			SW846 8270C
	65	(45 - 135)	6.6	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	78	(45 - 135)			SW846 8270C
	71	(45 - 135)	9.2	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	71	(45 - 135)			SW846 8270C
	65	(45 - 135)	7.7	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	66	(45 - 135)			SW846 8270C
	61	(45 - 135)	8.0	(0-40)	SW846 8270C
Butyl benzyl phthalate	68	(45 - 135)			SW846 8270C
	62	(45 - 135)	8.8	(0-40)	SW846 8270C
Carbazole	64	(45 - 135)			SW846 8270C
	59	(45 - 135)	7.9	(0-40)	SW846 8270C
4-Chloroaniline	50	(45 - 135)			SW846 8270C
	44 a	(45 - 135)	14	(0-40)	SW846 8270C
2-Chloronaphthalene	63	(45 - 135)			SW846 8270C
	56	(45 - 135)	11	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	68	(45 - 135)			SW846 8270C
	61	(45 - 135)	12	(0-40)	SW846 8270C
Chrysene	67	(45 - 135)			SW846 8270C
	60	(45 - 135)	11	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	66	(45 - 135)			SW846 8270C
	59	(45 - 135)	11	(0-40)	SW846 8270C
Dibenzofuran	66	(45 - 135)			SW846 8270C
	59	(45 - 135)	11	(0-40)	SW846 8270C
Di-n-butyl phthalate	70	(45 - 135)			SW846 8270C
	66	(45 - 135)	6.3	(0-40)	SW846 8270C
1,2-Dichlorobenzene	61	(45 - 135)			SW846 8270C
	59	(45 - 135)	3.8	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A190402 Work Order #...: MDF311AX-MS Matrix.....: WG
MS Lot-Sample #: A1A190402-033 MDF311A0-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	54	(45 - 135)			SW846 8270C
	55	(45 - 135)	2.0	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	41 a	(45 - 135)			SW846 8270C
	37 a	(45 - 135)	9.5	(0-40)	SW846 8270C
2,4-Dichlorophenol	70	(45 - 135)			SW846 8270C
	65	(45 - 135)	7.7	(0-40)	SW846 8270C
Diethyl phthalate	70	(45 - 135)			SW846 8270C
	64	(45 - 135)	8.7	(0-40)	SW846 8270C
2,4-Dimethylphenol	53	(45 - 135)			SW846 8270C
	52	(45 - 135)	3.0	(0-40)	SW846 8270C
Dimethyl phthalate	68	(45 - 135)			SW846 8270C
	63	(45 - 135)	7.6	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	56	(45 - 135)			SW846 8270C
	56	(45 - 135)	1.3	(0-40)	SW846 8270C
2,4-Dinitrophenol	29 a	(45 - 135)			SW846 8270C
	31 a	(45 - 135)	7.0	(0-40)	SW846 8270C
2,6-Dinitrotoluene	69	(45 - 135)			SW846 8270C
	64	(45 - 135)	7.4	(0-40)	SW846 8270C
Di-n-octyl phthalate	65	(45 - 135)			SW846 8270C
	59	(45 - 135)	11	(0-40)	SW846 8270C
Fluoranthene	66	(45 - 135)			SW846 8270C
	61	(45 - 135)	8.4	(0-40)	SW846 8270C
Fluorene	64	(45 - 135)			SW846 8270C
	58	(45 - 135)	11	(0-40)	SW846 8270C
Hexachlorobenzene	63	(45 - 135)			SW846 8270C
	58	(45 - 135)	8.0	(0-40)	SW846 8270C
Hexachlorobutadiene	46	(45 - 135)			SW846 8270C
	44 a	(45 - 135)	3.2	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	21 a	(45 - 135)			SW846 8270C
	20 a	(45 - 135)	7.5	(0-40)	SW846 8270C
Hexachloroethane	47	(45 - 135)			SW846 8270C
	47	(45 - 135)	0.56	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	66	(45 - 135)			SW846 8270C
	59	(45 - 135)	11	(0-40)	SW846 8270C
Isophorone	69	(45 - 135)			SW846 8270C
	64	(45 - 135)	7.6	(0-40)	SW846 8270C
2-Methylnaphthalene	72	(45 - 135)			SW846 8270C
	68	(45 - 135)	5.9	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A190402 Work Order #...: MDF311AX-MS Matrix.....: WG
MS Lot-Sample #: A1A190402-033 MDF311A0-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	72	(45 - 135)			SW846 8270C
	68	(45 - 135)	5.4	(0-40)	SW846 8270C
4-Methylphenol	71	(45 - 135)			SW846 8270C
	66	(45 - 135)	8.4	(0-40)	SW846 8270C
Naphthalene	64	(45 - 135)			SW846 8270C
	61	(45 - 135)	4.7	(0-40)	SW846 8270C
2-Nitroaniline	62	(45 - 135)			SW846 8270C
	56	(45 - 135)	11	(0-40)	SW846 8270C
3-Nitroaniline	56	(45 - 135)			SW846 8270C
	51	(45 - 135)	9.8	(0-50)	SW846 8270C
4-Nitroaniline	60	(45 - 135)			SW846 8270C
	56	(45 - 135)	6.6	(0-40)	SW846 8270C
Nitrobenzene	72	(45 - 135)			SW846 8270C
	68	(45 - 135)	5.7	(0-40)	SW846 8270C
2-Nitrophenol	71	(45 - 135)			SW846 8270C
	68	(45 - 135)	5.0	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	58	(45 - 135)			SW846 8270C
	54	(45 - 135)	7.1	(0-40)	SW846 8270C
Phenanthrene	62	(45 - 135)			SW846 8270C
	58	(45 - 135)	7.7	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	68	(45 - 135)			SW846 8270C
	63	(45 - 135)	7.7	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	65	(45 - 135)			SW846 8270C
	61	(45 - 135)	6.2	(0-40)	SW846 8270C
Benzoic acid	46	(45 - 135)			SW846 8270C
	48	(45 - 135)	4.0	(0-40)	SW846 8270C
Benzyl alcohol	75	(45 - 135)			SW846 8270C
	70	(45 - 135)	6.3	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
	59	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
	57	(50 - 150)
Terphenyl-d14	77	(50 - 150)
	67	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A190402 **Work Order #...:** MDF311AX-MS **Matrix.....:** WG
MS Lot-Sample #: A1A190402-033 MDF311A0-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	73	(50 - 150)
	67	(50 - 150)
2-Fluorophenol	74	(50 - 150)
	68	(50 - 150)
2,4,6-Tribromophenol	66	(50 - 150)
	61	(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.

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: qcmrl
Level: LOW
Data Type: MS DATA
SpikeList File: qcmrl.spk
Sublist File: qcmrl.sub
Method File: \\cansvr11\dd\chem\MSS\a4hp9.i\10126a.b\8270c-625.m
Misc Info:

Client SDG: SDGa00278
Fraction: SV

Operator: 001574
SampleType: MRL
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
82 Acenaphthene	10.000	9.4753	94.75	70-130
79 Acenaphthylene	10.000	9.6113	96.11	70-130
116 Anthracene	10.000	9.8003	98.00	70-130
136 Benzo(a)Anthracene	10.000	9.1603	91.60	70-130
141 Benzo(b)fluoranthe	10.000	8.2678	82.68	70-130
151 Benzo(g,h,i)peryle	10.000	9.7382	97.38	70-130
146 Benzo(a)pyrene	10.000	9.5964	95.96	70-130
29 Benzyl Alcohol	10.000	9.8663	98.66	70-130
44 bis(2-Chloroethoxy	10.000	10.163	101.63	70-130
23 bis(2-Chloroethyl)	10.000	10.493	104.93	70-130
31 bis(2-Chloroisopro	10.000	11.008	110.08	70-130
139 bis(2-ethylhexyl)P	10.000	9.7149	97.15	70-130
106 4-Bromophenyl-phen	10.000	9.6999	97.00	70-130
131 Butylbenzylphthala	10.000	11.964	119.64	70-130
52 4-Chloroaniline	10.000	9.4108	94.11	70-130
70 2-Chloronaphthalen	10.000	9.6678	96.68	70-130
95 4-Chlorophenyl-phe	10.000	10.009	100.09	70-130
137 Chrysene	10.000	9.7777	97.78	70-130
150 Dibenz(a,h)anthrac	10.000	9.7754	97.75	70-130
86 Dibenzofuran	10.000	9.8084	98.08	70-130
120 Di-n-Butylphthalat	10.000	9.9685	99.68	70-130
28 1,2-Dichlorobenzen	10.000	10.258	102.58	70-130
26 1,3-Dichlorobenzen	10.000	10.273	102.73	70-130
27 1,4-Dichlorobenzen	10.000	10.176	101.76	70-130
135 3,3'-Dichlorobenzi	10.000	9.3217	93.22	70-130
93 Diethylphthalate	10.000	9.9252	99.25	70-130
76 Dimethylphthalate	10.000	9.6826	96.83	70-130
87 2,4-Dinitrotoluene	10.000	9.8653	98.65	70-130
78 2,6-Dinitrotoluene	10.000	9.8180	98.18	70-130
140 Di-n-octylphthalat	10.000	9.7983	97.98	70-130
123 Fluoranthene	10.000	9.7394	97.39	70-130
94 Fluorene	10.000	9.5906	95.91	70-130
107 Hexachlorobenzene	10.000	9.6842	96.84	70-130
56 Hexachlorobutadien	10.000	9.7911	97.91	70-130
64 Hexachlorocyclopen	10.000	7.4712	74.71	70-130
34 Hexachloroethane	10.000	10.144	101.44	70-130
149 Indeno(1,2,3-cd)py	10.000	9.8320	98.32	70-130
41 Isophorone	10.000	9.9344	99.34	70-130
63 1-Methylnaphthalen	10.000	9.6523	96.52	70-130
62 2-Methylnaphthalen	10.000	9.5446	95.45	70-130

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
51	Naphthalene	10.000	9.8046	98.05	70-130
73	2-Nitroaniline	10.000	9.7806	97.81	70-130
81	3-Nitroaniline	10.000	9.6364	96.36	70-130
96	4-Nitroaniline	10.000	9.9720	99.72	70-130
35	Nitrobenzene	10.000	10.175	101.75	70-130
32	N-Nitroso-di-n-pro	10.000	10.462	104.62	70-130
99	N-Nitrosodiphenyla	10.000	9.6903	96.90	70-130
115	Phenanthrene	10.000	9.6804	96.80	70-130
125	Pyrene	10.000	9.5096	95.10	70-130
9	Pyridine	10.000	9.9886	99.89	70-130
50	1,2,4-Trichloroben	10.000	9.9427	99.43	70-130
49	Benzoic Acid	20.000	17.624	88.12	70-130
59	4-Chloro-3-Methylp	10.000	9.8507	98.51	70-130
24	2-Chlorophenol	10.000	9.9410	99.41	70-130
48	2,4-Dichlorophenol	10.000	9.4117	94.12	70-130
43	2,4-Dimethylphenol	10.000	9.6584	96.58	70-130
98	4,6-Dinitro-2-meth	10.000	7.8662	78.66	70-130
83	2,4-Dinitrophenol	20.000	13.673	68.36*	70-130
30	2-Methylphenol	10.000	10.183	101.83	70-130
192	4-Methylphenol	10.000	10.009	100.09	70-130
42	2-Nitrophenol	10.000	9.7157	97.16	70-130
85	4-Nitrophenol	10.000	7.2584	72.58	70-130
111	Pentachlorophenol	20.000	14.569	72.85	70-130
22	Phenol	10.000	10.243	102.43	70-130
67	2,4,5-Trichlorophe	10.000	9.3443	93.44	70-130
66	2,4,6-Trichlorophe	10.000	9.0440	90.44	70-130
119	Carbazole	10.000	9.8797	98.80	70-130
142	Benzo(k)fluoranthe	10.000	11.347	113.47	70-130
198	1,4-Dioxane	10.000	9.6155	96.15	70-130
21	Aniline	10.000	9.8258	98.26	70-130
10	N-Nitrosodimethyla	10.000	9.9376	99.38	70-130

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 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 1.7 and 4.0°C.	QAPP Table 4-2, NELAC
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Was a DDT standard analyzed every 12 hours? Was the DDT %breakdown < 15%?	✓				LCG Table 4 >15%=J/R
8. Was an endrin standard analyzed every 12 hours? Was endrin %breakdown <15%?	✓				LCG Table 4 >15%=J/R
9. Does the initial calibration curve consist of 5 concentration levels?	✓			Instrument A2HP3 1/20/11, 1/20/11 (toxaphene) Instrument A2HP9 2/7/11, 1/25/11 (toxaphene) stds = 0.05, 0.25, 0.50, 1.0, 2.5, 5.0, 7.5, 10.0, 12.5 ng on column Only the primary column was evaluated as there were no detected concentrations reported.	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 A2HP3 12/25/10 Instrument A2HP9 12/24/10	LCG Table 4 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?		✓		• The opening and closing MRLs for the analytical sequence 1/21/11 had delta-BHC recover above control limits at 162% and 176%. 4,4'-DDD recovered above control limits at 133% and 152%. No qualifications were made as there were no detected concentrations of these analytes. • On 2/4/11, the MRL at 1058 had delta-BHC recover above control limits at 161%. The MRL analyzed at 1702 had delta-BHC recover above control limits at 170%, 4,4'-DDD at 144% and endosulfan sulfate at 135%. No qualifications were made as there were no detected concentrations reported.	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 A2HP3 1/20/11 @ 1604, Tox 1/20/11 @1534 The toxaphene ICV (3r) analyzed 1/20/10 had a %D above control limits. No qualification required as there were no detected toxaphene concentrations reported. Instrument A2HP9 2/7/11 @ 1142, tox 1/25/11 @ 1729	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R
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%?	✓			• The CCV analyzed on 1/21/11 @ 1023 had an avg %D < 15%, but 4,4'DDD recovered below control limits with a %D of 24%. The bracketed 4,4'-DDD results were qualified as estimated. • The tox CCV analyzed 1/21/11 at 1052 had a %D above limits at 17%. No qualifications were made as there were no detected toxaphene concentrations. • The CCV analyzed 1/22/11 at 0056 had %D for all targets above control limits. No qualifications were made as there were no detected concentrations reported. • The CCV analyzed 2/4/11 @ 1632 had an average %D of 17.5%. All target analytes with outlier %D were above control limits and no detected concentrations were reported, so no qualifications were required.	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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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 FWGFBQmw-169c-1670-GW at 23%, FWGLL2mw-266c-1645-GW at 42%, FWGLL2mw-267c-1646-GW at 19%, FWGLL2mw-DUP3-1694-GW at 32%, FWGLL3mw-237c-1649-GW at 192%, FWGNTAmw-112c-1679-GW at 22%, FWGNTAmw-113c-1680-GW at 23% and FWGSCFmw-001-1682-GW at 36%. The results for FWGFBQmw-169c-1670-GW, FWGLL2mw-266c-1645-GW, FWGLL2mw-267c-1646-GW, FWGLL2mw-DUP3-1694-GW, FWGNTAmw-112c-1679-GW, FWGNTAmw-113c-1680-GW and FWGSCFmw-001-1682-GW were qualified as estimated, "UJ". No qualification was made for sample FWGLL3mw-237c-1649-GW as there were no detected pesticide concentrations reported for this sample.	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?			✓	As there were no detected concentrations above the RL, no evaluation was made.	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.	✓			Samples FWGLL3mw-237c-1649-GW, FWGSCFmw-001-1682-GW , FWGSCFmw-002-1683-GW, FWGSCFmw-004-1685-GW, FWGSCFmw-DUP1-1697-GW and FWGLL2mw-Dup3-1964-GW were diluted, elevating reporting limits.	

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 R0
Analysis: SW846 8081A

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

Environmental Quality Mgt., Inc.

Client Sample ID: FWGMBSmw-001C-1681-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-002 **Work Order #...:** MDF2T1AD **Matrix.....:** WG
Date Sampled...: 01/18/11 09:34 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
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	59	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-112C-1679-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-004 **Work Order #...:** MDF2W1AD **Matrix.....:** WG
Date Sampled...: 01/18/11 10:58 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
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	87	(50 - 150)
Decachlorobiphenyl	22 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-113C-1680-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-006 **Work Order #...:** MDF201AD **Matrix.....:** WG
Date Sampled...: 01/18/11 12:12 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
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	23 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-169C-1670-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-008 **Work Order #...:** MDF221AD **Matrix.....:** WG
Date Sampled...: 01/18/11 13:43 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(50 - 150)
Decachlorobiphenyl	23 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-010 **Work Order #...:** MDF251AD **Matrix.....:** WG
Date Sampled...: 01/18/11 14:54 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92	(50 - 150)
Decachlorobiphenyl	61	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-173C-1672-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-012 **Work Order #...:** MDF271AD **Matrix.....:** WG
Date Sampled...: 01/18/11 16:17 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
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	92	(50 - 150)
Decachlorobiphenyl	55	(50 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1682-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-015	**Work Order #...:** MDF3A1AD	**Matrix.....:** WG	
Date Sampled...: 01/18/11 09:30	**Date Received..:** 01/19/11		
Prep Date.....: 01/19/11	**Analysis Date..:** 02/04/11		
Prep Batch #...: 1019063			
Dilution Factor: 10	**Initial Wgt/Vol:** 980 mL	**Final Wgt/Vol..:** 5 mL	
	Method.....: SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.30	ug/L	0.070
beta-BHC	ND	0.30	ug/L	0.084
delta-BHC	ND	0.30	ug/L	0.087
gamma-BHC (Lindane)	ND	0.30	ug/L	0.064
Heptachlor	ND	0.30	ug/L	0.080
Aldrin	ND	0.30	ug/L	0.082
Heptachlor epoxide	ND	0.30	ug/L	0.071
Endosulfan I	ND	0.25	ug/L	0.13
Dieldrin	ND	0.30	ug/L	0.075
4,4'-DDE	ND	0.30	ug/L	0.097
Endrin	ND	0.30	ug/L	0.11
Endosulfan II	ND	0.25	ug/L	0.12
4,4'-DDD	ND	0.30	ug/L	0.096
Endosulfan sulfate	ND	0.30	ug/L	0.11
4,4'-DDT	ND	0.30	ug/L	0.16
Methoxychlor	ND	1.0	ug/L	0.32
Endrin ketone	ND	0.30	ug/L	0.078
Endrin aldehyde	ND	0.30	ug/L	0.11
alpha-Chlordane	ND	0.30	ug/L	0.14
gamma-Chlordane	ND	0.30	ug/L	0.12
Toxaphene	ND	20	ug/L	3.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96 DIL	(50 - 150)
Decachlorobiphenyl	36 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-002-1683-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-017 **Work Order #...:** MDF3F1AD **Matrix.....:** WG
Date Sampled...: 01/18/11 11:25 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1019063
Dilution Factor: 5 **Initial Wgt/Vol:** 930 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.15	ug/L	0.035
beta-BHC	ND	0.15	ug/L	0.042
delta-BHC	ND	0.15	ug/L	0.044
gamma-BHC (Lindane)	ND	0.15	ug/L	0.032
Heptachlor	ND	0.15	ug/L	0.040
Aldrin	ND	0.15	ug/L	0.041
Heptachlor epoxide	ND	0.15	ug/L	0.036
Endosulfan I	ND	0.12	ug/L	0.065
Dieldrin	ND	0.15	ug/L	0.038
4,4'-DDE	ND	0.15	ug/L	0.048
Endrin	ND	0.15	ug/L	0.055
Endosulfan II	ND	0.12	ug/L	0.060
4,4'-DDD	ND	0.15	ug/L	0.048
Endosulfan sulfate	ND	0.15	ug/L	0.055
4,4'-DDT	ND	0.15	ug/L	0.080
Methoxychlor	ND	0.50	ug/L	0.16
Endrin ketone	ND	0.15	ug/L	0.039
Endrin aldehyde	ND	0.15	ug/L	0.055
alpha-Chlordane	ND	0.15	ug/L	0.070
gamma-Chlordane	ND	0.15	ug/L	0.060
Toxaphene	ND	10	ug/L	1.6

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	100 DIL	(50 - 150)
Decachlorobiphenyl	91 DIL	(50 - 150)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1685-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-019 **Work Order #...:** MDF3H1AD **Matrix.....:** WG
Date Sampled...: 01/18/11 13:10 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1019063
Dilution Factor: 2 **Initial Wgt/Vol:** 970 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.060	ug/L	0.014
beta-BHC	ND	0.060	ug/L	0.017
delta-BHC	ND	0.060	ug/L	0.017
gamma-BHC (Lindane)	ND	0.060	ug/L	0.013
Heptachlor	ND	0.060	ug/L	0.016
Aldrin	ND	0.060	ug/L	0.016
Heptachlor epoxide	ND	0.060	ug/L	0.014
Endosulfan I	ND	0.050	ug/L	0.026
Dieldrin	ND	0.060	ug/L	0.015
4,4'-DDE	ND	0.060	ug/L	0.019
Endrin	ND	0.060	ug/L	0.022
Endosulfan II	ND	0.050	ug/L	0.024
4,4'-DDD	ND	0.060	ug/L	0.019
Endosulfan sulfate	ND	0.060	ug/L	0.022
4,4'-DDT	ND	0.060	ug/L	0.032
Methoxychlor	ND	0.20	ug/L	0.064
Endrin ketone	ND	0.060	ug/L	0.016
Endrin aldehyde	ND	0.060	ug/L	0.022
alpha-Chlordane	ND	0.060	ug/L	0.028
gamma-Chlordane	ND	0.060	ug/L	0.024
Toxaphene	ND	4.0	ug/L	0.64

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	98	(50 - 150)
Decachlorobiphenyl	90	(50 - 150)

NOTE(S):

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCEmw-DUP1-1697-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-021 **Work Order #...:** MDF3K1AD **Matrix.....:** WG
Date Sampled...: 01/18/11 14:00 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1019063
Dilution Factor: 2 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.060	ug/L	0.014
beta-BHC	ND	0.060	ug/L	0.017
delta-BHC	ND	0.060	ug/L	0.017
gamma-BHC (Lindane)	ND	0.060	ug/L	0.013
Heptachlor	ND	0.060	ug/L	0.016
Aldrin	ND	0.060	ug/L	0.016
Heptachlor epoxide	ND	0.060	ug/L	0.014
Endosulfan I	ND	0.050	ug/L	0.026
Dieldrin	ND	0.060	ug/L	0.015
4,4'-DDE	ND	0.060	ug/L	0.019
Endrin	ND	0.060	ug/L	0.022
Endosulfan II	ND	0.050	ug/L	0.024
4,4'-DDD	ND	0.060	ug/L	0.019
Endosulfan sulfate	ND	0.060	ug/L	0.022
4,4'-DDT	ND	0.060	ug/L	0.032
Methoxychlor	ND	0.20	ug/L	0.064
Endrin ketone	ND	0.060	ug/L	0.016
Endrin aldehyde	ND	0.060	ug/L	0.022
alpha-Chlordane	ND	0.060	ug/L	0.028
gamma-Chlordane	ND	0.060	ug/L	0.024
Toxaphene	ND	4.0	ug/L	0.64

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	109	(50 - 150)
Decachlorobiphenyl	98	(50 - 150)

NOTE(S):

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-237C-1649-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-023 **Work Order #...:** MDF3M1AD **Matrix.....:** WG
Date Sampled...: 01/18/11 15:20 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 02/08/11
Prep Batch #...: 1019063
Dilution Factor: 10 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.30	ug/L	0.070
beta-BHC	ND	0.30	ug/L	0.084
delta-BHC	ND	0.30	ug/L	0.087
gamma-BHC (Lindane)	ND	0.30	ug/L	0.064
Heptachlor	ND	0.30	ug/L	0.080
Aldrin	ND	0.30	ug/L	0.082
Heptachlor epoxide	ND	0.30	ug/L	0.071
Endosulfan I	ND	0.25	ug/L	0.13
Dieldrin	ND	0.30	ug/L	0.075
4,4'-DDE	ND	0.30	ug/L	0.097
Endrin	ND	0.30	ug/L	0.11
Endosulfan II	ND	0.25	ug/L	0.12
4,4'-DDD	ND	0.30	ug/L	0.096
Endosulfan sulfate	ND	0.30	ug/L	0.11
4,4'-DDT	ND	0.30	ug/L	0.16
Methoxychlor	ND	1.0	ug/L	0.32
Endrin ketone	ND	0.30	ug/L	0.078
Endrin aldehyde	ND	0.30	ug/L	0.11
alpha-Chlordane	ND	0.30	ug/L	0.14
gamma-Chlordane	ND	0.30	ug/L	0.12
Toxaphene	ND	20	ug/L	3.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	192 DIL,*	(50 - 150)
Decachlorobiphenyl	55 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: FWGEQUIPRINSE2-1699-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-025 **Work Order #...:** MDF3P1AD **Matrix.....:** WQ
Date Sampled...: 01/18/11 16:30 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
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	94	(50 - 150)
Decachlorobiphenyl	77	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1645-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-027 **Work Order #...:** MDF3R1AD **Matrix.....:** WG
Date Sampled...: 01/18/11 09:10 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
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	95	(50 - 150)
Decachlorobiphenyl	42 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1646-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-029 **Work Order #...:** MDF3V1AD **Matrix.....:** WG
Date Sampled...: 01/18/11 10:20 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
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	89	(50 - 150)
Decachlorobiphenyl	19 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1694-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-031 **Work Order #...:** MDF3X1AD **Matrix.....:** WG
Date Sampled...: 01/18/11 11:20 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 02/08/11
Prep Batch #...: 1019063
Dilution Factor: 10 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.30	ug/L	0.070
beta-BHC	ND	0.30	ug/L	0.084
delta-BHC	ND	0.30	ug/L	0.087
gamma-BHC (Lindane)	ND	0.30	ug/L	0.064
Heptachlor	ND	0.30	ug/L	0.080
Aldrin	ND	0.30	ug/L	0.082
Heptachlor epoxide	ND	0.30	ug/L	0.071
Endosulfan I	ND	0.25	ug/L	0.13
Dieldrin	ND	0.30	ug/L	0.075
4,4'-DDE	ND	0.30	ug/L	0.097
Endrin	ND	0.30	ug/L	0.11
Endosulfan II	ND	0.25	ug/L	0.12
4,4'-DDD	ND	0.30	ug/L	0.096
Endosulfan sulfate	ND	0.30	ug/L	0.11
4,4'-DDT	ND	0.30	ug/L	0.16
Methoxychlor	ND	1.0	ug/L	0.32
Endrin ketone	ND	0.30	ug/L	0.078
Endrin aldehyde	ND	0.30	ug/L	0.11
alpha-Chlordane	ND	0.30	ug/L	0.14
gamma-Chlordane	ND	0.30	ug/L	0.12
Toxaphene	ND	20	ug/L	3.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96 DIL	(50 - 150)
Decachlorobiphenyl	32 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: FWGLL2mw-269C-1647-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-033 **Work Order #...:** MDF311AH **Matrix.....:** WG
Date Sampled...: 01/18/11 12:05 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(50 - 150)
Decachlorobiphenyl	53	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1648-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-035 **Work Order #...:** MDF341AD **Matrix.....:** WG
Date Sampled...: 01/18/11 14:20 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
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	94	(50 - 150)
Decachlorobiphenyl	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-037 **Work Order #...:** MDF361AD **Matrix.....:** WG
Date Sampled...: 01/18/11 15:25 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
Dilution Factor: 1 **Initial Wgt/Vol:** 900 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(50 - 150)
Decachlorobiphenyl	68	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-039 **Work Order #...:** MDF381AD **Matrix.....:** WG
Date Sampled...: 01/18/11 16:30 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1019063
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(50 - 150)
Decachlorobiphenyl	80	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1A190402 **Work Order #...:** MDF4J1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A190000-063

Prep Date.....: 01/19/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/21/11 **Prep Batch #...:** 1019063
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	95	(50 - 150)
Decachlorobiphenyl	84	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1A190402 Work Order #...: MDF4J1AC Matrix.....: WATER
LCS Lot-Sample#: A1A190000-063
Prep Date.....: 01/19/11 Analysis Date..: 01/21/11
Prep Batch #...: 1019063
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	94	(44 - 137)	SW846 8081A
beta-BHC	83	(50 - 135)	SW846 8081A
delta-BHC	80	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	88	(58 - 127)	SW846 8081A
Heptachlor	83	(48 - 150)	SW846 8081A
Aldrin	90	(53 - 128)	SW846 8081A
Heptachlor epoxide	86	(50 - 127)	SW846 8081A
Endosulfan I	54	(50 - 160)	SW846 8081A
Dieldrin	90	(50 - 124)	SW846 8081A
4,4'-DDE	89	(50 - 130)	SW846 8081A
Endrin	88	(50 - 137)	SW846 8081A
Endosulfan II	60	(50 - 144)	SW846 8081A
4,4'-DDD	83	(50 - 137)	SW846 8081A
Endosulfan sulfate	82	(50 - 160)	SW846 8081A
4,4'-DDT	81	(50 - 145)	SW846 8081A
Methoxychlor	83	(50 - 160)	SW846 8081A
Endrin ketone	77	(50 - 150)	SW846 8081A
Endrin aldehyde	66	(30 - 160)	SW846 8081A
alpha-Chlordane	87	(50 - 122)	SW846 8081A
gamma-Chlordane	87	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	76	(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 #...: A1A190402 Work Order #...: MDF311AT-MS Matrix.....: WG
MS Lot-Sample #: A1A190402-033 MDF311AU-MSD
Date Sampled...: 01/18/11 12:05 Date Received..: 01/19/11
Prep Date.....: 01/19/11 Analysis Date..: 01/21/11
Prep Batch #...: 1019063
Dilution Factor: 2 Initial Wgt/Vol: 525 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	105	(50 - 150)			SW846 8081A
	115	(50 - 150)	9.1	(0-50)	SW846 8081A
beta-BHC	93	(50 - 150)			SW846 8081A
	104	(50 - 150)	10	(0-50)	SW846 8081A
delta-BHC	91	(50 - 150)			SW846 8081A
	99	(50 - 150)	9.0	(0-50)	SW846 8081A
gamma-BHC (Lindane)	100	(50 - 150)			SW846 8081A
	111	(50 - 150)	11	(0-50)	SW846 8081A
Heptachlor	92	(50 - 150)			SW846 8081A
	104	(50 - 150)	11	(0-50)	SW846 8081A
Aldrin	95	(50 - 150)			SW846 8081A
	107	(50 - 150)	11	(0-50)	SW846 8081A
Heptachlor epoxide	96	(50 - 150)			SW846 8081A
	106	(50 - 150)	10	(0-50)	SW846 8081A
Endosulfan I	61	(50 - 150)			SW846 8081A
	67	(50 - 150)	10	(0-50)	SW846 8081A
Dieldrin	100	(50 - 150)			SW846 8081A
	110	(50 - 150)	9.2	(0-50)	SW846 8081A
4,4'-DDE	93	(50 - 150)			SW846 8081A
	103	(50 - 150)	10	(0-50)	SW846 8081A
Endrin	102	(50 - 150)			SW846 8081A
	111	(50 - 150)	8.4	(0-50)	SW846 8081A
Endosulfan II	70	(50 - 150)			SW846 8081A
	74	(50 - 150)	5.5	(0-50)	SW846 8081A
4,4'-DDD	102	(50 - 150)			SW846 8081A
	107	(50 - 150)	5.1	(0-50)	SW846 8081A
Endosulfan sulfate	98	(50 - 150)			SW846 8081A
	101	(50 - 150)	3.3	(0-50)	SW846 8081A
4,4'-DDT	85	(50 - 150)			SW846 8081A
	92	(50 - 150)	8.4	(0-50)	SW846 8081A
Methoxychlor	107	(50 - 150)			SW846 8081A
	106	(50 - 150)	1.0	(0-50)	SW846 8081A
Endrin ketone	95	(50 - 150)			SW846 8081A
	97	(50 - 150)	1.5	(0-50)	SW846 8081A
Endrin aldehyde	76	(50 - 150)			SW846 8081A
	78	(50 - 150)	3.4	(0-50)	SW846 8081A
alpha-Chlordane	95	(50 - 150)			SW846 8081A
	106	(50 - 150)	10	(0-50)	SW846 8081A
gamma-Chlordane	98	(50 - 150)			SW846 8081A
	107	(50 - 150)	9.4	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1A190402 **Work Order #...:** MDF311AT-MS **Matrix.....:** WG
MS Lot-Sample #: A1A190402-033 MDF311AU-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
	97	(50 - 150)
Decachlorobiphenyl	52	(50 - 150)
	59	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

FORM 8
PESTICIDES ANALYTICAL SEQUENCE

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1A190402

GC Column: CLP PESTICIDES II ID: 0.53 (mm) Init. Calib. Date(s): 01/10/11 01/20/11

Instrument ID: A2HP3

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION					
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		PEM E216	01/21/11	0923		
02		AB3 E212	01/21/11	1023		4,4-DDD
03		TOX3 F004	01/21/11	1052		17,
04		MRL	01/21/11	1123		DeltaBHC, 4,4'-DDD
05	MDF4JCHK	MDF4J1AC	01/21/11	1153		
06	FWGMBSMW-001	MDF2T1AD	01/21/11	1223		
07	FWGNTAMW-112	MDF2W1AD	01/21/11	1254		
08	FWGNTAMW-113	MDF201AD	01/21/11	1324		
09	FWGFBQMW-169	MDF221AD	01/21/11	1355		
10	FWGFBQMW-172	MDF251AD	01/21/11	1425		
11	FWGFBQMW-173	MDF271AD	01/21/11	1455		
12	FWGEQUIPRINS	MDF3P1AD	01/21/11	1756		
13	FWGLL2MW-266	MDF3R1AD	01/21/11	1826		
14	FWGLL2MW-267	MDF3V1AD	01/21/11	1856		
15	MDF4JBLK	MDF4J1AA	01/21/11	1956		
16		PEM E216	01/21/11	2027		
17		AB3 E212	01/21/11	2057		
18	FWGLL3MW-236	MDF341AD	01/21/11	2127		
19	FWGLL3MW-242	MDF361AD	01/21/11	2156		
20	FWGLL3MW-243	MDF381AD	01/21/11	2227		
21	FWGLL2MW-269	MDF311AH	01/21/11	2257		
22	FWGLL2MW-269	MDF311AT	01/21/11	2327		
23	FWGLL2MW-269	MDF311AU	01/21/11	2357		
24		TOX3 F004	01/22/11	0026		
25		AB3 E212	01/22/11	0056		
26		MRL	01/22/11	0126		DeltaBHC, 4,4'-DDD
27						
28						
29						
30						
31						
32						

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 20-JAN-2011 15:34
Lab File ID: 015F1501.D Init. Cal. Date(s): 10-JAN-2011 20-JAN-2011
Analysis Type: Init. Cal. Times: 08:50 15:04
Lab Sample ID: ICV F007 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110120IC-1.b\PEST3.m\pest3r.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
19 Toxaphene (1)	1485812	1749163	1749163	0.010	-17.72439	15.00000	Averaged	<-
(2)	736065	873748	873748	0.010	-18.70526	15.00000	Averaged	<-
(3)	1551353	1802272	1802272	0.010	-16.17418	15.00000	Averaged	<-
(4)	747637	868810	868810	0.010	-16.20754	15.00000	Averaged	<-
(5)	1386291	1586018	1586018	0.010	-14.40728	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 16.64373
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

Data File: 005F0501.D
Report Date: 03-Feb-2011 12:54

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 21-JAN-2011 10:52
Lab File ID: 005F0501.D Init. Cal. Date(s): 10-JAN-2011 20-JAN-2011
Analysis Type: Init. Cal. Times: 08:50 15:04
Lab Sample ID: TOX3 F004 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\PEST3.m\pest3r.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
19 Toxaphene(1)	1485812	1750853	1750853	0.010	-17.83813	15.00000	Averaged	<-
(2)	736065	866585	866585	0.010	-17.73211	15.00000	Averaged	<-
(3)	1551353	1830032	1830032	0.010	-17.96359	15.00000	Averaged	<-
(4)	747637	871963	871963	0.010	-16.62926	15.00000	Averaged	<-
(5)	1386291	1614628	1614628	0.010	-16.47106	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 17.32683
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 21-JAN-2011 10:23
Lab File ID: 004F0401.D Init. Cal. Date(s): 10-JAN-2011 20-JAN-2011
Analysis Type: Init. Cal. Times: 08:50 15:04
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\PEST3.m\pest3r.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	97814093	96923320	96923320	0.000	0.91068	15.00000	Averaged	
4 alpha-BHC	112769180	102153000	102153000	0.010	9.41408	15.00000	Averaged	
5 gamma-BHC (Lindane)	101731081	90633320	90633320	0.010	10.90892	15.00000	Averaged	
6 beta-BHC	19925113	17182360	17182360	0.010	13.76531	15.00000	Averaged	
7 delta-BHC	0.02500	0.02140	31718280	0.010	14.40889	0.000e+000	Linear	
8 Heptachlor	36304750	32442640	32442640	0.010	10.63803	15.00000	Averaged	
10 Aldrin	100167321	91436480	91436480	0.010	8.71626	15.00000	Averaged	
12 Heptachlor epoxide	39857993	34411560	34411560	0.010	13.66459	15.00000	Averaged	
13 gamma-Chlordane	40840553	34598640	34598640	0.010	15.28362	15.00000	Averaged	<-
14 alpha-Chlordane	41327792	35844480	35844480	0.010	13.26786	15.00000	Averaged	
15 Endosulfan I	78114612	67609920	67609920	0.010	13.44779	15.00000	Averaged	
16 4,4'-DDE	78377130	64507720	64507720	0.010	17.69574	15.00000	Averaged	<-
17 Dieldrin	41566492	35530040	35530040	0.010	14.52240	15.00000	Averaged	
20 Endrin	38911467	32382240	32382240	0.010	16.77970	15.00000	Averaged	<-
22 4,4'-DDD	0.02500	0.01904	38533000	0.010	23.85233	0.000e+000	Linear	
23 Endosulfan II	40663730	34142120	34142120	0.010	16.03790	15.00000	Averaged	<-
24 4,4'-DDT	61021513	48898760	48898760	0.010	19.86636	15.00000	Averaged	<-
25 Endrin aldehyde	56526679	49386520	49386520	0.010	12.63149	15.00000	Averaged	
26 Endosulfan sulfate	64004696	53531360	53531360	0.010	16.36339	15.00000	Averaged	<-
28 Methoxychlor	32206227	26720680	26720680	0.010	17.03257	15.00000	Averaged	<-
29 Endrin ketone	70045669	58202360	58202360	0.010	16.90798	15.00000	Averaged	<-
$ 30 Decachlorobiphenyl	67868448	60566600	60566600	0.010	10.75883	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 13.94885
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: 006F0601.D
Report Date: 03-Feb-2011 12:54

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: MRL
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: MRL.spk
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\PEST3.m\pest3r.m
Misc Info:

Client SDG: SDGa00711
Fraction: Pesticides

Operator: 093905
SampleType: MRL
Quant Type: ESTD

1/21/11 @ 1123

SPIKE	COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4	alpha-BHC	0.005000	0.004378	87.57	70-130
5	gamma-BHC (Lindane	0.005000	0.004609	92.18	70-130
6	beta-BHC	0.005000	0.005006	100.13	70-130
7	delta-BHC	0.005000	0.008115	162.30*	70-130
8	Heptachlor	0.005000	0.004767	95.34	70-130
10	Aldrin	0.005000	0.004810	96.19	70-130
12	Heptachlor epoxide	0.005000	0.004909	98.19	70-130
13	gamma-Chlordane	0.005000	0.004730	94.61	70-130
14	alpha-Chlordane	0.005000	0.004844	96.88	70-130
15	Endosulfan I	0.005000	0.005072	101.44	70-130
16	4,4'-DDE	0.005000	0.004310	86.19	70-130
17	Dieldrin	0.005000	0.004588	91.77	70-130
20	Endrin	0.005000	0.004697	93.95	70-130
22	4,4'-DDD	0.005000	0.006672	133.43*	70-130
23	Endosulfan II	0.005000	0.004881	97.61	70-130
24	4,4'-DDT	0.005000	0.004676	93.53	70-130
25	Endrin aldehyde	0.005000	0.005199	103.99	70-130
26	Endosulfan sulfate	0.005000	0.005226	104.52	70-130
28	Methoxychlor	0.005000	0.005172	103.43	70-130
29	Endrin ketone	0.005000	0.004975	99.49	70-130

Data File: 034F3401.D
Report Date: 03-Feb-2011 12:58

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: MRL
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: MRL.spk
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\PEST3.m\pest3r.m
Misc Info:

Client SDG: SDGa00711
Fraction: Pesticides
Operator: 093905
SampleType: MRL
Quant Type: ESTD

1/22/11 @ 0120

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.004882	97.64	70-130
5 gamma-BHC (Lindane	0.005000	0.005241	104.82	70-130
6 beta-BHC	0.005000	0.005830	116.61	70-130
7 delta-BHC	0.005000	0.008805	176.09*	70-130
8 Heptachlor	0.005000	0.005438	108.76	70-130
10 Aldrin	0.005000	0.005300	105.99	70-130
12 Heptachlor epoxide	0.005000	0.005607	112.14	70-130
13 gamma-Chlordane	0.005000	0.005415	108.30	70-130
14 alpha-Chlordane	0.005000	0.005621	112.42	70-130
15 Endosulfan I	0.005000	0.005806	116.12	70-130
16 4,4'-DDE	0.005000	0.005100	102.00	70-130
17 Dieldrin	0.005000	0.005370	107.41	70-130
20 Endrin	0.005000	0.005572	111.43	70-130
22 4,4'-DDD	0.005000	0.007623	152.47*	70-130
23 Endosulfan II	0.005000	0.005657	113.14	70-130
24 4,4'-DDT	0.005000	0.005405	108.10	70-130
25 Endrin aldehyde	0.005000	0.005914	118.29	70-130
26 Endosulfan sulfate	0.005000	0.005911	118.21	70-130
28 Methoxychlor	0.005000	0.005791	115.82	70-130
29 Endrin ketone	0.005000	0.005688	113.76	70-130

Data File: 033F3301.D
Report Date: 03-Feb-2011 12:58

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i
Lab File ID: 033F3301.D
Analysis Type:
Lab Sample ID: AB3 E212
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\PEST3.m\pest3r.m

Injection Date: 22-JAN-2011 00:56
Init. Cal. Date(s): 10-JAN-2011 20-JAN-2011
Init. Cal. Times: 08:50 15:04
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	97814093	107630360	107630360	0.000	-10.03564	15.00000	Averaged	
4 alpha-BHC	112769180	137344400	137344400	0.010	-21.79250	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	101731081	126218160	126218160	0.010	-24.07040	15.00000	Averaged	<-
6 beta-BHC	19925113	24698640	24698640	0.010	-23.95734	15.00000	Averaged	<-
7 delta-BHC	0.02500	0.03014	48322080	0.010	-20.54657	0.000e+000	Linear	
8 Heptachlor	36304750	45000400	45000400	0.010	-23.95182	15.00000	Averaged	<-
10 Aldrin	100167321	120941960	120941960	0.010	-20.73994	15.00000	Averaged	<-
12 Heptachlor epoxide	39857993	49577760	49577760	0.010	-24.38599	15.00000	Averaged	<-
13 gamma-Chlordane	40840553	49975440	49975440	0.010	-22.36720	15.00000	Averaged	<-
14 alpha-Chlordane	41327792	50902160	50902160	0.010	-23.16690	15.00000	Averaged	<-
15 Endosulfan I	78114612	97002840	97002840	0.010	-24.18015	15.00000	Averaged	<-
16 4,4'-DDE	78377130	93938760	93938760	0.010	-19.85481	15.00000	Averaged	<-
17 Dieldrin	41566492	51876520	51876520	0.010	-24.80370	15.00000	Averaged	<-
20 Endrin	38911467	49158800	49158800	0.010	-26.33500	15.00000	Averaged	<-
22 4,4'-DDD	0.02500	0.03027	65622480	0.010	-21.09294	0.000e+000	Linear	
23 Endosulfan II	40663730	49937240	49937240	0.010	-22.80536	15.00000	Averaged	<-
24 4,4'-DDT	61021513	75219800	75219800	0.010	-23.26767	15.00000	Averaged	<-
25 Endrin aldehyde	56526679	70886200	70886200	0.010	-25.40309	15.00000	Averaged	<-
26 Endosulfan sulfate	64004696	79369240	79369240	0.010	-24.00534	15.00000	Averaged	<-
28 Methoxychlor	32206227	39647400	39647400	0.010	-23.10477	15.00000	Averaged	<-
29 Endrin ketone	70045669	86521280	86521280	0.010	-23.52124	15.00000	Averaged	<-
$ 30 Decachlorobiphenyl	67868448	81809840	81809840	0.010	-20.54179	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 22.45137
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

FORM 8
PESTICIDES ANALYTICAL SEQUENCE

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1A190402

GC Column: CLP PESTICIDES ID: 0.53 (mm) Init. Calib. Date(s): 01/10/11 01/31/11

Instrument ID: A2HP3

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION					
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		PEM E216	02/04/11	0826		
02		AB3 E212	02/04/11	0958		
03		TOX3 F004	02/04/11	1028		
04		MRL	02/04/11	1058		
05	FWGSCFMW-001	MDF3A1AD	02/04/11	1129		
06	FWGSCFMW-002	MDF3F1AD	02/04/11	1159		
07	FWGSCFMW-004	MDF3H1AD	02/04/11	1229		
08	FWGSCFMW-DUP	MDF3K1AD	02/04/11	1300		
09		TOX3 F004	02/04/11	1602		
10		AB3 E212	02/04/11	1632		
11		MRL	02/04/11	1702		
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 04-FEB-2011 09:58
Lab File ID: 004F0401.D Init. Cal. Date(s): 10-JAN-2011 31-JAN-2011
Analysis Type: Init. Cal. Times: 08:50 11:15
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m\pest3r.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 Tetrachloro-m-xylene	97814093	109848160	109848160	0.000	-12.30300	15.00000	Averaged
4 alpha-BHC	112769180	114144240	114144240	0.010	-1.21936	15.00000	Averaged
5 gamma-BHC (Lindane)	101731081	99095120	99095120	0.010	2.59111	15.00000	Averaged
6 beta-BHC	19925113	18690160	18690160	0.010	6.19797	15.00000	Averaged
7 delta-BHC	0.02500	0.02341	35538600	0.010	6.36594	0.000e+000	Linear
8 Heptachlor	36304750	36336000	36336000	0.010	-0.08608	15.00000	Averaged
10 Aldrin	100167321	105472960	105472960	0.010	-5.29678	15.00000	Averaged
12 Heptachlor epoxide	39857993	38827080	38827080	0.010	2.58647	15.00000	Averaged
13 gamma-Chlordane	40840553	39785520	39785520	0.010	2.58330	15.00000	Averaged
14 alpha-Chlordane	41327792	40307560	40307560	0.010	2.46863	15.00000	Averaged
15 Endosulfan I	78114612	78246840	78246840	0.010	-0.16927	15.00000	Averaged
16 4,4'-DDE	78377130	76519680	76519680	0.010	2.36989	15.00000	Averaged
17 Dieldrin	41566492	41450560	41450560	0.010	0.27891	15.00000	Averaged
20 Endrin	38911467	37286560	37286560	0.010	4.17591	15.00000	Averaged
22 4,4'-DDD	0.02500	0.02082	42842440	0.010	16.70255	0.000e+000	Linear
23 Endosulfan II	40663730	41479160	41479160	0.010	-2.00530	15.00000	Averaged
24 4,4'-DDT	61021513	60550560	60550560	0.010	0.77178	15.00000	Averaged
25 Endrin aldehyde	56526679	58561840	58561840	0.010	-3.60035	15.00000	Averaged
26 Endosulfan sulfate	64004696	64745920	64745920	0.010	-1.15808	15.00000	Averaged
28 Methoxychlor	32206227	32218080	32218080	0.010	-0.03680	15.00000	Averaged
29 Endrin ketone	70045669	70199640	70199640	0.010	-0.21981	15.00000	Averaged
$ 30 Decachlorobiphenyl	67868448	76030160	76030160	0.010	-12.02578	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 3.87332
Maximun Average %D/Drift = ~~15.00000~~ 20
* Passed Average %D/Drift Test.

Data File: 006F0601.D
Report Date: 04-Feb-2011 12:14

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: MRL
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: MRL.spk
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m\pest3r.m
Misc Info:

Client SDG: SDGa00711
Fraction: Pesticides

Operator: 093905
SampleType: MRL
Quant Type: ESTD

2/4/1058

SPIKE	COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4	alpha-BHC	0.005000	0.004655	93.11	70-130
5	gamma-BHC (Lindane	0.005000	0.004779	95.58	70-130
6	beta-BHC	0.005000	0.005098	101.97	70-130
7	delta-BHC	0.005000	0.008054	161.08*	70-130
8	Heptachlor	0.005000	0.005055	101.09	70-130
10	Aldrin	0.005000	0.005162	103.25	70-130
12	Heptachlor epoxide	0.005000	0.005035	100.71	70-130
13	gamma-Chlordane	0.005000	0.005007	100.14	70-130
14	alpha-Chlordane	0.005000	0.005120	102.40	70-130
15	Endosulfan I	0.005000	0.005177	103.54	70-130
16	4,4'-DDE	0.005000	0.004818	96.36	70-130
17	Dieldrin	0.005000	0.004919	98.38	70-130
20	Endrin	0.005000	0.004828	96.56	70-130
22	4,4'-DDD	0.005000	0.006266	125.31	70-130
23	Endosulfan II	0.005000	0.005275	105.51	70-130
24	4,4'-DDT	0.005000	0.004956	99.11	70-130
25	Endrin aldehyde	0.005000	0.005579	111.58	70-130
26	Endosulfan sulfate	0.005000	0.005446	108.93	70-130
28	Methoxychlor	0.005000	0.005546	110.93	70-130
29	Endrin ketone	0.005000	0.005325	106.51	70-130

Data File: 018F1801.D
Report Date: 07-Feb-2011 07:42

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: MRL
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: MRL.spk
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m\pest3r.m
Misc Info:

Client SDG: SDGa00711
Fraction: Pesticides

Operator: 093905
SampleType: MRL
Quant Type: ESTD

2/4/11
@1702

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.004961	99.22	70-130
5 gamma-BHC (Lindane	0.005000	0.005112	102.24	70-130
6 beta-BHC	0.005000	0.005688	113.76	70-130
7 delta-BHC	0.005000	0.008532	170.63*	70-130
8 Heptachlor	0.005000	0.005286	105.73	70-130
10 Aldrin	0.005000	0.005674	113.47	70-130
12 Heptachlor epoxide	0.005000	0.005909	118.18	70-130
13 gamma-Chlordane	0.005000	0.005570	111.39	70-130
14 alpha-Chlordane	0.005000	0.005817	116.34	70-130
15 Endosulfan I	0.005000	0.006078	121.56	70-130
16 4,4'-DDE	0.005000	0.005246	104.92	70-130
17 Dieldrin	0.005000	0.005394	107.88	70-130
20 Endrin	0.005000	0.005450	109.00	70-130
22 4,4'-DDD	0.005000	0.007205	144.10*	70-130
23 Endosulfan II	0.005000	0.005765	115.30	70-130
24 4,4'-DDT	0.005000	0.005419	108.39	70-130
25 Endrin aldehyde	0.005000	0.005911	118.23	70-130
26 Endosulfan sulfate	0.005000	0.006749	134.98*	70-130
28 Methoxychlor	0.005000	0.005612	112.24	70-130
29 Endrin ketone	0.005000	0.005793	115.85	70-130

Data File: 017F1701.D
Report Date: 07-Feb-2011 07:42

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i
Lab File ID: 017F1701.D
Analysis Type:
Lab Sample ID: AB3 E212
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m\pest3r.m

Injection Date: 04-FEB-2011 16:32
Init. Cal. Date(s): 10-JAN-2011 31-JAN-2011
Init. Cal. Times: 08:50 11:15
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	97814093	113482040	113482040	0.000	-16.01809	15.00000	Averaged	<-
4 alpha-BHC	112769180	137358840	137358840	0.010	-21.80530	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	101731081	120114760	120114760	0.010	-18.07086	15.00000	Averaged	<-
6 beta-BHC	19925113	23746840	23746840	0.010	-19.18045	15.00000	Averaged	<-
7 delta-BHC	0.02500	0.02869	45573000	0.010	-14.75917	0.000e+000	Linear	
8 Heptachlor	36304750	42324160	42324160	0.010	-16.58023	15.00000	Averaged	<-
10 Aldrin	100167321	126467600	126467600	0.010	-26.25635	15.00000	Averaged	<-
12 Heptachlor epoxide	39857993	48410280	48410280	0.010	-21.45689	15.00000	Averaged	<-
13 gamma-Chlordane	40840553	48762240	48762240	0.010	-19.39662	15.00000	Averaged	<-
14 alpha-Chlordane	41327792	50061560	50061560	0.010	-21.13292	15.00000	Averaged	<-
15 Endosulfan I	78114612	94599120	94599120	0.010	-21.10298	15.00000	Averaged	<-
16 4,4'-DDE	78377130	94087080	94087080	0.010	-20.04405	15.00000	Averaged	<-
17 Dieldrin	41566492	50142440	50142440	0.010	-20.63188	15.00000	Averaged	<-
20 Endrin	38911467	45692080	45692080	0.010	-17.42575	15.00000	Averaged	<-
22 4,4'-DDD	0.02500	0.02450	51703920	0.010	2.00011	0.000e+000	Linear	
23 Endosulfan II	40663730	47722440	47722440	0.010	-17.35874	15.00000	Averaged	<-
24 4,4'-DDT	61021513	69008320	69008320	0.010	-13.08851	15.00000	Averaged	
25 Endrin aldehyde	56526679	66724800	66724800	0.010	-18.04125	15.00000	Averaged	<-
26 Endosulfan sulfate	64004696	75258520	75258520	0.010	-17.58281	15.00000	Averaged	<-
28 Methoxychlor	32206227	35138960	35138960	0.010	-9.10611	15.00000	Averaged	
29 Endrin ketone	70045669	79817240	79817240	0.010	-13.95029	15.00000	Averaged	
$ 30 Decachlorobiphenyl	67868448	81465720	81465720	0.010	-20.03475	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 17.50109
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

FORM 8
PESTICIDES ANALYTICAL SEQUENCE

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1A190402

GC Column: CLP PESTICIDES II ID: 0.53 (mm) Init. Calib. Date(s): 12/15/10 02/07/11

Instrument ID: A2HP9

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION					
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		PEM	02/08/11	1112		
02		AB3 E212	02/08/11	1135		
03		MRL	02/08/11	1158		
04		TOX3	02/08/11	1221		
05	FWGLL3MW-237	MDF3M1AD	02/08/11	1338		
06	FWGLL2MW-DUP	MDF3X1AD	02/08/11	1401		
07		TOX3 F004	02/08/11	1424		
08		AB3 E212	02/08/11	1447		
09		MRL	02/08/11	1510		
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 21-JAN-2011 10:52
Lab File ID: 005F0501.D Init. Cal. Date(s): 10-JAN-2011 20-JAN-2011
Analysis Type: Init. Cal. Times: 08:50 15:04
Lab Sample ID: TOX3 F004 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\PEST3.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
19 Toxaphene(1)	411409	504277	504277	0.010	-22.57316	15.00000	Averaged	<-
(2)	304830	370992	370992	0.010	-21.70468	15.00000	Averaged	<-
(3)	442645	542810	542810	0.010	-22.62878	15.00000	Averaged	<-
(4)	583314	711917	711917	0.010	-22.04705	15.00000	Averaged	<-
(5)	335798	411400	411400	0.010	-22.51424	15.00000	Averaged	<-

Average %D / Drift Results.
Calculated Average %D/Drift = 22.29358
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

Data File: \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\025F2501.D Page 1
Report Date: 03-Feb-2011 12:48

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 21-JAN-2011 20:57
Lab File ID: 025F2501.D Init. Cal. Date(s): 10-JAN-2011 20-JAN-2011
Analysis Type: Init. Cal. Times: 08:50 15:04
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\PEST3.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	22721513	25075920	25075920	0.000	-10.36202	15.00000	Averaged	
4 alpha-BHC	36768068	47863280	47863280	0.010	-30.17622	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	31887888	39987720	39987720	0.010	-25.40097	15.00000	Averaged	<-
6 beta-BHC	15569316	19391440	19391440	0.010	-24.54908	15.00000	Averaged	<-
7 delta-BHC	17712895	22332320	22332320	0.010	-26.07945	15.00000	Averaged	<-
9 Heptachlor	30208883	29058400	29058400	0.010	3.80842	15.00000	Averaged	
10 Aldrin	14760555	18286200	18286200	0.010	-23.88559	15.00000	Averaged	<-
12 Heptachlor epoxide	11324613	14014600	14014600	0.010	-23.75345	15.00000	Averaged	<-
13 gamma-Chlordane	12167686	14663400	14663400	0.010	-20.51100	15.00000	Averaged	<-
14 alpha-Chlordane	13399169	16294040	16294040	0.010	-21.60485	15.00000	Averaged	<-
16 4,4'-DDE	14736563	17905240	17905240	0.010	-21.50214	15.00000	Averaged	<-
15 Endosulfan I	12580687	15174880	15174880	0.010	-20.62044	15.00000	Averaged	<-
17 Dieldrin	14579804	17480160	17480160	0.010	-19.89297	15.00000	Averaged	<-
20 Endrin	30433638	37064960	37064960	0.010	-21.78945	15.00000	Averaged	<-
22 4,4'-DDD	10702121	12136400	12136400	0.010	-13.40182	15.00000	Averaged	
23 Endosulfan II	14673513	17540120	17540120	0.010	-19.53593	15.00000	Averaged	<-
24 4,4'-DDT	11927563	11524880	11524880	0.010	3.37607	15.00000	Averaged	
26 Endrin aldehyde	27018599	32796760	32796760	0.010	-21.38586	15.00000	Averaged	<-
27 Methoxychlor	13822208	13292560	13292560	0.010	3.83186	15.00000	Averaged	
28 Endosulfan sulfate	31159714	37004520	37004520	0.010	-18.75757	15.00000	Averaged	<-
29 Endrin ketone	17548646	19624120	19624120	0.010	-11.82698	15.00000	Averaged	
$ 30 Decachlorobiphenyl	38627488	48701960	48701960	0.010	-26.08109	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 18.73333
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

Data File: \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\033F3301.D Page 1
Report Date: 03-Feb-2011 12:49

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 22-JAN-2011 00:56
Lab File ID: 033F3301.D Init. Cal. Date(s): 10-JAN-2011 20-JAN-2011
Analysis Type: Init. Cal. Times: 08:50 15:04
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\PEST3.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	22721513	26504600	26504600	0.000	-16.64980	15.00000	Averaged	<-
4 alpha-BHC	36768068	52557240	52557240	0.010	-42.94262	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	31887888	44983880	44983880	0.010	-41.06886	15.00000	Averaged	<-
6 beta-BHC	15569316	21719760	21719760	0.010	-39.50363	15.00000	Averaged	<-
7 delta-BHC	17712895	25466720	25466720	0.010	-43.77503	15.00000	Averaged	<-
9 Heptachlor	30208883	33720480	33720480	0.010	-11.62439	15.00000	Averaged	
10 Aldrin	14760555	19697840	19697840	0.010	-33.44918	15.00000	Averaged	<-
12 Heptachlor epoxide	11324613	15626600	15626600	0.010	-37.98793	15.00000	Averaged	<-
13 gamma-Chlordane	12167686	16226560	16226560	0.010	-33.35782	15.00000	Averaged	<-
14 alpha-Chlordane	13399169	18176720	18176720	0.010	-35.65558	15.00000	Averaged	<-
16 4,4'-DDE	14736563	19612200	19612200	0.010	-33.08530	15.00000	Averaged	<-
15 Endosulfan I	12580687	17073840	17073840	0.010	-35.71469	15.00000	Averaged	<-
17 Dieldrin	14579804	19487560	19487560	0.010	-33.66133	15.00000	Averaged	<-
20 Endrin	30433638	41932240	41932240	0.010	-37.78254	15.00000	Averaged	<-
22 4,4'-DDD	10702121	13298360	13298360	0.010	-24.25911	15.00000	Averaged	<-
23 Endosulfan II	14673513	19185000	19185000	0.010	-30.74578	15.00000	Averaged	<-
24 4,4'-DDT	11927563	12919080	12919080	0.010	-8.31282	15.00000	Averaged	
26 Endrin aldehyde	27018599	36488360	36488360	0.010	-35.04904	15.00000	Averaged	<-
27 Methoxychlor	13822208	14462480	14462480	0.010	-4.63220	15.00000	Averaged	
28 Endosulfan sulfate	31159714	40333000	40333000	0.010	-29.43957	15.00000	Averaged	<-
29 Endrin ketone	17548646	21144600	21144600	0.010	-20.49135	15.00000	Averaged	<-
$ 30 Decachlorobiphenyl	38627488	51309240	51309240	0.010	-32.83090	15.00000	Averaged	<-

Average %D / Drift Results.
Calculated Average %D/Drift = 30.09179
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa00711
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\PEST3.m
Misc Info:

SPIKE	COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4	alpha-BHC	0.005000	0.006116	122.32	70-130
5	gamma-BHC (Lindane	0.005000	0.006343	126.87	70-130
6	beta-BHC	0.005000	0.007013	140.27*	70-130
7	delta-BHC	0.005000	0.006226	124.51	70-130
9	Heptachlor	0.005000	0.005397	107.94	70-130
10	Aldrin	0.005000	0.006290	125.81	70-130
12	Heptachlor epoxide	0.005000	0.006777	135.55*	70-130
13	gamma-Chlordane	0.005000	0.006408	128.15	70-130
14	alpha-Chlordane	0.005000	0.006636	132.71*	70-130
15	Endosulfan I	0.005000	0.006700	134.00*	70-130
16	4,4'-DDE	0.005000	0.005808	116.17	70-130
17	Dieldrin	0.005000	0.006354	127.08	70-130
20	Endrin	0.005000	0.006447	128.94	70-130
22	4,4'-DDD	0.005000	0.005489	109.77	70-130
23	Endosulfan II	0.005000	0.006482	129.64	70-130
24	4,4'-DDT	0.005000	0.005209	104.19	70-130
26	Endrin aldehyde	0.005000	0.006844	136.87*	70-130
27	Methoxychlor	0.005000	0.005018	100.36	70-130
28	Endosulfan sulfate	0.005000	0.006674	133.48*	70-130
29	Endrin ketone	0.005000	0.006144	122.89	70-130

TestAmerica North Canton

PESTICIDE 8081/608

Data file : \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\034F3401.D
Lab Smp Id: MRL
Inj Date : 22-JAN-2011 01:26
Operator : 093905 Inst ID: a2hp3.i
Smp Info : MRL
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\GCS\a2hp3.i\110121-1.b\PEST3.m
Meth Date : 03-Feb-2011 12:49 vandorenc Quant Type: ESTD
Cal Date : 10-JAN-2011 16:58 Cal File: 019F1901.D
Als bottle: 34 QC Sample: MRL
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: mrl.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: CANPGCSV23

Concentration Formula: Amt * DF * Vt/Vo/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (uL)
Vo	1.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
4 alpha-BHC					CAS #: 319-84-6			
5.939	5.939	0.000	224874	0.00612	0.006116			
5 gamma-BHC (Lindane)					CAS #: 58-89-9			
6.442	6.442	0.000	202275	0.00634	0.006343			(M)
6 beta-BHC					CAS #: 319-85-7			
6.609	6.609	0.000	109192	0.00701	0.007013			(R)
7 delta-BHC					CAS #: 319-86-8			
6.854	6.854	0.000	110275	0.00623	0.006226			
9 Heptachlor					CAS #: 76-44-8			
7.179	7.179	0.000	163037	0.00540	0.005397			
10 Aldrin					CAS #: 309-00-2			
7.691	7.692	-0.001	92850	0.00629	0.006290			

FORM 8
PESTICIDES ANALYTICAL SEQUENCE

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1A190402

GC Column: CLP PESTICIDES ID: 0.53 (mm) Init. Calib. Date(s): 01/10/11 01/31/11

Instrument ID: A2HP3

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION					
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		PEM E216	02/04/11	0826		
02		AB3 E212	02/04/11	0958		
03		TOX3 F004	02/04/11	1028		
04		MRL	02/04/11	1058		
05	FWGSCFMW-001	MDF3A1AD	02/04/11	1129		
06	FWGSCFMW-002	MDF3F1AD	02/04/11	1159		
07	FWGSCFMW-004	MDF3H1AD	02/04/11	1229		
08	FWGSCFMW-DUP	MDF3K1AD	02/04/11	1300		
09		TOX3 F004	02/04/11	1602		
10		AB3 E212	02/04/11	1632		
11		MRL	02/04/11	1702		
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa00711
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m
Misc Info:

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.005622	112.43	70-130
5 gamma-BHC (Lindane	0.005000	0.005820	116.39	70-130
6 beta-BHC	0.005000	0.006321	126.42	70-130
7 delta-BHC	0.005000	0.005292	105.85	70-130
9 Heptachlor	0.005000	0.006127	122.55	70-130
10 Aldrin	0.005000	0.006018	120.36	70-130
12 Heptachlor epoxide	0.005000	0.006213	124.26	70-130
13 gamma-Chlordane	0.005000	0.006050	121.00	70-130
14 alpha-Chlordane	0.005000	0.006169	123.38	70-130
15 Endosulfan I	0.005000	0.006034	120.68	70-130
16 4,4'-DDE	0.005000	0.004783	95.66	70-130
17 Dieldrin	0.005000	0.005924	118.48	70-130
20 Endrin	0.005000	0.006014	120.27	70-130
22 4,4'-DDD	0.005000	0.004668	93.36	70-130
23 Endosulfan II	0.005000	0.006262	125.24	70-130
24 4,4'-DDT	0.005000	0.005374	107.49	70-130
26 Endrin aldehyde	0.005000	0.006669	133.39*	70-130
27 Methoxychlor	0.005000	0.005723	114.45	70-130
28 Endosulfan sulfate	0.005000	0.006536	130.72*	70-130
29 Endrin ketone	0.005000	0.006396	127.93	70-130

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 04-FEB-2011 16:32
Lab File ID: 017F1701.D Init. Cal. Date(s): 10-JAN-2011 31-JAN-2011
Analysis Type: Init. Cal. Times: 08:50 11:15
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	22721513	26537600	26537600	0.000	-16.79504	15.00000	Averaged	<-
4 alpha-BHC	36768068	54229400	54229400	0.010	-47.49048	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	31887888	45334480	45334480	0.010	-42.16834	15.00000	Averaged	<-
6 beta-BHC	15569316	22634320	22634320	0.010	-45.37774	15.00000	Averaged	<-
7 delta-BHC	17712895	25049080	25049080	0.010	-41.41720	15.00000	Averaged	<-
9 Heptachlor	30208883	39965280	39965280	0.010	-32.29645	15.00000	Averaged	<-
10 Aldrin	14760555	20904680	20904680	0.010	-41.62530	15.00000	Averaged	<-
12 Heptachlor epoxide	11324613	15905040	15905040	0.010	-40.44665	15.00000	Averaged	<-
13 gamma-Chlordane	12167686	17461440	17461440	0.010	-43.50666	15.00000	Averaged	<-
14 alpha-Chlordane	13399169	18563200	18563200	0.010	-38.53993	15.00000	Averaged	<-
16 4,4'-DDE	14736563	18084960	18084960	0.010	-22.72169	15.00000	Averaged	<-
15 Endosulfan I	12580687	16904400	16904400	0.010	-34.36786	15.00000	Averaged	<-
17 Dieldrin	14579804	20115320	20115320	0.010	-37.96701	15.00000	Averaged	<-
20 Endrin	30433638	42754240	42754240	0.010	-40.48350	15.00000	Averaged	<-
22 4,4'-DDD	10702121	12582520	12582520	0.010	-17.57034	15.00000	Averaged	<-
23 Endosulfan II	14673513	19655640	19655640	0.010	-33.95320	15.00000	Averaged	<-
24 4,4'-DDT	11927563	14367520	14367520	0.010	-20.45646	15.00000	Averaged	<-
26 Endrin aldehyde	27018599	36197040	36197040	0.010	-33.97082	15.00000	Averaged	<-
27 Methoxychlor	13822208	16884400	16884400	0.010	-22.15414	15.00000	Averaged	<-
28 Endosulfan sulfate	31159714	42442200	42442200	0.010	-36.20857	15.00000	Averaged	<-
29 Endrin ketone	17548646	22442280	22442280	0.010	-27.88611	15.00000	Averaged	<-
$ 30 Decachlorobiphenyl	38627488	49161200	49161200	0.010	-27.26999	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 33.84879
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa00711
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m
Misc Info:

SPIKE	COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4	alpha-BHC	0.005000	0.006208	124.16	70-130
5	gamma-BHC (Lindane	0.005000	0.006633	132.66*	70-130
6	beta-BHC	0.005000	0.007252	145.05*	70-130
7	delta-BHC	0.005000	0.006201	124.02	70-130
9	Heptachlor	0.005000	0.006651	133.01*	70-130
10	Aldrin	0.005000	0.006864	137.29*	70-130
12	Heptachlor epoxide	0.005000	0.007160	143.19*	70-130
13	gamma-Chlordane	0.005000	0.007695	153.90*	70-130
14	alpha-Chlordane	0.005000	0.007109	142.18*	70-130
15	Endosulfan I	0.005000	0.006990	139.81*	70-130
16	4,4'-DDE	0.005000	0.005800	116.00	70-130
17	Dieldrin	0.005000	0.006781	135.62*	70-130
20	Endrin	0.005000	0.006981	139.63*	70-130
22	4,4'-DDD	0.005000	0.006008	120.16	70-130
23	Endosulfan II	0.005000	0.007049	140.98*	70-130
24	4,4'-DDT	0.005000	0.006244	124.88	70-130
26	Endrin aldehyde	0.005000	0.007509	150.18*	70-130
27	Methoxychlor	0.005000	0.006118	122.36	70-130
28	Endosulfan sulfate	0.005000	0.007350	147.00*	70-130
29	Endrin ketone	0.005000	0.007165	143.30*	70-130

TestAmerica North Canton

PESTICIDE 8081/608

Data file : \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\018F1801.D
Lab Smp Id: MRL
Inj Date : 04-FEB-2011 17:02
Operator : 093905 Inst ID: a2hp3.i
Smp Info : MRL
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m
Meth Date : 07-Feb-2011 07:35 vandorenc Quant Type: ESTD
Cal Date : 25-JAN-2011 16:02 Cal File: 007F0701.D
Als bottle: 18 QC Sample: MRL
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: mrl.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: CANPGCSV23

Concentration Formula: Amt * DF * Vt/Vo/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (uL)
Vo	1.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
4 alpha-BHC					CAS #: 319-84-6		
5.938	5.937	0.001	228260	0.00621	0.006208		
5 gamma-BHC (Lindane)					CAS #: 58-89-9		
6.440	6.441	-0.001	211512	0.00663	0.006633		(R)
6 beta-BHC					CAS #: 319-85-7		
6.609	6.608	0.001	112918	0.00725	0.007252		(R)
7 delta-BHC					CAS #: 319-86-8		
6.853	6.853	0.000	109834	0.00620	0.006201		
9 Heptachlor					CAS #: 76-44-8		
7.176	7.177	-0.001	200910	0.00665	0.006651		(R)
10 Aldrin					CAS #: 309-00-2		
7.692	7.690	0.002	101323	0.00686	0.006864		(R)

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 04-FEB-2011 09:58
Lab File ID: 004F0401.D Init. Cal. Date(s): 10-JAN-2011 31-JAN-2011
Analysis Type: Init. Cal. Times: 08:50 11:15
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	22721513	25162800	25162800	0.000	-10.74438	15.00000	Averaged	
4 alpha-BHC	36768068	42540240	42540240	0.010	-15.69887	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	31887888	34948280	34948280	0.010	-9.59735	15.00000	Averaged	
6 beta-BHC	15569316	17507240	17507240	0.010	-12.44707	15.00000	Averaged	
7 delta-BHC	17712895	18700840	18700840	0.010	-5.57755	15.00000	Averaged	
9 Heptachlor	30208883	32363920	32363920	0.010	-7.13379	15.00000	Averaged	
10 Aldrin	14760555	16837200	16837200	0.010	-14.06888	15.00000	Averaged	
12 Heptachlor epoxide	11324613	12281320	12281320	0.010	-8.44803	15.00000	Averaged	
13 gamma-Chlordane	12167686	12944360	12944360	0.010	-6.38309	15.00000	Averaged	
14 alpha-Chlordane	13399169	14492080	14492080	0.010	-8.15656	15.00000	Averaged	
16 4,4'-DDE	14736563	14473160	14473160	0.010	1.78741	15.00000	Averaged	
15 Endosulfan I	12580687	13424120	13424120	0.010	-6.70419	15.00000	Averaged	
17 Dieldrin	14579804	15573560	15573560	0.010	-6.81598	15.00000	Averaged	
20 Endrin	30433638	33586840	33586840	0.010	-10.36091	15.00000	Averaged	
22 4,4'-DDD	10702121	10069240	10069240	0.010	5.91360	15.00000	Averaged	
23 Endosulfan II	14673513	15915800	15915800	0.010	-8.46618	15.00000	Averaged	
24 4,4'-DDT	11927563	12073720	12073720	0.010	-1.22537	15.00000	Averaged	
26 Endrin aldehyde	27018599	30753000	30753000	0.010	-13.82159	15.00000	Averaged	
27 Methoxychlor	13822208	15066160	15066160	0.010	-8.99966	15.00000	Averaged	
28 Endosulfan sulfate	31159714	35759960	35759960	0.010	-14.76344	15.00000	Averaged	
29 Endrin ketone	17548646	19043840	19043840	0.010	-8.52028	15.00000	Averaged	
$ 30 Decachlorobiphenyl	38627488	44126720	44126720	0.010	-14.23658	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.08504
Maximum Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: 005F0501.D
Report Date: 08-Feb-2011 14:58

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 08-FEB-2011 11:35
Lab File ID: 005F0501.D Init. Cal. Date(s): 15-DEC-2010 07-FEB-2011
Analysis Type: Init. Cal. Times: 12:37 11:19
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110208-1.b\PEST9.m\PEST9r.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	57357834	65296280	65296280	0.000	-13.84021	15.00000	Averaged	
4 alpha-BHC	113513431	125496040	125496040	0.010	-10.55612	15.00000	Averaged	
5 gamma-BHC (Lindane)	89889045	101659160	101659160	0.010	-13.09405	15.00000	Averaged	
6 beta-BHC	17241082	18796280	18796280	0.010	-9.02031	15.00000	Averaged	
7 delta-BHC	94228018	103269200	103269200	0.010	-9.59500	15.00000	Averaged	
8 Heptachlor	78290780	95289720	95289720	0.010	-21.71257	15.00000	Averaged	<-
10 Aldrin	111453520	120472560	120472560	0.010	-8.09220	15.00000	Averaged	
12 Heptachlor epoxide	30257554	33931920	33931920	0.010	-12.14363	15.00000	Averaged	
13 gamma-Chlordane	32168558	34199360	34199360	0.010	-6.31300	15.00000	Averaged	
14 alpha-Chlordane	82258763	88535560	88535560	0.010	-7.63055	15.00000	Averaged	
15 Endosulfan I	28064934	31535840	31535840	0.010	-12.36741	15.00000	Averaged	
16 4,4'-DDE	33388733	34766920	34766920	0.010	-4.12770	15.00000	Averaged	
17 Dieldrin	80383443	88409160	88409160	0.010	-9.98429	15.00000	Averaged	
18 Endrin	27569953	31274440	31274440	0.010	-13.43668	15.00000	Averaged	
21 4,4'-DDD	22162433	24228200	24228200	0.010	-9.32103	15.00000	Averaged	
22 Endosulfan II	31004641	34045040	34045040	0.010	-9.80627	15.00000	Averaged	
24 4,4'-DDT	20329307	22987160	22987160	0.010	-13.07400	15.00000	Averaged	
25 Endrin aldehyde	20054458	22471880	22471880	0.010	-12.05429	15.00000	Averaged	
26 Endosulfan sulfate	28018093	29723040	29723040	0.010	-6.08516	15.00000	Averaged	
27 Methoxychlor	24082688	27313880	27313880	0.010	-13.41707	15.00000	Averaged	
29 Endrin ketone	29577241	32016080	32016080	0.010	-8.24566	15.00000	Averaged	
$ 30 Decachlorobiphenyl	33092092	35558400	35558400	0.010	-7.45286	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 10.51682
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 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 1.7 and 4.0°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-5
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-5
7. Does the initial calibration curve consist of 5 concentration levels of Aroclors 1016 and 1260?	✓			Instrument A2HP13; ICAL on 1/19/11 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?	✓			No data provided for evaluation.	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			1/19/11@ 2317	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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 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%?	✓			The CCV analyzed 1/26/11 at 1748 had aroclor 1260 with a %D above control limits at 17%. No qualification was made as there were no detected 1260 concentrations reported for the field samples.	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?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits for FWGFBQmw-169c-1670-GW at 31%, FWGLL2mw-266c-1645-GW at 48%, FWGLL2mw-267c-1646-GW at 19%, FWGLL2mw-DUP3-1694-GW at 36%, FWGLL3mw-237c-1649-GW at 34%, FWGNTAmw-112c-1679-GW at 34%, FWGNTAmw-113c-1680-GW at 25%, FWGSCFmw-001-1682-GW at 23% and above control limits for FWGSCFmw-DUP1-1697-GW at 234%. The results for FWGFBQmw-169c-1670-GW, FWGLL2mw-266c-1645-GW, FWGLL2mw-267c-1646-GW, FWGLL2mw-DUP3-1694-GW, FWGNTAmw-112c-1679-GW, FWGNTAmw-113c-1680-GW, FWGSCFmw-001-1682-GW and FWGLL3mw-237c-1649-GW were qualified as estimated, "UJ". No qualification was made for sample FWGSCFmw-DUP1-1697-GW as there were no detected PCB concentrations reported for this sample.	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
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: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGMBSmw-001C-1681-GW

GC Semivolatiles

Lot-Sample #...:	A1A190402-002	**Work Order #...:**	MDF2T1AF	**Matrix.....:**	WG
Date Sampled...:	01/18/11 09:34	**Date Received..:**	01/19/11		
Prep Date.....:	01/19/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1019064				
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	89	(50 - 150)
Decachlorobiphenyl	73	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-112C-1679-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-004 **Work Order #...:** MDF2W1AF **Matrix.....:** WG
Date Sampled...: 01/18/11 10:58 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019064
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	96	(50 - 150)
Decachlorobiphenyl	34 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-113C-1680-GW

GC Semivolatiles

Lot-Sample #...:	A1A190402-006	**Work Order #...:**	MDF201AF	**Matrix.....:**	WG
Date Sampled...:	01/18/11 12:12	**Date Received..:**	01/19/11		
Prep Date.....:	01/19/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1019064				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	25 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-169C-1670-GW

GC Semivolatiles

Lot-Sample #...:	A1A190402-008	**Work Order #...:**	MDF221AF	**Matrix.....:**	WG
Date Sampled...:	01/18/11 13:43	**Date Received..:**	01/19/11		
Prep Date.....:	01/19/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1019064				
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	98	(50 - 150)
Decachlorobiphenyl	31 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GW

GC Semivolatiles

Lot-Sample #...:	A1A190402-010	**Work Order #...:**	MDF251AF	**Matrix.....:**	WG
Date Sampled...:	01/18/11 14:54	**Date Received..:**	01/19/11		
Prep Date.....:	01/19/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1019064				
Dilution Factor:	1	**Initial Wgt/Vol:**	1030 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	98	(50 - 150)
Decachlorobiphenyl	75	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-173C-1672-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-012 **Work Order #...:** MDF271AF **Matrix.....:** WG
Date Sampled...: 01/18/11 16:17 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019064
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96	(50 - 150)
Decachlorobiphenyl	61	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1682-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-015 **Work Order #...:** MDF3A1AF **Matrix.....:** WG
Date Sampled...: 01/18/11 09:30 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1019064
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	66	(50 - 150)
Decachlorobiphenyl	23 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1683-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-017 **Work Order #...:** MDF3F1AF **Matrix.....:** WG
Date Sampled...: 01/18/11 11:25 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019064
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	108	(50 - 150)
Decachlorobiphenyl	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1685-GW

GC Semivolatiles

Lot-Sample #...:	A1A190402-019	**Work Order #...:**	MDF3H1AF	**Matrix.....:**	WG
Date Sampled...:	01/18/11 13:10	**Date Received..:**	01/19/11		
Prep Date.....:	01/19/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1019064				
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	95	(50 - 150)
Decachlorobiphenyl	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCEmw-DUP1-1697-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-021 **Work Order #...:** MDF3K1AF **Matrix.....:** WG
Date Sampled...: 01/18/11 14:00 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019064
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	234 *	(50 - 150)
Decachlorobiphenyl	86	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-237C-1649-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-023 **Work Order #...:** MDF3M1AF **Matrix.....:** WG
Date Sampled...: 01/18/11 15:20 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019064
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	99	(50 - 150)
Decachlorobiphenyl	34 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1699-GW

GC Semivolatiles

Lot-Sample #...:	A1A190402-025	**Work Order #...:**	MDF3P1AF	**Matrix.....:**	WQ
Date Sampled...:	01/18/11 16:30	**Date Received..:**	01/19/11		
Prep Date.....:	01/19/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1019064				
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	94	(50 - 150)
Decachlorobiphenyl	92	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1645-GW

GC Semivolatiles

Lot-Sample #...:	A1A190402-027	**Work Order #...:**	MDF3R1AF	**Matrix.....:**	WG
Date Sampled...:	01/18/11 09:10	**Date Received..:**	01/19/11		
Prep Date.....:	01/19/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1019064				
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	94	(50 - 150)
Decachlorobiphenyl	48 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1646-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-029 **Work Order #...:** MDF3V1AF **Matrix.....:** WG
Date Sampled...: 01/18/11 10:20 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019064
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	87	(50 - 150)
Decachlorobiphenyl	19 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1694-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-031 **Work Order #...:** MDF3X1AF **Matrix.....:** WG
Date Sampled...: 01/18/11 11:20 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019064
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(50 - 150)
Decachlorobiphenyl	36 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1647-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-033	**Work Order #...:** MDF311AP	**Matrix.....:** WG	
Date Sampled...: 01/18/11 12:05	**Date Received..:** 01/19/11		
Prep Date.....: 01/19/11	**Analysis Date..:** 01/26/11		
Prep Batch #...: 1019064			
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	85	(50 - 150)
Decachlorobiphenyl	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1648-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-035 **Work Order #...:** MDF341AF **Matrix.....:** WG
Date Sampled...: 01/18/11 14:20 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019064
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	98	(50 - 150)
Decachlorobiphenyl	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GW

GC Semivolatiles

Lot-Sample #...:	A1A190402-037	**Work Order #...:**	MDF361AF	**Matrix.....:**	WG
Date Sampled...:	01/18/11 15:25	**Date Received..:**	01/19/11		
Prep Date.....:	01/19/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1019064				
Dilution Factor:	1	**Initial Wgt/Vol:**	900 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	76	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GW

GC Semivolatiles

Lot-Sample #...: A1A190402-039 **Work Order #...:** MDF381AF **Matrix.....:** WG
Date Sampled...: 01/18/11 16:30 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019064
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	100	(50 - 150)
Decachlorobiphenyl	99	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1A190402 **Work Order #...:** MDF4K1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A190000-064

Prep Date.....: 01/19/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/26/11 **Prep Batch #...:** 1019064
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	96	(50 - 150)
Decachlorobiphenyl	112	(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 #...: A1A190402 **Work Order #...:** MDF4K1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A190000-064
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019064
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	95	**(58 - 141)**	**SW846 8082**
Aroclor 1260	97	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	120	(50 - 150)
Decachlorobiphenyl	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1A190402 **Work Order #...:** MDF311AV-MS **Matrix.....:** WG
MS Lot-Sample #: A1A190402-033 MDF311AW-MSD
Date Sampled...: 01/18/11 12:05 **Date Received..:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1019064
Dilution Factor: 2 **Initial Wgt/Vol:** 525 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**76**	**(50 - 150)**			**SW846 8082**
	91	**(50 - 150)**	**18**	**(0-50)**	**SW846 8082**
Aroclor 1260	**84**	**(50 - 150)**			**SW846 8082**
	102	**(50 - 150)**	**19**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(50 - 150)
	94	(50 - 150)
Decachlorobiphenyl	63	(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

Data File: \\CANSVR11\dd\chem\GCS\a2hp13.i\110126-1.b\039F3201.D
Report Date: 26-Jan-2011 18:01

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp13.i Injection Date: 26-JAN-2011 17:48
Lab File ID: 039F3201.D Init. Cal. Date(s): 19-JAN-2011 19-JAN-2011
Analysis Type: Init. Cal. Times: 11:44 23:00
Lab Sample ID: E248 Quant Type: ESTD
Method: \\CANSVR11\dd\chem\GCS\a2hp13.i\110126-1.b\PCB13.m

COMPOUND	RRF / AMOUNT	RF0.500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 TCMX	232002475	253061680	0.010	-9.07715	15.00000	Averaged	
3 AROCLOR-1016 (1)	3622270	3655190	0.010	-0.90881	15.00000	Averaged	
(2)	5787533	6021112	0.010	-4.03590	15.00000	Averaged	
(3)	10912907	11852218	0.010	-8.60734	15.00000	Averaged	
(4)	4136089	4357296	0.010	-5.34822	15.00000	Averaged	
(5)	4408839	4666276	0.010	-5.83912	15.00000	Averaged	
8 AROCLOR-1260 (1)	6776979	7565014	0.010	-11.62812	15.00000	Averaged	
(2)	10112767	11739710	0.010	-16.08801	15.00000	Averaged	<-
(3)	9478786	11445654	0.010	-20.75021	15.00000	Averaged	<-
(4)	16532449	19863074	0.010	-20.14599	15.00000	Averaged	<-
(5)	8326966	9899564	0.010	-18.88561	15.00000	Averaged	<-
$ 9 DCB	142967902	179785360	0.010	-25.75225	15.00000	Averaged	<-

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 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 1.7 and 4.0°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			ICP- 11/11/10 ICPMS-11/5/10 Hg-11/2/10	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 1/21/11 had thallium detected at 0.31ug/L. The thallium results for samples FWGMBSmw-001c-1681-GF and FWGLL3mw-236c-1648-GF were <5x the ICB contamination and were qualified, "U". No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 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 90-85%=J/UJ; <85%=J/R
17. Were the CCBs run every 10 samples and at the end of the analytical sequence? Were results <1/2 the MRL?		✓		ICPMS The CCBs analyzed 1/21/11 had detected thallium from 0.19ug/L to 0.36ug/L and sodium at 8.5ug/L to 13ug/L. The thallium results for samples FWGMBSmw-001c-1681-GF and FWGLL3mw-236c-1648-GF were <5x the CCB contamination and were qualified, "U". No sodium qualifications were made as the detected sodium concentrations were >5 x 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%-LL= J/UJ; <60%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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%?	✓				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%?		✓		The field duplicate RPD for samples FWGSCFmw-004-168-GF and FWGSCFmw-DUP1-1697-GF was above control limits for zinc at 200%. The zinc result for sample FWGSCFmw-DUP1-1697-GF was qualified as estimated, "J".	QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				
36. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
37. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 7 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 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 1.7 and 4.0°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 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. The matrix spike analyzed on sample FWGLL2mw-269c-1647-GF recovered above control limits at 121%. No qualifications were made as there were no detected mercury concentrations reported.	LCG Table 9 >125% = J 30% - 75% = J/UJ <30% = J/R
25. Was the Matrix Duplicate RPD ± 20%?	✓				LCG Table 9 >20% = J
26. Was a field duplicate analyzed? Were the RPDs ± 30%?	✓				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: January 2010
Data Reviewer/Date: Angye Dragotta/ March 1, 2011

SDG: A1A190402 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: FWGMBSmw-001C-1681-GF

TOTAL Metals

Lot-Sample #...: A1A190402-003 **Matrix.....:** WG
Date Sampled...: 01/18/11 09:34 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2V1AN
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF2V1AA
		Dilution Factor: 1		Analysis Time..: 15:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**4.7 B**	**5.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF2V1AK**
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**126**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF2V1AP**
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF2V1AC
		Dilution Factor: 1		Analysis Time..: 15:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**86300**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF2V1AQ**
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF2V1AD
		Dilution Factor: 1		Analysis Time..: 15:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2V1AR
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2V1AT
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2V1AU
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGMBSmw-001C-1681-GF

TOTAL Metals

Lot-Sample #...: A1A190402-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF2V1AE
		Dilution Factor: 1		Analysis Time..: 15:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF2V1A2
		Dilution Factor: 1		Analysis Time..: 16:35	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1190**	1000	**ug/L**	SW846 6010B	01/20-01/25/11	MDF2V1AV
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	22900	1000	**ug/L**	SW846 6010B	01/20-01/25/11	MDF2V1AW
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	375	10.0	**ug/L**	SW846 6010B	01/20-01/25/11	MDF2V1AX
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	11200	1000	**ug/L**	SW846 6020	01/20-01/21/11	MDF2V1AJ
		Dilution Factor: 1		Analysis Time..: 15:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2V1A0
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2V1AL
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF2V1AF
		Dilution Factor: 1		Analysis Time..: 15:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2V1AM
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGMBSmw-001C-1681-GF

TOTAL Metals

Lot-Sample #...: A1A190402-003 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.36 B**	**1.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF2V1AH**
		Dilution Factor: 1		Analysis Time..: 15:01	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2V1A1
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/20-01/21/11	MDF2V1AG
		Dilution Factor: 1		Analysis Time..: 15:01	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: FWGNTAmw-112C-1679-GF

TOTAL Metals

Lot-Sample #...: A1A190402-005 **Matrix.....:** WG
Date Sampled...: 01/18/11 10:58 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2X1AR
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**157**	**50.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF2X1AE**
		Dilution Factor: 1		Analysis Time..: 15:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**17.0**	**5.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF2X1AN**
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**35.1**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF2X1AT**
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF2X1AF
		Dilution Factor: 1		Analysis Time..: 15:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**133000**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF2X1AU**
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF2X1AG
		Dilution Factor: 1		Analysis Time..: 15:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2X1AV
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2X1AW
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2X1AX
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-112C-1679-GF

TOTAL Metals

Lot-Sample #...: A1A190402-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1090**	**50.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF2X1AH**
		Dilution Factor: 1		Analysis Time..: 15:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF2X1AD
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1330**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF2X1A0**
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**40600**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF2X1A1**
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**475**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF2X1A2**
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**18600**	**1000**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF2X1AM**
		Dilution Factor: 1		Analysis Time..: 15:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2X1AA
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2X1AP
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF2X1AJ
		Dilution Factor: 1		Analysis Time..: 15:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2X1AQ
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-112C-1679-GF

TOTAL Metals

Lot-Sample #...: A1A190402-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF2X1AL
		Dilution Factor: 1		Analysis Time..: 15:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF2X1AC
		Dilution Factor: 1		Analysis Time..: 11:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**2.9 B**	**10.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF2X1AK**
		Dilution Factor: 1		Analysis Time..: 15:08	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: FWGNTAmw-113C-1680-GF

TOTAL Metals

Lot-Sample #...: A1A190402-007 **Matrix.....:** WG
Date Sampled...: 01/18/11 12:12 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF211AR
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**107**	50.0	**ug/L**	SW846 6020	**01/20-01/21/11**	**MDF211AE**
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**10.7**	5.0	**ug/L**	SW846 6010B	**01/20-01/25/11**	**MDF211AN**
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**38.7**	10.0	**ug/L**	SW846 6010B	**01/20-01/25/11**	**MDF211AT**
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF211AF
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**89800**	1000	**ug/L**	SW846 6010B	**01/20-01/25/11**	**MDF211AU**
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF211AG
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF211AV
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF211AW
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF211AX
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-113C-1680-GF

TOTAL Metals

Lot-Sample #...: A1A190402-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF211AH
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF211AD
		Dilution Factor: 1		Analysis Time..: 16:38	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1600**	1000	**ug/L**	SW846 6010B	01/20-01/25/11	MDF211A0
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**32800**	1000	**ug/L**	SW846 6010B	01/20-01/25/11	MDF211A1
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**277**	10.0	**ug/L**	SW846 6010B	01/20-01/25/11	MDF211A2
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**14900**	1000	**ug/L**	SW846 6020	01/20-01/21/11	MDF211AM
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF211AA
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF211AP
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF211AJ
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF211AQ
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-113C-1680-GF

TOTAL Metals

Lot-Sample #...: A1A190402-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF211AL
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF211AC
		Dilution Factor: 1		Analysis Time..: 19:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/20-01/21/11	MDF211AK
		Dilution Factor: 1		Analysis Time..: 15:14	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-169C-1670-GF

TOTAL Metals

Lot-Sample #...: A1A190402-009 **Matrix.....:** WG
Date Sampled...: 01/18/11 13:43 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF241AR
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF241AE
		Dilution Factor: 1		Analysis Time..: 15:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF241AN
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**42.5**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF241AT**
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF241AF
		Dilution Factor: 1		Analysis Time..: 15:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**20000**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF241AU**
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	**0.75**	**0.50**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF241AG**
		Dilution Factor: 1		Analysis Time..: 15:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**9.3**	**5.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF241AV**
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF241AW
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF241AX
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-169C-1670-GF

TOTAL Metals

Lot-Sample #...: A1A190402-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**378**	**50.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF241AH**
		Dilution Factor: 1		Analysis Time..: 15:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF241AD
		Dilution Factor: 1		Analysis Time..: 16:40	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1920**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF241A0**
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**13400**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF241A1**
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**4790**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF241A2**
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**27900**	**1000**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF241AM**
		Dilution Factor: 1		Analysis Time..: 15:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**11.1**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF241AA**
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF241AP
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF241AJ
		Dilution Factor: 1		Analysis Time..: 15:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF241AQ
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-169C-1670-GF

TOTAL Metals

Lot-Sample #...: A1A190402-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF241AL
		Dilution Factor: 1		Analysis Time..: 15:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF241AC
		Dilution Factor: 1		Analysis Time..: 11:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**11.8**	10.0	ug/L	SW846 6020	01/20-01/21/11	MDF241AK
		Dilution Factor: 1		Analysis Time..: 15:19	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GF

TOTAL Metals

Lot-Sample #...: A1A190402-011 **Matrix.....:** WG
Date Sampled...: 01/18/11 14:54 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF261AR
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF261AE
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF261AN
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**34.3**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF261AT**
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF261AF
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**73900**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF261AU**
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF261AG
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF261AV
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF261AW
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF261AX
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GF

TOTAL Metals

Lot-Sample #...: A1A190402-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF261AH
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF261AD
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**702 B**	1000	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF261A0**
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**31800**	1000	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF261A1**
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**30.2**	10.0	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF261A2**
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**7190**	1000	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF261AM**
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF261AA
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF261AP
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF261AJ
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF261AQ
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GF

TOTAL Metals

Lot-Sample #...: A1A190402-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF261AL
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF261AC
		Dilution Factor: 1		Analysis Time..: 11:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/20-01/21/11	MDF261AK
		Dilution Factor: 1		Analysis Time..: 15:23	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: FWGFBQmw-173C-1672-GF

TOTAL Metals

Lot-Sample #...: A1A190402-013 **Matrix.....:** WG
Date Sampled...: 01/18/11 16:17 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF281AR
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF281AE
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF281AN
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**10.3**	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF281AT
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF281AF
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**7890**	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF281AU
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF281AG
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF281AV
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF281AW
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF281AX
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-173C-1672-GF

TOTAL Metals

Lot-Sample #...: A1A190402-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**305**	**50.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF281AH**
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF281AD
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1290**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF281A0**
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**3080**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF281A1**
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**328**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF281A2**
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1720**	**1000**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF281AM**
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**3.6 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF281AA**
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF281AP
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF281AJ
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF281AQ
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-173C-1672-GF

TOTAL Metals

Lot-Sample #...: A1A190402-013 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF281AL
		Dilution Factor: 1		Analysis Time..: 15:28	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF281AC
		Dilution Factor: 1		Analysis Time..: 11:56	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**5.7 B**	10.0	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF281AK**
		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: FWGSCFmw-001-1682-GF

TOTAL Metals

Lot-Sample #...: A1A190402-016 **Matrix.....:** WG
Date Sampled...: 01/18/11 09:30 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3C1AR
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3C1AE
		Dilution Factor: 1		Analysis Time..: 15:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3C1AN
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3C1AT
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3C1AF
		Dilution Factor: 1		Analysis Time..: 15:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**49800**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3C1AU**
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF3C1AG
		Dilution Factor: 1		Analysis Time..: 15:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3C1AV
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3C1AW
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3C1AX
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1682-GF

TOTAL Metals

Lot-Sample #...: A1A190402-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3C1AH
		Dilution Factor: 1		Analysis Time..: 15:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF3C1AD
		Dilution Factor: 1		Analysis Time..: 16:28	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**14600**	1000	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3C1A0**
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**15200**	1000	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3C1A1**
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**606**	10.0	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3C1A2**
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**17200**	1000	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF3C1AM**
		Dilution Factor: 1		Analysis Time..: 15:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3C1AA
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3C1AP
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**1.5 B**	2.0	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF3C1AJ**
		Dilution Factor: 1		Analysis Time..: 15:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3C1AQ
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1682-GF

TOTAL Metals

Lot-Sample #...: A1A190402-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3C1AL
		Dilution Factor: 1		Analysis Time..: 15:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3C1AC
		Dilution Factor: 1		Analysis Time..: 12:14	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**2.6 B**	**10.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF3C1AK**
		Dilution Factor: 1		Analysis Time..: 15:33	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1683-GF

TOTAL Metals

Lot-Sample #...: A1A190402-018 **Matrix.....:** WG
Date Sampled...: 01/18/11 11:25 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3G1AR
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3G1AE
		Dilution Factor: 1		Analysis Time..: 15:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**11.4**	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3G1AN
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**42.5**	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3G1AT
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3G1AF
		Dilution Factor: 1		Analysis Time..: 15:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**79700**	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF3G1AU
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF3G1AG
		Dilution Factor: 1		Analysis Time..: 15:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3G1AV
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3G1AW
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3G1AX
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1683-GF

TOTAL Metals

Lot-Sample #...: A1A190402-018 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3G1AH
		Dilution Factor: 1		Analysis Time..: 15:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF3G1AD
		Dilution Factor: 1		Analysis Time..: 16:37	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2140**	1000	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3G1A0**
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**25300**	1000	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3G1A1**
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**72.7**	10.0	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3G1A2**
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**20500**	1000	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF3G1AM**
		Dilution Factor: 1		Analysis Time..: 15:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3G1AA
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3G1AP
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF3G1AJ
		Dilution Factor: 1		Analysis Time..: 15:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3G1AQ
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1683-GF

TOTAL Metals

Lot-Sample #...: A1A190402-018 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3G1AL
		Dilution Factor: 1		Analysis Time..: 15:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3G1AC
		Dilution Factor: 1		Analysis Time..: 12:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/20-01/21/11	MDF3G1AK
		Dilution Factor: 1		Analysis Time..: 15:38	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1685-GF

TOTAL Metals

Lot-Sample #...: A1A190402-020 **Matrix.....:** WG
Date Sampled...: 01/18/11 13:10 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3J1AR
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3J1AE
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3J1AN
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**96.7**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3J1AT**
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3J1AF
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**149000**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3J1AU**
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF3J1AG
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3J1AV
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3J1AW
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3J1AX
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1685-GF

TOTAL Metals

Lot-Sample #...: A1A190402-020 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3J1AH
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF3J1AD
		Dilution Factor: 1		Analysis Time..: 16:44	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**2580**	1000	**ug/L**	SW846 6010B	01/20-01/25/11	MDF3J1A0
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**59300**	1000	**ug/L**	SW846 6010B	01/20-01/25/11	MDF3J1A1
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**708**	10.0	**ug/L**	SW846 6010B	01/20-01/25/11	MDF3J1A2
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**13000**	1000	**ug/L**	SW846 6020	01/20-01/21/11	MDF3J1AM
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3J1AA
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3J1AP
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF3J1AJ
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3J1AQ
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1685-GF

TOTAL Metals

Lot-Sample #...: A1A190402-020 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3J1AL
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3J1AC
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/20-01/21/11	MDF3J1AK
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1697-GF

TOTAL Metals

Lot-Sample #...: A1A190402-022 **Matrix.....:** WG
Date Sampled...: 01/18/11 14:00 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1AR
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3L1AE
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1AN
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**92.3**	10.0	**ug/L**	SW846 6010B	**01/20-01/25/11**	**MDF3L1AT**
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3L1AF
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**143000**	1000	**ug/L**	SW846 6010B	**01/20-01/25/11**	**MDF3L1AU**
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF3L1AG
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1AV
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1AW
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1AX
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1697-GF

TOTAL Metals

Lot-Sample #...: A1A190402-022 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3L1AH
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF3L1AD
		Dilution Factor: 1		Analysis Time..: 16:32	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	2420	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1A0
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	56600	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1A1
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	677	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1A2
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	13500	1000	ug/L	SW846 6020	01/20-01/21/11	MDF3L1AM
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1AA
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1AP
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF3L1AJ
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1AQ
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1697-GF

TOTAL Metals

Lot-Sample #...: A1A190402-022 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3L1AL
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3L1AC
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**3.1 B**	**10.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF3L1AK**
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-237C-1649-GF

TOTAL Metals

Lot-Sample #...: A1A190402-024 **Matrix.....:** WG
Date Sampled...: 01/18/11 15:20 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1AR
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3N1AE
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1AN
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1AT
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3N1AF
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**31100**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3N1AU**
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF3N1AG
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1AV
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1AW
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1AX
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-237C-1649-GF

TOTAL Metals

Lot-Sample #...: A1A190402-024 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3N1AH
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF3N1AD
		Dilution Factor: 1		Analysis Time..: 16:45	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	1310	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1A0
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	8980	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1A1
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	91.6	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1A2
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	4170	1000	ug/L	SW846 6020	01/20-01/21/11	MDF3N1AM
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	5.2 B	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1AA
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1AP
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	0.13 B	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF3N1AJ
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1AQ
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-237C-1649-GF

TOTAL Metals

Lot-Sample #...: A1A190402-024 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3N1AL
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3N1AC
		Dilution Factor: 1		Analysis Time..: 12:37	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**3.8 B**	**10.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	MDF3N1AK
		Dilution Factor: 1		Analysis Time..: 16:07	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1699-GW

TOTAL Metals

Lot-Sample #...: A1A190402-025 **Matrix.....:** WQ
Date Sampled...: 01/18/11 16:30 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1AU
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3P1AG
		Dilution Factor: 1		Analysis Time..: 16:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1AQ
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1AV
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3P1AH
		Dilution Factor: 1		Analysis Time..: 16:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1AW
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF3P1AJ
		Dilution Factor: 1		Analysis Time..: 16:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1AX
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1A0
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1A1
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1699-GW

TOTAL Metals

Lot-Sample #...: A1A190402-025 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3P1AK
		Dilution Factor: 1		Analysis Time..: 16:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF3P1A7
		Dilution Factor: 1		Analysis Time..: 16:02	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1A2
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1A3
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1A4
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	ND	1000	ug/L	SW846 6020	01/20-01/21/11	MDF3P1AP
		Dilution Factor: 1		Analysis Time..: 16:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1A5
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1AR
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF3P1AL
		Dilution Factor: 1		Analysis Time..: 16:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1AT
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1699-GW

TOTAL Metals

Lot-Sample #...: A1A190402-025 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3P1AN
		Dilution Factor: 1		Analysis Time..: 16:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3P1A6
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/20-01/21/11	MDF3P1AM
		Dilution Factor: 1		Analysis Time..: 16:11	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1645-GF

TOTAL Metals

Lot-Sample #...: A1A190402-028 **Matrix.....:** WG
Date Sampled...: 01/18/11 09:10 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3T1AR
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3T1AE
		Dilution Factor: 1		Analysis Time..: 16:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3T1AN
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	21.0	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3T1AT
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3T1AF
		Dilution Factor: 1		Analysis Time..: 16:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	24500	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF3T1AU
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF3T1AG
		Dilution Factor: 1		Analysis Time..: 16:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	13.0	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3T1AV
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3T1AW
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3T1AX
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1645-GF

TOTAL Metals

Lot-Sample #...: A1A190402-028 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**2250**	**50.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF3T1AH**
		Dilution Factor: 1		Analysis Time..: 16:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF3T1AD
		Dilution Factor: 1		Analysis Time..: 16:36	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1420**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3T1A0**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**11000**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3T1A1**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**936**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3T1A2**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**10300**	**1000**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF3T1AM**
		Dilution Factor: 1		Analysis Time..: 16:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**11.4**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3T1AA**
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3T1AP
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF3T1AJ
		Dilution Factor: 1		Analysis Time..: 16:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3T1AQ
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1645-GF

TOTAL Metals

Lot-Sample #...: A1A190402-028 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3T1AL
		Dilution Factor: 1		Analysis Time..: 16:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3T1AC
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**3.8 B**	**10.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF3T1AK**
		Dilution Factor: 1		Analysis Time..: 16:16	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1646-GF

TOTAL Metals

Lot-Sample #...: A1A190402-030 **Matrix.....:** WG
Date Sampled...: 01/18/11 10:20 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3W1AR
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	318	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF3W1AE
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3W1AN
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	14.9	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3W1AT
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3W1AF
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	37000	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF3W1AU
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF3W1AG
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	2.2 B	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3W1AV
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3W1AW
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3W1AX
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1646-GF

TOTAL Metals

Lot-Sample #...: A1A190402-030 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**660**	**50.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF3W1AH**
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF3W1AD
		Dilution Factor: 1		Analysis Time..: 16:47	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**731 B**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3W1A0**
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**18000**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3W1A1**
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**547**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3W1A2**
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**16600**	**1000**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF3W1AM**
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**3.8 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF3W1AA**
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3W1AP
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF3W1AJ
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3W1AQ
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1646-GF

TOTAL Metals

Lot-Sample #...: A1A190402-030 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF3W1AL
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF3W1AC
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**3.8 B**	**10.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF3W1AK**
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1694-GF

TOTAL Metals

Lot-Sample #...: A1A190402-032 **Matrix.....:** WG
Date Sampled...: 01/18/11 11:20 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF301AR
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**367**	**50.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF301AE**
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF301AN
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**15.1**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF301AT**
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF301AF
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**37300**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF301AU**
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF301AG
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**2.8 B**	**5.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF301AV**
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF301AW
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF301AX
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1694-GF

TOTAL Metals

Lot-Sample #...: A1A190402-032 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**666**	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF301AH
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF301AD
		Dilution Factor: 1		Analysis Time..: 16:30	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**749 B**	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF301A0
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**18200**	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF301A1
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**551**	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF301A2
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**16800**	1000	ug/L	SW846 6020	01/20-01/21/11	MDF301AM
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**3.7 B**	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF301AA
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF301AP
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF301AJ
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF301AQ
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1694-GF

TOTAL Metals

Lot-Sample #...: A1A190402-032 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF301AL
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF301AC
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**3.6 B**	10.0	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF301AK**
		Dilution Factor: 1		Analysis Time..: 16:26	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1647-GF

TOTAL Metals

Lot-Sample #...: A1A190402-034 **Matrix.....:** WG
Date Sampled...: 01/18/11 12:05 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF331CP
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF331AL
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF331CE
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	232	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF331CT
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF331AP
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	29800	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF331CW
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF331AT
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF331C1
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF331C4
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF331C7
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1647-GF

TOTAL Metals

Lot-Sample #...: A1A190402-034 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**6590**	**50.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF331AW**
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF331AH
		Dilution Factor: 1		Analysis Time..: 15:57	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**3390**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF331DA**
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**14400**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF331DE**
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1570**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF331DH**
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**6630**	**1000**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF331CA**
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF331AA
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF331CH
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF331A1
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF331CL
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1647-GF

TOTAL Metals

Lot-Sample #...: A1A190402-034 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF331A7
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF331AE
		Dilution Factor: 1		Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/20-01/21/11	MDF331A4
		Dilution Factor: 1		Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1648-GF

TOTAL Metals

Lot-Sample #...: A1A190402-036 **Matrix.....:** WG
Date Sampled...: 01/18/11 14:20 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF351AR
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF351AE
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF351AN
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF351AT
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF351AF
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**20700**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF351AU**
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF351AG
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF351AV
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF351AW
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF351AX
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1648-GF

TOTAL Metals

Lot-Sample #...: A1A190402-036 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF351AH
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF351AD
		Dilution Factor: 1		Analysis Time..: 16:01	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1290**	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF351A0
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**12500**	1000	ug/L	SW846 6010B	01/20-01/25/11	MDF351A1
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**129**	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF351A2
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**4190**	1000	ug/L	SW846 6020	01/20-01/21/11	MDF351AM
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**3.5 B**	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF351AA
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF351AP
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF351AJ
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF351AQ
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-236C-1648-GF

TOTAL Metals

Lot-Sample #...: A1A190402-036 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.28 B**	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF351AL
		Dilution Factor: 1		Analysis Time..: 17:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF351AC
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**5.2 B**	10.0	ug/L	SW846 6020	01/20-01/21/11	MDF351AK
		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.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GF

TOTAL Metals

Lot-Sample #...: A1A190402-038 **Matrix.....:** WG
Date Sampled...: 01/18/11 15:25 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF371AR
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF371AE
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF371AN
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**4.5 B**	10.0	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF371AT**
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF371AF
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**13100**	1000	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF371AU**
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF371AG
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF371AV
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF371AW
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF371AX
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GF

TOTAL Metals

Lot-Sample #...: A1A190402-038 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF371AH
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF371AD
		Dilution Factor: 1		Analysis Time..: 16:43	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**872 B**	1000	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF371A0**
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**5380**	1000	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF371A1**
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**29.5**	10.0	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF371A2**
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**11300**	1000	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF371AM**
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**5.9 B**	10.0	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF371AA**
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF371AP
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDF371AJ
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF371AQ
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GF

TOTAL Metals

Lot-Sample #...: A1A190402-038 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF371AL
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF371AC
		Dilution Factor: 1		Analysis Time..: 13:49	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	6.7 B	10.0	ug/L	SW846 6020	01/20-01/21/11	MDF371AK
		Dilution Factor: 1		Analysis Time..: 17:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GF

TOTAL Metals

Lot-Sample #...: A1A190402-040 **Matrix.....:** WG
Date Sampled...: 01/18/11 16:30 **Date Received..:** 01/19/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1020016						
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF391AR
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF391AE
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF391AN
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**17.9**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF391AT**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF391AF
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**17800**	**1000**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF391AU**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDF391AG
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF391AV
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF391AW
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF391AX
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GF

TOTAL Metals

Lot-Sample #...: A1A190402-040 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDF391AH
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDF391AD
		Dilution Factor: 1		Analysis Time..: 16:03	Analyst ID.....: 001576	
		Instrument ID..: H1		MDL.....: 0.16		
Potassium	**1210**	1000	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF391A0**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**6640**	1000	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF391A1**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF391A2
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**3790**	1000	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF391AM**
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**2.2 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/20-01/25/11**	**MDF391AA**
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDF391AP
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	**0.46 B**	**2.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF391AJ**
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDF391AQ
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GF

TOTAL Metals

Lot-Sample #...: A1A190402-040 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDF391AL
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDF391AC
		Dilution Factor: 1		Analysis Time..: 13:55	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**3.4 B**	**10.0**	**ug/L**	**SW846 6020**	**01/20-01/21/11**	**MDF391AK**
		Dilution Factor: 1		Analysis Time..: 17:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1A190402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1A200000-016 **Prep Batch #...:** 1020016						
Aluminum	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDHJA1AA
		Dilution Factor: 1				
		Analysis Time..: 14:48		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	01/20-01/21/11	MDHJA1AF
		Dilution Factor: 1				
		Analysis Time..: 14:48		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AK
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AP
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDHJA1AC
		Dilution Factor: 1				
		Analysis Time..: 14:48		Analyst ID.....: 000079	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	01/20-01/21/11	MDHJA1AD
		Dilution Factor: 1				
		Analysis Time..: 14:48		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AQ
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AT
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AR
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AU
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	01/20-01/21/11	MDHJA1AE
		Dilution Factor: 1				
		Analysis Time..: 14:48		Analyst ID.....: 000079	Instrument ID..: I8	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1A190402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AL
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AW
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AX
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	01/20-01/26/11	MDHJA1A2
		Dilution Factor: 1				
		Analysis Time..: 15:55		Analyst ID.....: 001576	Instrument ID..: H1	
Nickel	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1A0
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AV
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AM
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1AN
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Sodium	ND	1000	ug/L	SW846 6020	01/20-01/21/11	MDHJA1AJ
		Dilution Factor: 1				
		Analysis Time..: 14:48		Analyst ID.....: 000079	Instrument ID..: I8	
Thallium	ND	1.0	ug/L	SW846 6020	01/20-01/21/11	MDHJA1AH
		Dilution Factor: 1				
		Analysis Time..: 14:48		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	01/20-01/25/11	MDHJA1A1
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 001637	Instrument ID..: I5	
Zinc	ND	10.0	ug/L	SW846 6020	01/20-01/21/11	MDHJA1AG
		Dilution Factor: 1				
		Analysis Time..: 14:48		Analyst ID.....: 000079	Instrument ID..: I8	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1A190402 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 #...: A1A190402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A1A200000-016 **Prep Batch #...:** 1020016					
Aluminum	99	(80 - 120)	SW846 6020	01/20-01/21/11	MDHJA1A3
		Dilution Factor: 1	Analysis Time..: 14:54	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	98	(80 - 120)	SW846 6020	01/20-01/21/11	MDHJA1A4
		Dilution Factor: 1	Analysis Time..: 14:54	Analyst ID.....: 000079	
		Instrument ID..: I8			
Cadmium	104	(80 - 120)	SW846 6020	01/20-01/21/11	MDHJA1A5
		Dilution Factor: 1	Analysis Time..: 14:54	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	100	(80 - 120)	SW846 6020	01/20-01/21/11	MDHJA1A6
		Dilution Factor: 1	Analysis Time..: 14:54	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	99	(80 - 120)	SW846 6020	01/20-01/21/11	MDHJA1A7
		Dilution Factor: 1	Analysis Time..: 14:54	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	104	(80 - 120)	SW846 6020	01/20-01/21/11	MDHJA1A8
		Dilution Factor: 1	Analysis Time..: 14:54	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	93	(80 - 120)	SW846 6020	01/20-01/21/11	MDHJA1A9
		Dilution Factor: 1	Analysis Time..: 14:54	Analyst ID.....: 000079	
		Instrument ID..: I8			
Sodium	106	(80 - 120)	SW846 6020	01/20-01/21/11	MDHJA1CA
		Dilution Factor: 1	Analysis Time..: 14:54	Analyst ID.....: 000079	
		Instrument ID..: I8			
Arsenic	101	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CC
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Lead	95	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CD
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A190402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	102	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CE
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Silver	98	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CF
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Barium	106	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CG
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Calcium	97	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CH
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Cobalt	98	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CJ
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Chromium	99	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CK
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Copper	104	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CL
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Potassium	102	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CM
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Magnesium	97	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CN
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Manganese	105	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CP
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Nickel	100	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CQ
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A190402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	102	(80 - 120)	SW846 6010B	01/20-01/25/11	MDHJA1CR
		Dilution Factor: 1	Analysis Time..: 11:21	Analyst ID.....: 001637	
		Instrument ID..: I5			
Mercury	114	(80 - 120)	SW846 7470A	01/20-01/26/11	MDHJA1CT
		Dilution Factor: 1	Analysis Time..: 15:56	Analyst ID.....: 001576	
		Instrument ID..: H1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A190402 **Matrix.....:** WG
Date Sampled...: 01/18/11 12:05 **Date Received..:** 01/19/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1A190402-034 **Prep Batch #...:** 1020016					
Aluminum	104	(75 - 125)	SW846 6020	01/20-01/21/11	MDF331AM
		Dilution Factor: 1	Analysis Time..: 16:31	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	106	(75 - 125)	SW846 6020	01/20-01/21/11	MDF331A2
		Dilution Factor: 1	Analysis Time..: 16:31	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	103	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331CF
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Barium	108	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331CU
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Beryllium	100	(75 - 125)	SW846 6020	01/20-01/21/11	MDF331AQ
		Dilution Factor: 1	Analysis Time..: 16:31	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	109	(75 - 125)	SW846 6020	01/20-01/21/11	MDF331AU
		Dilution Factor: 1	Analysis Time..: 16:31	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	96	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331CX
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Chromium	100	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331C5
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Cobalt	99	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331C2
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Copper	107	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331C8
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A190402 **Matrix.....:** WG
Date Sampled...: 01/18/11 12:05 **Date Received..:** 01/19/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	99	(75 - 125)	SW846 6020	01/20-01/21/11	MDF331AX
		Dilution Factor: 1	Analysis Time..: 16:31	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	94	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331CJ
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Magnesium	98	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331DF
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Manganese	100	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331DJ
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Mercury	121 N	(80 - 120)	SW846 7470A	01/20-01/26/11	MDF331AJ
		Dilution Factor: 1	Analysis Time..: 15:57	Instrument ID..: H1	
		Analyst ID.....: 001576			
Nickel	103	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331AC
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Potassium	107	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331DC
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Selenium	102	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331CM
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Silver	99	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331CQ
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Sodium	107	(75 - 125)	SW846 6020	01/20-01/21/11	MDF331CC
		Dilution Factor: 1	Analysis Time..: 16:31	Instrument ID..: I8	
		Analyst ID.....: 000079			
Thallium	102	(75 - 125)	SW846 6020	01/20-01/21/11	MDF331A8
		Dilution Factor: 1	Analysis Time..: 16:31	Instrument ID..: I8	
		Analyst ID.....: 000079			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A190402 **Matrix.....:** WG
Date Sampled...: 01/18/11 12:05 **Date Received..:** 01/19/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	103	(75 - 125)	SW846 6010B	01/20-01/25/11	MDF331AF
		Dilution Factor: 1	Analysis Time..: 13:08	Instrument ID..: I5	
		Analyst ID.....: 001637			
Zinc	113	(75 - 125)	SW846 6020	01/20-01/21/11	MDF331A5
		Dilution Factor: 1	Analysis Time..: 16:31	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 #...: A1A190402 **Work Order #...:** MDF33-SMP MDF33-DUP **Matrix.....:** WG

Date Sampled...: 01/18/11 12:05 **Date Received..:** 01/19/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/20-01/25/11	1020016
		Dilution Factor: 1				Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/20-01/21/11	1020016
		Dilution Factor: 1				Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/20-01/25/11	1020016
		Dilution Factor: 1				Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5						
Barium						SD Lot-Sample #: A1A190402-034		
	232	231	ug/L	0.71	(0-20)	SW846 6010B	01/20-01/25/11	1020016
		Dilution Factor: 1				Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/20-01/21/11	1020016
		Dilution Factor: 1				Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #: A1A190402-034		
	29800	29600	ug/L	0.75	(0-20)	SW846 6010B	01/20-01/25/11	1020016
		Dilution Factor: 1				Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/20-01/21/11	1020016
		Dilution Factor: 1				Analysis Time..: 16:31	Analyst ID.....: 000079	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/20-01/25/11	1020016
		Dilution Factor: 1				Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/20-01/25/11	1020016
		Dilution Factor: 1				Analysis Time..: 13:08	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1A190402-000 **Work Order #...:** MDF33-SMP MDF33-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/20-01/25/11	1020016
			Dilution Factor: 1			Analysis Time..: 13:08	Analyst ID.....: 001637	
			Instrument ID..: I5					
Iron						SD Lot-Sample #: A1A190402-034		
	6590	6630	ug/L	0.62	(0-20)	SW846 6020	01/20-01/21/11	1020016
			Dilution Factor: 1			Analysis Time..: 16:31	Analyst ID.....: 000079	
			Instrument ID..: I8					
Mercury						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	01/20-01/26/11	1020016
			Dilution Factor: 1			Analysis Time..: 15:57	Analyst ID.....: 001576	
			Instrument ID..: H1					
Potassium						SD Lot-Sample #: A1A190402-034		
	3390	3370	ug/L	0.78	(0-20)	SW846 6010B	01/20-01/25/11	1020016
			Dilution Factor: 1			Analysis Time..: 13:08	Analyst ID.....: 001637	
			Instrument ID..: I5					
Magnesium						SD Lot-Sample #: A1A190402-034		
	14400	14300	ug/L	0.72	(0-20)	SW846 6010B	01/20-01/25/11	1020016
			Dilution Factor: 1			Analysis Time..: 13:08	Analyst ID.....: 001637	
			Instrument ID..: I5					
Manganese						SD Lot-Sample #: A1A190402-034		
	1570	1560	ug/L	0.64	(0-20)	SW846 6010B	01/20-01/25/11	1020016
			Dilution Factor: 1			Analysis Time..: 13:08	Analyst ID.....: 001637	
			Instrument ID..: I5					
Sodium						SD Lot-Sample #: A1A190402-034		
	6630	6440	ug/L	2.9	(0-20)	SW846 6020	01/20-01/21/11	1020016
			Dilution Factor: 1			Analysis Time..: 16:31	Analyst ID.....: 000079	
			Instrument ID..: I8					
Nickel						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/20-01/25/11	1020016
			Dilution Factor: 1			Analysis Time..: 13:08	Analyst ID.....: 001637	
			Instrument ID..: I5					
Lead						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/20-01/25/11	1020016
			Dilution Factor: 1			Analysis Time..: 13:08	Analyst ID.....: 001637	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1A190402-000 **Work Order #...:** MDF33-SMP MDF33-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/20-01/21/11	1020016
			Dilution Factor: 1			Analysis Time..: 16:31	Analyst ID.....: 000079	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/20-01/25/11	1020016
			Dilution Factor: 1			Analysis Time..: 13:08	Analyst ID.....: 001637	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/20-01/21/11	1020016
			Dilution Factor: 1			Analysis Time..: 16:31	Analyst ID.....: 000079	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/20-01/25/11	1020016
			Dilution Factor: 1			Analysis Time..: 13:08	Analyst ID.....: 001637	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #: A1A190402-034		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/20-01/21/11	1020016
			Dilution Factor: 1			Analysis Time..: 16:31	Analyst ID.....: 000079	
			Instrument ID..: I8					

TestAmerica North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80121A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 01/21/11 12:59 PM Found	Q	CCB 2 01/21/11 2:41 PM Found	Q	CCB 3 01/21/11 3:50 PM Found	Q	CCB 4 01/21/11 4:52 PM Found	Q	CCB 5 01/21/11 5:36 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	6.9	U	6.9	U	**8.5**	**B**	**9.8**	**B**	**13**	**B**
Thallium	205	1	**0.36**	**B**	**0.35**	**B**	**0.22**	**B**	**0.19**	**B**	**0.29**	**B**
Zinc	66	10	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U

ICB
MBS-001-1681-GF,
FW9CL3-236-1648

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80121A.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 01/21/11 12:27 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	6.9	U								
Thallium	205	1	**0.31**	**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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A190402 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 1.7 and 4.0°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-9
7. Does the initial calibration curve consist of at least 6 standards and one blank?	✓				LCG Table 10 R
8. Was the correlation coefficient R ≥ .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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A1A190402 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 MS and MSD analyzed on sample FWGLL2mw-269-1647-GW recovered below control limits at 50% and 54%, respectively. All cyanide results were qualified as estimated, "J/UJ".	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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

SDG: A01A190402 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
1. Did Chain-of-Custody information agree with laboratory report?	X				
2. Were samples preserved properly and received in good condition?	X			The coolers were received between 1.7– 4.0 °C.	QAPP Table 4-2
3. Were holding times met?	X				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	X				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	X				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	X				QAPP Table 3-9
7. Was the Linear Calibration Range verified using 3 standards and 1 blank? Was the ICV within 10% of the initial values?	X				Method EPA 353.2 Section 9.2.2 J
8. Were the calibration standards verified by preparation and analysis of a Quality Control Sample? Were results within 10% of the stated values?	X				Method EPA 353.2 Section 9.2.3 Pj
9. Was an Instrument Performance Check Solution (CCV) analyzed immediately following daily calibration, after every 10th sample, and at the end of the analytical sequence?	X				Method EPA 353.2 Section 9.3.4
10. Was the CCV a mid-level standard from the initial calibration curve?	X				Method EPA 353.2 Section 9.3.4
11. Were the CCVs 90-110%?	X				Method EPA 353.2 Section 9.3.4 >110%=J; <85%=J/R 85-90%=J/UJ;
12. Was a method blank and a calibration blank prepared and analyzed with each batch?	X				Method EPA 353.2 Section 9.3.1, 9.3.4
13. Were target analytes detected in the method blank or calibration blank >1/2 the MRL?		X		*ADR checked section;*	LCG Attachment A Section 11 <5x = B
14. Was a field blank (trip or equipment) collected and analyzed?	X				
15. Were target analytes reported in the field blank analyses (trip or equipment) >1/2 the MRL?		X		*ADR checked section;*	*<5x=U*

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG:** A01A190402 Rev 0
Sample Event: January 2011 **Analysis:** EPA 353.2
Data Reviewer/Date: Angye Dragotta/ March 2, 2011

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
16. Was a field duplicate analyzed? Were the RPDs acceptable?	X				
17. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within 90-110%?	X				Method EPA 353.2 Section 9.3.3 J/UJ; <50%= R
18. Was a MS/MSD pair prepared with each batch?	X				*Method EPA 353.2 Section 9.4.1*
19. Was the MS/MSD parent sample a Ravenna sample?	X				
20. Were MS/MSD recoveries and RPD within acceptance criteria?	X			ADR checked section;	*Method EPA 353.2 Section 9.4.2* *Pj*
21. Were sample concentrations within calibration range?	X				
22. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		X			
23. Were lab comments included in report? If yes, summarize contents.	X				

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGMBSmw-001C-1681-GW

General Chemistry

Lot-Sample #...: A1A190402-002 Work Order #...: MDF2T Matrix.....: WG
Date Sampled...: 01/18/11 09:34 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-112C-1679-GW

General Chemistry

Lot-Sample #...: A1A190402-004 **Work Order #...:** MDF2W **Matrix.....:** WG
Date Sampled...: 01/18/11 10:58 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGNTAmw-113C-1680-GW

General Chemistry

Lot-Sample #...: A1A190402-006 **Work Order #...:** MDF20 **Matrix.....:** WG
Date Sampled...: 01/18/11 12:12 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-169C-1670-GW

General Chemistry

Lot-Sample #...: A1A190402-008 **Work Order #...:** MDF22 **Matrix.....:** WG
Date Sampled...: 01/18/11 13:43 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-172C-1671-GW

General Chemistry

Lot-Sample #...: A1A190402-010 **Work Order #...:** MDF25 **Matrix.....:** WG
Date Sampled...: 01/18/11 14:54 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-173C-1672-GW

General Chemistry

Lot-Sample #...: A1A190402-012 **Work Order #...:** MDF27 **Matrix.....:** WG
Date Sampled...: 01/18/11 16:17 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-001-1682-GW

General Chemistry

Lot-Sample #...: A1A190402-015 **Work Order #...:** MDF3A **Matrix.....:** WG
Date Sampled...: 01/18/11 09:30 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280
	Dilution Factor: 1			MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	01/20/11	1020127
	Dilution Factor: 1			MDL.....: 0.05		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-002-1683-GW

General Chemistry

Lot-Sample #...: A1A190402-017 **Work Order #...:** MDF3F **Matrix.....:** WG
Date Sampled...: 01/18/11 11:25 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	01/20/11	1020127
		Dilution Factor: 1		MDL.....: 0.05		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-004-1685-GW

General Chemistry

Lot-Sample #...: A1A190402-019 **Work Order #...:** MDF3H **Matrix.....:** WG
Date Sampled...: 01/18/11 13:10 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	01/20/11	1020127
		Dilution Factor: 1		MDL.....: 0.05		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-DUP1-1697-GW

General Chemistry

Lot-Sample #...: A1A190402-021 **Work Order #...:** MDF3K **Matrix.....:** WG
Date Sampled...: 01/18/11 14:00 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	01/20/11	1020127
		Dilution Factor: 1		MDL.....: 0.05		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-237C-1649-GW

General Chemistry

Lot-Sample #...: A1A190402-023 **Work Order #...:** MDF3M **Matrix.....:** WG
Date Sampled...: 01/18/11 15:20 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE2-1699-GW

General Chemistry

Lot-Sample #...: A1A190402-025 **Work Order #...:** MDF3P **Matrix.....:** WQ
Date Sampled...: 01/18/11 16:30 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280
	Dilution Factor: 1			MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	01/20/11	1020127
	Dilution Factor: 1			MDL.....: 0.05		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-266C-1645-GW

General Chemistry

Lot-Sample #...: A1A190402-027 Work Order #...: MDF3R Matrix.....: WG
Date Sampled...: 01/18/11 09:10 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	0.0064 B	0.010	mg/L	SW846 9012A	01/24/11	1024280
	Dilution Factor: 1			MDL.....: 0.0050		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-267C-1646-GW

General Chemistry

Lot-Sample #...: A1A190402-029 **Work Order #...:** MDF3V **Matrix.....:** WG
Date Sampled...: 01/18/11 10:20 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-DUP3-1694-GW

General Chemistry

Lot-Sample #...: A1A190402-031 Work Order #...: MDF3X Matrix.....: WG
Date Sampled...: 01/18/11 11:20 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	0.0064 B	0.010	mg/L	SW846 9012A	01/24/11	1024280

Dilution Factor: 1 MDL.....: 0.0050

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL2mw-269C-1647-GW

General Chemistry

Lot-Sample #...: A1A190402-033 Work Order #...: MDF31 Matrix.....: WG
Date Sampled...: 01/18/11 12:05 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	0.0084 B	0.010	mg/L	SW846 9012A	01/24/11	1024280

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: FWGLL3mw-236C-1648-GW

General Chemistry

Lot-Sample #...: A1A190402-035 **Work Order #...:** MDF34 **Matrix.....:** WG
Date Sampled...: 01/18/11 14:20 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-242C-1652-GW

General Chemistry

Lot-Sample #...: A1A190402-037 **Work Order #...:** MDF36 **Matrix.....:** WG
Date Sampled...: 01/18/11 15:25 **Date Received..:** 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-243C-1703-GW

General Chemistry

Lot-Sample #...: A1A190402-039 Work Order #...: MDF38 Matrix.....: WG
Date Sampled...: 01/18/11 16:30 Date Received..: 01/19/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	0.0056 B	0.010	mg/L	SW846 9012A	01/24/11	1024280

Dilution Factor: 1 MDL.....: 0.0050

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1A190402 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MDMRL1AA		MB Lot-Sample #:	A1A240000-280	
	ND	0.010	mg/L	SW846 9012A	01/24/11	1024280
		Dilution Factor: 1				
Nitrate-Nitrite		Work Order #: MDH0N1AA		MB Lot-Sample #:	A1A200000-127	
	ND	0.1	mg/L	MCAWW 353.2	01/20/11	1020127
		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 #...: A1A190402 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MDMRL1AC	LCS Lot-Sample#: A1A240000-280		
	93	(80 - 120)	SW846 9012A	01/24/11	1024280
		Dilution Factor: 1			
Nitrate-Nitrite		Work Order #: MDH0N1AC	LCS Lot-Sample#: A1A200000-127		
	98	(90 - 110)	MCAWW 353.2	01/20/11	1020127
		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 #...: A1A190402 **Matrix.....:** WATER
Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite		WO#: MDHLP1AU-MS/MDHLP1AV-MSD				MS Lot-Sample #: A1A200401-017	
	104	(90 - 110)			MCAWW 353.2	01/20/11	1020127
	103	(90 - 110)	0.29	(0-20)	MCAWW 353.2	01/20/11	1020127

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 #...: A1A190402 **Matrix.....:** WG
Date Sampled...: 01/18/11 12:05 **Date Received..:** 01/19/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: MDF311AM-MS/MDF311AN-MSD				MS Lot-Sample #: A1A190402-033	
	50 N	(80 - 120)			SW846 9012A	01/24/11	1024280
	54 N	(80 - 120)	5.2	(0-20)	SW846 9012A	01/24/11	1024280

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: A1A190402										
6010B	FWGFBQmw-172C-1671-GF	AQ	N							
				Potassium	1000	702B		J	ug/L	L
6010B	FWGFBQmw-173C-1672-GF	AQ	N							
				Nickel	10.0	3.6B		J	ug/L	L
6010B	FWGLL2mw-267C-1646-GF	AQ	N							
				Cobalt	5.0	2.2B		J	ug/L	L
				Nickel	10.0	3.8B		J	ug/L	L
				Potassium	1000	731B		J	ug/L	L
6010B	FWGLL2mw-DUP3-1694-GF	AQ	FD							
				Cobalt	5.0	2.8B		J	ug/L	L
				Nickel	10.0	3.7B		J	ug/L	L
				Potassium	1000	749B		J	ug/L	L
6010B	FWGLL3mw-236C-1648-GF	AQ	N							
				Nickel	10.0	3.5B		J	ug/L	L
6010B	FWGLL3mw-237C-1649-GF	AQ	N							
				Nickel	10.0	5.2B		J	ug/L	L
6010B	FWGLL3mw-242C-1652-GF	AQ	N							
				Barium	10.0	4.5B		J	ug/L	L
				Nickel	10.0	5.9B		J	ug/L	L
				Potassium	1000	872B		J	ug/L	L
6010B	FWGLL3mw-243C-1703-GF	AQ	N							
				Nickel	10.0	2.2B		J	ug/L	L
6010B	FWGMBSmw-001C-1681-GF	AQ	N							
				Arsenic	5.0	4.7B		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A190402										
6020	FWGFBQmw-173C-1672-GF	AQ	N							
				Zinc	10.0	5.7B		J	ug/L	L
6020	FWGLL2mw-266C-1645-GF	AQ	N							
				Zinc	10.0	3.8B		J	ug/L	L
6020	FWGLL2mw-267C-1646-GF	AQ	N							
				Zinc	10.0	3.8B		J	ug/L	L
6020	FWGLL2mw-DUP3-1694-GF	AQ	FD							
				Zinc	10.0	3.6B		J	ug/L	L
6020	FWGLL3mw-236C-1648-GF	AQ	N							
				Thallium	1.0	0.28B		UJ	ug/L	Cb,L
				Zinc	10.0	5.2B		J	ug/L	L
6020	FWGLL3mw-237C-1649-GF	AQ	N							
				Antimony	2.0	0.13B		J	ug/L	L
				Zinc	10.0	3.8B		J	ug/L	L
6020	FWGLL3mw-242C-1652-GF	AQ	N							
				Zinc	10.0	6.7B		J	ug/L	L
6020	FWGLL3mw-243C-1703-GF	AQ	N							
				Antimony	2.0	0.46B		J	ug/L	L
				Zinc	10.0	3.4B		J	ug/L	L
6020	FWGMBSmw-001C-1681-GF	AQ	N							
				Thallium	1.0	0.36B		UJ	ug/L	Cb,L
6020	FWGNTAmw-112C-1679-GF	AQ	N							
				Zinc	10.0	2.9B		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A190402										
6020	FWGSCFmw-001-1682-GF	AQ	N							
				Antimony	2.0	1.5B		J	ug/L	L
				Zinc	10.0	2.6B		J	ug/L	L
6020	FWGSCFmw-004-1685-GF	AQ	N							
				Zinc	10.0	10.0U		UJ	ug/L	Pj,P
6020	FWGSCFmw-DUP1-1697-GF	AQ	FD							
				Zinc	10.0	3.1B		J	ug/L	Pj,L
8081A	FWGFBQmw-169C-1670-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: A1A190402										
8081A	FWGLL2mw-266C-1645-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: A1A190402										
8081A	FWGLL2mw-267C-1646-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: A1A190402										
8081A	FWGLL2mw-DUP3-1694-GW	AQ	FD							
				4,4'-DDD	0.30	0.30U		UJ	ug/L	G
				4,4'-DDE	0.30	0.30U		UJ	ug/L	G
				4,4'-DDT	0.30	0.30U		UJ	ug/L	G
				Aldrin	0.30	0.30U		UJ	ug/L	G
				alpha-BHC	0.30	0.30U		UJ	ug/L	G
				alpha-Chordane	0.30	0.30U		UJ	ug/L	G
				beta-BHC	0.30	0.30U		UJ	ug/L	G
				delta-BHC	0.30	0.30U		UJ	ug/L	G
				Dieldrin	0.30	0.30U		UJ	ug/L	G
				Endosulfan I	0.25	0.25U		UJ	ug/L	G
				Endosulfan II	0.25	0.25U		UJ	ug/L	G
				Endosulfan sulfate	0.30	0.30U		UJ	ug/L	G
				Endrin	0.30	0.30U		UJ	ug/L	G
				Endrin aldehyde	0.30	0.30U		UJ	ug/L	G
				Endrin ketone	0.30	0.30U		UJ	ug/L	G
				gamma-BHC	0.30	0.30U		UJ	ug/L	G
				gamma-Chlordane	0.30	0.30U		UJ	ug/L	G
				Heptachlor	0.30	0.30U		UJ	ug/L	G
				Heptachlor epoxide	0.30	0.30U		UJ	ug/L	G
				Methoxychlor	1.0	1.0U		UJ	ug/L	G
				Toxaphene	20	20U		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: A1A190402										
8081A	FWGNTAmw-112C-1679-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: A1A190402										
8081A	FWGNTAmw-113C-1680-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: A1A190402										
8081A	FWGSCFmw-001-1682-GW	AQ	N							
				4,4'-DDD	0.30	0.30U		UJ	ug/L	G
				4,4'-DDE	0.30	0.30U		UJ	ug/L	G
				4,4'-DDT	0.30	0.30U		UJ	ug/L	G
				Aldrin	0.30	0.30U		UJ	ug/L	G
				alpha-BHC	0.30	0.30U		UJ	ug/L	G
				alpha-Chordane	0.30	0.30U		UJ	ug/L	G
				beta-BHC	0.30	0.30U		UJ	ug/L	G
				delta-BHC	0.30	0.30U		UJ	ug/L	G
				Dieldrin	0.30	0.30U		UJ	ug/L	G
				Endosulfan I	0.25	0.25U		UJ	ug/L	G
				Endosulfan II	0.25	0.25U		UJ	ug/L	G
				Endosulfan sulfate	0.30	0.30U		UJ	ug/L	G
				Endrin	0.30	0.30U		UJ	ug/L	G
				Endrin aldehyde	0.30	0.30U		UJ	ug/L	G
				Endrin ketone	0.30	0.30U		UJ	ug/L	G
				gamma-BHC	0.30	0.30U		UJ	ug/L	G
				gamma-Chlordane	0.30	0.30U		UJ	ug/L	G
				Heptachlor	0.30	0.30U		UJ	ug/L	G
				Heptachlor epoxide	0.30	0.30U		UJ	ug/L	G
				Methoxychlor	1.0	1.0U		UJ	ug/L	G
				Toxaphene	20	20U		UJ	ug/L	G
8082	FWGFBQmw-169C-1670-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A190402										
8082	FWGLL2mw-266C-1645-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	FWGLL2mw-267C-1646-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	FWGLL2mw-DUP3-1694-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

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: A1A190402										
8082	FWGLL3mw-237C-1649-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	FWGNTAmw-112C-1679-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	FWGNTAmw-113C-1680-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A190402										
8082	FWGSCFmw-001-1682-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	FWGEQUIPRINSE2-1699-GW	AQ	EB							
				2-Butanone	10	5.1J		J	ug/L	L
				Acetone	10	11		B	ug/L	O
				Chloroform	1.0	0.40J		J	ug/L	L
8260B	FWGNTAmw-113C-1680-GW	AQ	N							
				Toluene	1.0	0.21J		J	ug/L	L
8260B	FWGSCFmw-004-1685-GW	AQ	N							
				Carbon disulfide	1.0	0.53J		J	ug/L	L,P
8260B	FWGSCFmw-DUP1-1697-GW	AQ	FD							
				Carbon disulfide	1.0	0.88J		J	ug/L	Pj,L
8260B	FWGTEAM1-TRIP	AQ	TB							
				2-Butanone	10	0.68J		J	ug/L	L
				4-Methyl-2-pentanone	10	0.38J		J	ug/L	L
8260B	FWGTEAM3-TRIP	AQ	TB							
				2-Butanone	10	0.61J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A190402										
8270C	FWGEQUIPRINSE2-1699-GW	AQ	EB							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	2.2J B		JB	ug/L	L,F
				Di-n-butyl phthalate	1.0	0.92J B		JB	ug/L	L,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGFBQmw-169C-1670-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	0.83J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGFBQmw-172C-1671-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.6J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.77J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGFBQmw-173C-1672-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.5J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.69J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGLL2mw-266C-1645-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	2.1J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.79J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J

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: A1A190402										
8270C	FWGLL2mw-267C-1646-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	3.2J B		JB	ug/L	L,N,P,F
				Di-n-butyl phthalate	1.0	0.76J B		JB	ug/L	L,N,P,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGLL2mw-269C-1647-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj,H
				bis(2-Ethylhexyl) phthalate	10	1.6J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.72J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	H,J
8270C	FWGLL2mw-DUP3-1694-GW	AQ	FD							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.5J B		JB	ug/L	Pj,N,F,L
				Di-n-butyl phthalate	1.0	1.0U		UJ	ug/L	Pj,P
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGLL3mw-236C-1648-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	2.2J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	1.0B		B	ug/L	F,N
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGLL3mw-237C-1649-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.9J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.90J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J

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: A1A190402										
8270C	FWGLL3mw-242C-1652-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				Di-n-butyl phthalate	1.0	1.0B		B	ug/L	F,N
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGLL3mw-243C-1703-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	2.8J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	1.0B		B	ug/L	F,N
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGMBSmw-001C-1681-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGNTAmw-112C-1679-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGNTAmw-113C-1680-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	3.0J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGSCFmw-001-1682-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	3.0J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.72J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J

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: A1A190402										
8270C	FWGSCFmw-002-1683-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	2.2J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.69J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGSCFmw-004-1685-GW	AQ	N							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.7J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.72J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGSCFmw-DUP1-1697-GW	AQ	FD							
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	Pj
				bis(2-Ethylhexyl) phthalate	10	1.9J B		JB	ug/L	L,N,F
				Di-n-butyl phthalate	1.0	0.79J B		JB	ug/L	L,N,F
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
9012A	FWGEQUIPRINSE2-1699-GW	AQ	EB							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGFBQmw-169C-1670-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGFBQmw-172C-1671-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGFBQmw-173C-1672-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGLL2mw-266C-1645-GW	AQ	N							
				Cyanide	0.010	0.0064B		J	mg/L	L,H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A190402										
9012A	FWGLL2mw-267C-1646-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	Pj,P,H
9012A	FWGLL2mw-269C-1647-GW	AQ	N	Cyanide	0.010	0.0084B		J	mg/L	L,H
9012A	FWGLL2mw-DUP3-1694-GW	AQ	FD	Cyanide	0.010	0.0064B		J	mg/L	Pj,H,L
9012A	FWGLL3mw-236C-1648-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGLL3mw-237C-1649-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGLL3mw-242C-1652-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGLL3mw-243C-1703-GW	AQ	N	Cyanide	0.010	0.0056B		J	mg/L	L,H
9012A	FWGMBSmw-001C-1681-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGNTAmw-112C-1679-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGNTAmw-113C-1680-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGSCFmw-001-1682-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A190402										
9012A	FWGSCFmw-002-1683-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGSCFmw-004-1685-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	H
9012A	FWGSCFmw-DUP1-1697-GW	AQ	FD	Cyanide	0.010	0.010U		UJ	mg/L	H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

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.

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE2-1699-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402025

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	5.1		ug/L	J	YES	J								J							L
Acetone	11		ug/L		YES	UJB										UJB					O
Chloroform	0.40		ug/L	J	YES	J								J							L
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 B	YES	UJB			UJB					J							L,F
Di-n-butyl phthalate	0.92		ug/L	J B	YES	UJB			UJB					J							L,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGFBQmw-169C-1670-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402008

Reviewed By / Date : Angye Dragotta 3/2/2011 **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 : FWGFBQmw-169C-1670-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402008

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	0.83		ug/L	J B	YES	~~U~~ J B			J B					J		J B					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGFBQmw-172C-1671-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402011

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	702		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 : FWGFBQmw-172C-1671-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402010

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	1.6		ug/L	J B	YES	UJ B			UJ B					J		UJ B					L,N,F
Di-n-butyl phthalate	0.77		ug/L	J B	YES	UJ B			UJ B					J		UJ B					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGFBQmw-173C-1672-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402013

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	3.6		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	5.7		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any quelifiers 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 : FWGFBQmw-173C-1672-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402012

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	1.5		ug/L	J B	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					L,N,F
Di-n-butyl phthalate	0.69		ug/L	J B	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGLL2mw-266C-1645-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402028

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	3.8		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-266C-1645-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402027

Reviewed By / Date : Angye Dragotta 3/2/2011 **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 : FWGLL2mw-266C-1645-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402027

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	2.1		ug/L	J B	YES	UJ JB			UB					J		UB					L,N,F
Di-n-butyl phthalate	0.79		ug/L	J B	YES	UJ JB			UB					J		UB					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.0064		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 : FWGLL2mw-267C-1646-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402030

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	2.2		ug/L	B	YES	J								J							L
Nickel	3.8		ug/L	B	YES	J								J							L
Potassium	731		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	3.8		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-267C-1646-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402029

Reviewed By / Date : Angye Dragotta 3/2/2011 **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 : FWGLL2mw-267C-1646-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402029

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	3.2		ug/L	J B	YES	UJB			UB					J		UB					L,N,P,F
Di-n-butyl phthalate	0.76		ug/L	J B	YES	UJB			UB					J		UB					L,N,P,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										Pj,P,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 : FWGLL2mw-269C-1647-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402033

Reviewed By / Date : Angye Dragotta 3/2/2011 **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										Pj,H
bis(2-Ethylhexyl) phthalate	1.6		ug/L	J B	YES	~~UJ~~ J B			~~U~~ J B					J		~~U~~ J B					L,N,F
Di-n-butyl phthalate	0.72		ug/L	J B	YES	~~UJ~~ J B			~~U~~ J B					J		~~U~~ J B					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ	UJ										H,J
Analysis Method : 9012A																					
																					Dilution: 1
Cyanide	0.0084		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 : FWGLL2mw-DUP3-1694-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402032

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	2.6		ug/L	B	YES	J								J							L
Nickel	3.7		ug/L	B	YES	J								J							L
Potassium	749		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	3.6		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL2mw-DUP3-1694-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A190402031

Reviewed By / Date : Angye Dragotta 3/2/2011 **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: 10**															
4,4'-DDD	0.30		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.30		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.30		ug/L	U	YES	UJ							UJ								G
Aldrin	0.30		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.30		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.30		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.30		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.30		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.30		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.25		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.25		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.30		ug/L	U	YES	UJ							UJ								G
Endrin	0.30		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.30		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.30		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.30		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.30		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.30		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.30		ug/L	U	YES	UJ							UJ								G
Methoxychlor	1.0		ug/L	U	YES	UJ							UJ								G
Toxaphene	20		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 : FWGLL2mw-DUP3-1694-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402031

Reviewed By / Date : Angye Dragotta 3/2/2011 **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
bis(2-Ethylhexyl) phthalate	1.5		ug/L	J B	YES	UJ JB			JB					J		JB					Pj,N,F,L
Di-n-butyl phthalate	1.0		ug/L	U	YES	UJ															Pj,P
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.0064		mg/L	B	YES	J					J			J							Pj,H,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 : FWGLL3mw-236C-1648-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402036

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	3.5		ug/L	B	YES	**J**								J							L
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.28		ug/L	B	YES	**UJ**								J							Cb,L
Zinc	5.2		ug/L	B	YES	**J**								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-236C-1648-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402035

Reviewed By / Date : Angye Dragotta 3/2/2011 **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 B	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					L,N,F
Di-n-butyl phthalate	1.0		ug/L	B	YES	~~U~~ B			~~U~~ B							~~U~~ B					F,N
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGLL3mw-237C-1649-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402024

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	5.2		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.13		ug/L	B	YES	J								J							L
Zinc	3.8		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers addad during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-237C-1649-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402023

Reviewed By / Date : Angye Dragotta 3/2/2011 **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
bis(2-Ethylhexyl) phthalate	1.9		ug/L	J B	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					L,N,F
Di-n-butyl phthalate	0.90		ug/L	J B	YES	~~UJ~~ JB			~~U~~ B					J		~~U~~ B					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGLL3mw-242C-1652-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402038

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	4.5		ug/L	B	YES	J								J							L
Nickel	5.9		ug/L	B	YES	J								J							L
Potassium	872		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	6.7		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 : FWGLL3mw-242C-1652-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402037

Reviewed By / Date : Angye Dragotta 3/2/2011 **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
Di-n-butyl phthalate	1.0		ug/L	B	YES	UB			UB							UB					F,N
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGLL3mw-243C-1703-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402040

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	2.2		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Antimony	0.46		ug/L	B	YES	J								J							L
Zinc	3.4		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-243C-1703-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402039

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	2.8		ug/L	J B	YES	UJ J B			U B					J		U B					L,N,F
Di-n-butyl phthalate	1.0		ug/L	B	YES	U B			U B							U B					F,N
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A																					
																					Dilution: 1
Cyanide	0.0056		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 : FWGMBSmw-001C-1681-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402003

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	4.7		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.36		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 : FWGMBSmw-001C-1681-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402002

Reviewed By / Date : Angye Dragotta 3/2/2011 **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
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGNTAmw-112C-1679-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402005

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	2.9		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGNTAmw-112C-1679-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402004

Reviewed By / Date : Angye Dragotta 3/2/2011 **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 : FWGNTAmw-112C-1679-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402004

Reviewed By / Date : Angye Dragotta 3/2/2011 **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
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGNTAmw-113C-1680-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402006

Reviewed By / Date : Angye Dragotta 3/2/2011 **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 : FWGNTAmw-113C-1680-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402006

Reviewed By / Date : Angye Dragotta 3/2/2011 **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**															
Toluene	0.21		ug/L	J	YES	J								J							L
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	3.0		ug/L	J B	YES	UJ SB			JB					J		JB					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGSCFmw-001-1682-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402016

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	1.5		ug/L	B	YES	J								J							L
Zinc	2.6		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-001-1682-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A190402015

Reviewed By / Date : Angye Dragotta 3/2/2011 **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: 10**															
4,4'-DDD	0.30		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.30		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.30		ug/L	U	YES	UJ							UJ								G
Aldrin	0.30		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.30		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.30		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.30		ug/L	U	YES	UJ							UJ								G
delta-BHC	0.30		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.30		ug/L	U	YES	UJ							UJ								G
Endosulfan I	0.25		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.25		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.30		ug/L	U	YES	UJ							UJ								G
Endrin	0.30		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.30		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.30		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.30		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.30		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.30		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.30		ug/L	U	YES	UJ							UJ								G
Methoxychlor	1.0		ug/L	U	YES	UJ							UJ								G
Toxaphene	20		ug/L	U	YES	UJ							UJ								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-001-1682-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402015

Reviewed By / Date : Angye Dragotta 3/2/2011 **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
bis(2-Ethylhexyl) phthalate	3.0		ug/L	J B	YES	~~UJ~~ JB			UB					J		UB					L,N,F
Di-n-butyl phthalate	0.72		ug/L	J B	YES	~~UJ~~ JB			UB					J		UB					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGSCFmw-002-1683-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402017

Reviewed By / Date : Angye Dragotta 3/2/2011 **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 B	YES	~~UJ~~ JB			~~UJ~~ JB					J		~~UJ~~ JB					L,N,F
Di-n-butyl phthalate	0.69		ug/L	J B	YES	~~UJ~~ JB			~~UJ~~ JB					J		~~UJ~~ JB					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGSCFmw-004-1685-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402020

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	10.0		ug/L	U	YES	UJ															Pj,P

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-004-1685-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402019

Reviewed By / Date : Angye Dragotta 3/2/2011 **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**															
Carbon disulfide	0.53		ug/L	J	YES	J								J							L,P
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.7		ug/L	J B	YES	~~UJ~~ JB			UB					J		UB					L,N,F
Di-n-butyl phthalate	0.72		ug/L	J B	YES	~~UJ~~ JB			UB					J		UB					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : FWGSCFmw-DUP1-1697-GF **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A190402022

Reviewed By / Date : Angye Dragotta 3/2/2011 **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	3.1		ug/L	B	YES	**J**								J							Pj,L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-DUP1-1697-GW **Lab Report Batch :** A1A190402 **Lab ID :** TALCAN

Sample Date : 01/18/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A190402021

Reviewed By / Date : Angye Dragotta 3/2/2011 **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**															
Carbon disulfide	0.88		ug/L	J	YES	J								J							Pj,L
Analysis Method : 8270C						**Dilution: 1**															
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ															Pj
bis(2-Ethylhexyl) phthalate	1.9		ug/L	J B	YES	~~UJ~~ JB			~~UJ~~ JB					J		~~UJ~~ JB					L,N,F
Di-n-butyl phthalate	0.79		ug/L	J B	YES	~~UJ~~ JB			~~UJ~~ JB					J		~~UJ~~ JB					L,N,F
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
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 : A1A190402
Lab ID : TALCAN
Sample Date : 01/18/2011
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A1A190402001

Reviewed By / Date : Angye Dragotta 3/2/2011
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	0.68		ug/L	J	YES	**J**								J							L
4-Methyl-2-pentanone	0.38		ug/L	J	YES	**J**								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGTEAM3-TRIP
Lab Report Batch : A1A190402
Lab ID : TALCAN
Sample Date : 01/18/2011
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A1A190402026

Reviewed By / Date : Angye Dragotta 3/2/2011
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	0.61		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review end any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A1A190402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE2-1699	A1A190402025	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: A1A190402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE2-1699	A1A190402025	8260B	AQ	2-Butanone	J	5.1	10	ug/L
				Chloroform	J	0.40	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	2.2	10	ug/L
				Di-n-butyl phthalate	J B	0.92	1.0	ug/L
FWGFBQmw-169C-1670-	A1A190402008			bis(2-Ethylhexyl) phthalate	J B	0.83	10	ug/L
FWGFBQmw-172C-1671-	A1A190402011	6010B		Potassium	B	702	1000	ug/L
FWGFBQmw-172C-1671-	A1A190402010	8270C		bis(2-Ethylhexyl) phthalate	J B	1.6	10	ug/L
				Di-n-butyl phthalate	J B	0.77	1.0	ug/L
FWGFBQmw-173C-1672-	A1A190402013	6010B		Nickel	B	3.6	10.0	ug/L
		6020		Zinc	B	5.7	10.0	ug/L
FWGFBQmw-173C-1672-	A1A190402012	8270C		bis(2-Ethylhexyl) phthalate	J B	1.5	10	ug/L
				Di-n-butyl phthalate	J B	0.69	1.0	ug/L
FWGLL2mw-266C-1645-G	A1A190402028	6020		Zinc	B	3.8	10.0	ug/L
FWGLL2mw-266C-1645-G	A1A190402027	8270C		bis(2-Ethylhexyl) phthalate	J B	2.1	10	ug/L
				Di-n-butyl phthalate	J B	0.79	1.0	ug/L
		9012A		Cyanide	B	0.0064	0.010	mg/L
FWGLL2mw-267C-1646-G	A1A190402030	6010B		Cobalt	B	2.2	5.0	ug/L
				Nickel	B	3.8	10.0	ug/L
				Potassium	B	731	1000	ug/L
		6020		Zinc	B	3.8	10.0	ug/L
FWGLL2mw-267C-1646-G	A1A190402029	8270C		bis(2-Ethylhexyl) phthalate	J B	3.2	10	ug/L
				Di-n-butyl phthalate	J B	0.76	1.0	ug/L
FWGLL2mw-269C-1647-G	A1A190402033			bis(2-Ethylhexyl) phthalate	J B	1.6	10	ug/L
				Di-n-butyl phthalate	J B	0.72	1.0	ug/L
		9012A		Cyanide	B	0.0084	0.010	mg/L
FWGLL2mw-DUP3-1694-	A1A190402032	6010B		Cobalt	B	2.8	5.0	ug/L
				Nickel	B	3.7	10.0	ug/L
				Potassium	B	749	1000	ug/L
		6020		Zinc	B	3.6	10.0	ug/L
FWGLL2mw-DUP3-1694-	A1A190402031	8270C		bis(2-Ethylhexyl) phthalate	J B	1.5	10	ug/L
		9012A		Cyanide	B	0.0064	0.010	mg/L
FWGLL3mw-236C-1648-G	A1A190402036	6010B		Nickel	B	3.5	10.0	ug/L
		6020		Thallium	B	0.28	1.0	ug/L
				Zinc	B	5.2	10.0	ug/L
FWGLL3mw-236C-1648-G	A1A190402035	8270C		bis(2-Ethylhexyl) phthalate	J B	2.2	10	ug/L
FWGLL3mw-237C-1649-G	A1A190402024	6010B		Nickel	B	5.2	10.0	ug/L

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A1A190402 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGLL3mw-237C-1649-G	A1A190402024	6020	AQ	Antimony	B	0.13	2.0	ug/L
				Zinc	B	3.8	10.0	ug/L
FWGLL3mw-237C-1649-G	A1A190402023	8270C		bis(2-Ethylhexyl) phthalate	J B	1.9	10	ug/L
				Di-n-butyl phthalate	J B	0.90	1.0	ug/L
FWGLL3mw-242C-1652-G	A1A190402038	6010B		Barium	B	4.5	10.0	ug/L
				Nickel	B	5.9	10.0	ug/L
				Potassium	B	872	1000	ug/L
		6020		Zinc	B	6.7	10.0	ug/L
FWGLL3mw-243C-1703-G	A1A190402040	6010B		Nickel	B	2.2	10.0	ug/L
		6020		Antimony	B	0.46	2.0	ug/L
				Zinc	B	3.4	10.0	ug/L
FWGLL3mw-243C-1703-G	A1A190402039	8270C		bis(2-Ethylhexyl) phthalate	J B	2.8	10	ug/L
		9012A		Cyanide	B	0.0056	0.010	mg/L
FWGMBSmw-001C-1681-	A1A190402003	6010B		Arsenic	B	4.7	5.0	ug/L
		6020		Thallium	B	0.36	1.0	ug/L
FWGNTAmw-112C-1679-	A1A190402005			Zinc	B	2.9	10.0	ug/L
FWGNTAmw-113C-1680-	A1A190402006	8260B		Toluene	J	0.21	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	3.0	10	ug/L
FWGSCFmw-001-1682-G	A1A190402016	6020		Antimony	B	1.5	2.0	ug/L
				Zinc	B	2.6	10.0	ug/L
FWGSCFmw-001-1682-G	A1A190402015	8270C		bis(2-Ethylhexyl) phthalate	J B	3.0	10	ug/L
				Di-n-butyl phthalate	J B	0.72	1.0	ug/L
FWGSCFmw-002-1683-G	A1A190402017			bis(2-Ethylhexyl) phthalate	J B	2.2	10	ug/L
				Di-n-butyl phthalate	J B	0.69	1.0	ug/L
FWGSCFmw-004-1685-G	A1A190402019	8260B		Carbon disulfide	J	0.53	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.7	10	ug/L
				Di-n-butyl phthalate	J B	0.72	1.0	ug/L
FWGSCFmw-DUP1-1697-	A1A190402022	6020		Zinc	B	3.1	10.0	ug/L
FWGSCFmw-DUP1-1697-	A1A190402021	8260B		Carbon disulfide	J	0.88	1.0	ug/L
		8270C		bis(2-Ethylhexyl) phthalate	J B	1.9	10	ug/L
				Di-n-butyl phthalate	J B	0.79	1.0	ug/L
FWGTEAM1-TRIP	A1A190402001	8260B		2-Butanone	J	0.68	10	ug/L
				4-Methyl-2-pentanone	J	0.38	10	ug/L
FWGTEAM3-TRIP	A1A190402026			2-Butanone	J	0.61	10	ug/L

QC Outlier Report: Trip Blank

Lab Reporting Batch : A1A190402
Lab ID: TALCAN
Method/Preparation Batch : 1020121 / 1020121
Analysis Date : 01/20/2011
Client Sample ID : FWGTEAM1-TRIP
Preparation Date : 01/20/2011
Lab Sample ID : A1A190402001
Preparation Type : 5030B

Analysis Method : 8260B

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	0.68	10	ug/L	J	Common Contaminant

2-Butanone contamination found in the trip blank did not qualify any samples.

4-Methyl-2-pentanone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	0.38	10	ug/L	J	

4-Methyl-2-pentanone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	14	10	ug/L		Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	12	10	ug/L		Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGEQUIPRINSE2-1699-G	A1A190402025	1	11		ug/L

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	0.61	10	ug/L	J	Common Contaminant

2-Butanone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	14	10	ug/L		Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Method Blank Outlier Report

Lab Reporting Batch : A1A190402
Lab ID: TALCAN
Analysis Method : 8260B
Analysis Date : 01/20/2011
Preparation Type : 5030B
Preparation Date : 01/20/2011
Method Blank Lab Sample ID : A1A200000121B
Preparation Batch : 1020121

Methylene chloride	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.66	2.0	ug/L	J	Common Contaminant

Methylene chloride contamination found in the method blank did not qualify any samples.

Method Blank Outlier Report

Lab Reporting Batch : A1A190402 **Lab ID:** TALCAN

Analysis Method : 8270C **Analysis Date :** 01/26/2011

Preparation Type : 3520C **Preparation Date :** 01/19/2011

Method Blank Lab Sample ID : A1A190000065B **Preparation Batch :** 1019065

Di-n-butyl phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.69	1.0	ug/L	J	Common Contaminant

Di-n-butyl 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
FWGEQUIPRINSE2-1699-G	A1A190402025	1	0.92	J B	ug/L
FWGFBQmw-172C-1671-G	A1A190402010	1	0.77	J B	ug/L
FWGFBQmw-173C-1672-G	A1A190402012	1	0.69	J B	ug/L
FWGLL2mw-266C-1645-GW	A1A190402027	1	0.79	J B	ug/L
FWGLL2mw-267C-1646-GW	A1A190402029	1	0.76	J B	ug/L
FWGLL2mw-269C-1647-GW	A1A190402033	1	0.72	J B	ug/L
FWGLL3mw-236C-1648-GW	A1A190402035	1	1.0	B	ug/L
FWGLL3mw-237C-1649-GW	A1A190402023	1	0.90	J B	ug/L
FWGLL3mw-242C-1652-GW	A1A190402037	1	1.0	B	ug/L
FWGLL3mw-243C-1703-GW	A1A190402039	1	1.0	B	ug/L
FWGSCFmw-001-1682-GW	A1A190402015	1	0.72	J B	ug/L
FWGSCFmw-002-1683-GW	A1A190402017	1	0.69	J B	ug/L
FWGSCFmw-004-1685-GW	A1A190402019	1	0.72	J B	ug/L
FWGSCFmw-DUP1-1697-G	A1A190402021	1	0.79	J B	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A1A190402
Lab ID: TALCAN
Analysis Method : 8270C
Analysis Date : 01/26/2011
Preparation Type : 3520C
Preparation Date : 01/19/2011
Method Blank Lab Sample ID : A1A190000065B
Preparation Batch : 1019065

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.93	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
FWGEQUIPRINSE2-1699-G	A1A190402025	1	2.2	J B	ug/L
FWGFBQmw-169C-1670-G	A1A190402008	1	0.83	J B	ug/L
FWGFBQmw-172C-1671-G	A1A190402010	1	1.6	J B	ug/L
FWGFBQmw-173C-1672-G	A1A190402012	1	1.5	J B	ug/L
FWGLL2mw-266C-1645-GW	A1A190402027	1	2.1	J B	ug/L
FWGLL2mw-267C-1646-GW	A1A190402029	1	3.2	J B	ug/L
FWGLL2mw-269C-1647-GW	A1A190402033	1	1.6	J B	ug/L
FWGLL2mw-DUP3-1694-GW	A1A190402031	1	1.5	J B	ug/L
FWGLL3mw-236C-1648-GW	A1A190402035	1	2.2	J B	ug/L
FWGLL3mw-237C-1649-GW	A1A190402023	1	1.9	J B	ug/L
FWGLL3mw-243C-1703-GW	A1A190402039	1	2.8	J B	ug/L
FWGNTAmw-113C-1680-G	A1A190402006	1	3.0	J B	ug/L
FWGSCFmw-001-1682-GW	A1A190402015	1	3.0	J B	ug/L
FWGSCFmw-002-1683-GW	A1A190402017	1	2.2	J B	ug/L
FWGSCFmw-004-1685-GW	A1A190402019	1	1.7	J B	ug/L
FWGSCFmw-DUP1-1697-G	A1A190402021	1	1.9	J B	ug/L

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A1A190402
Lab ID: TALCAN
Method/Preparation Batch : 1020164 / 1020164
Analysis Date : 01/20/2011
Client Sample ID : FWGEQUIPRINSE2-1699-GW
Preparation Date : 01/20/2011
Lab Sample ID : A1A190402025
Preparation Type : 5030B

Analysis Method : 8260B

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	5.1	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:	11	10	ug/L		Common Contaminant

Acetone contamination found in the equipment blank did not qualify any samples.

Chloroform	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.40	1.0	ug/L	J	

Chloroform contamination found in the equipment blank did not qualify any samples.

bis(2-Ethylhexyl) phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	2.2	10	ug/L	J B	Common Contaminant

bis(2-Ethylhexyl) phthalate was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGFBQmw-169C-1670-G	A1A190402008	1	0.83	J B	ug/L
FWGFBQmw-172C-1671-G	A1A190402010	1	1.6	J B	ug/L
FWGFBQmw-173C-1672-G	A1A190402012	1	1.5	J B	ug/L
FWGLL2mw-266C-1645-GW	A1A190402027	1	2.1	J B	ug/L
FWGLL2mw-267C-1646-GW	A1A190402029	1	3.2	J B	ug/L
FWGLL2mw-269C-1647-GW	A1A190402033	1	1.6	J B	ug/L
FWGLL2mw-DUP3-1694-GW	A1A190402031	1	1.5	J B	ug/L
FWGLL3mw-236C-1648-GW	A1A190402035	1	2.2	J B	ug/L
FWGLL3mw-237C-1649-GW	A1A190402023	1	1.9	J B	ug/L
FWGLL3mw-243C-1703-GW	A1A190402039	1	2.8	J B	ug/L
FWGNTAmw-113C-1680-G	A1A190402006	1	3.0	J B	ug/L
FWGSCFmw-001-1682-GW	A1A190402015	1	3.0	J B	ug/L
FWGSCFmw-002-1683-GW	A1A190402017	1	2.2	J B	ug/L
FWGSCFmw-004-1685-GW	A1A190402019	1	1.7	J B	ug/L
FWGSCFmw-DUP1-1697-G	A1A190402021	1	1.9	J B	ug/L

Di-n-butyl phthalate	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.92	1.0	ug/L	J B	Common Contaminant

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A1A190402
Lab ID: TALCAN
Method/Preparation Batch : 1019065 / 1019065
Analysis Date : 01/26/2011
Client Sample ID : FWGEQUIPRINSE2-1699-GW
Preparation Date : 01/19/2011
Lab Sample ID : A1A190402025
Preparation Type : 3520C

Analysis Method : 8270C

Di-n-butyl phthalate was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGFBQmw-172C-1671-G	A1A190402010	1	0.77	J B	ug/L
FWGFBQmw-173C-1672-G	A1A190402012	1	0.69	J B	ug/L
FWGLL2mw-266C-1645-GW	A1A190402027	1	0.79	J B	ug/L
FWGLL2mw-267C-1646-GW	A1A190402029	1	0.76	J B	ug/L
FWGLL2mw-269C-1647-GW	A1A190402033	1	0.72	J B	ug/L
FWGLL3mw-236C-1648-GW	A1A190402035	1	1.0	B	ug/L
FWGLL3mw-237C-1649-GW	A1A190402023	1	0.90	J B	ug/L
FWGLL3mw-242C-1652-GW	A1A190402037	1	1.0	B	ug/L
FWGLL3mw-243C-1703-GW	A1A190402039	1	1.0	B	ug/L
FWGSCFmw-001-1682-GW	A1A190402015	1	0.72	J B	ug/L
FWGSCFmw-002-1683-GW	A1A190402017	1	0.69	J B	ug/L
FWGSCFmw-004-1685-GW	A1A190402019	1	0.72	J B	ug/L
FWGSCFmw-DUP1-1697-G	A1A190402021	1	0.79	J B	ug/L

Laboratory Control Sample / Laboratory Control Sample Duplicate Outlier Report

Method Batch : 1019065 **Analysis Method :** 8270C **Analysis Date :** 01/26/2011

Preparation Batch : 1019065 **Preparation Type :** 3520C **Preparation Date :** 01/19/2011

Lab Reporting Batch : A1A190402 **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
A1A190000065C	AQ	Hexachlorocyclopentadiene	29		30.00	30.00	115.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE2-1699-GW	A1A190402025
FWGFBQmw-169C-1670-GW	A1A190402008
FWGFBQmw-172C-1671-GW	A1A190402010
FWGFBQmw-173C-1672-GW	A1A190402012
FWGLL2mw-266C-1645-GW	A1A190402027
FWGLL2mw-267C-1646-GW	A1A190402029
FWGLL2mw-269C-1647-GW	A1A190402033
FWGLL2mw-DUP3-1694-GW	A1A190402031
FWGLL3mw-236C-1648-GW	A1A190402035
FWGLL3mw-237C-1649-GW	A1A190402023
FWGLL3mw-242C-1652-GW	A1A190402037
FWGLL3mw-243C-1703-GW	A1A190402039
FWGMBSmw-001C-1681-GW	A1A190402002
FWGNTAmw-112C-1679-GW	A1A190402004
FWGNTAmw-113C-1680-GW	A1A190402006
FWGSCFmw-001-1682-GW	A1A190402015
FWGSCFmw-002-1683-GW	A1A190402017
FWGSCFmw-004-1685-GW	A1A190402019
FWGSCFmw-DUP1-1697-GW	A1A190402021

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 030240.0006 - RVAAP (OH)

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 1019065 **Analysis Method :** 8270C **Analysis Date :** 01/26/2011

Preparation Batch : 1019065 **Preparation Type :** 3520C **Preparation Date :** 01/19/2011

Lab Reporting Batch : A1A190402 **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
FWGLL2mw-269C-1647-	A1A190402033S	AQ	2,4-Dinitrophenol	29		0.00	45.00	135.00	40.00
			3,3'-Dichlorobenzidine	41		0.00	45.00	135.00	40.00
			Hexachlorocyclopentadiene	21		0.00	45.00	135.00	40.00
FWGLL2mw-269C-1647-	A1A190402033D		2,4-Dinitrophenol	31		0.00	45.00	135.00	40.00
			3,3'-Dichlorobenzidine	37		0.00	45.00	135.00	40.00
			4-Chloroaniline	44		0.00	45.00	135.00	40.00
			Hexachlorocyclopentadiene	20		0.00	45.00	135.00	40.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLL2mw-269C-1647-GW	A1A190402033

* 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)

Surrogate Recovery Outlier Report

Lab Report Batch: A1A190402 **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
FWGFBQmw-169C-1670-GW	A1A190402008	8081A	1	AQ	Decachlorobiphenyl	23	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
FWGLL2mw-266C-1645-GW	A1A190402027	8081A	1	AQ	Decachlorobiphenyl	42	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	48	50.0	150.0	10.0	All Target
FWGLL2mw-267C-1646-GW	A1A190402029	8081A	1	AQ	Decachlorobiphenyl	19	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	19	50.0	150.0	10.0	All Target
FWGLL2mw-DUP3-1694-GW	A1A190402031	8081A	10	AQ	Decachlorobiphenyl	32	50.0	150.0	10.0	All Target
		8082	1		Decachlorobiphenyl	36	50.0	150.0	10.0	All Target
FWGLL3mw-237C-1649-GW	A1A190402023	8081A	10	AQ	Tetrachloro-m-xylene	192	50.0	150.0	10.0	All Target
		8082	1		Decachlorobiphenyl	34	50.0	150.0	10.0	All Target
FWGNTAmw-112C-1679-GW	A1A190402004	8081A	1	AQ	Decachlorobiphenyl	22	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	34	50.0	150.0	10.0	All Target
FWGNTAmw-113C-1680-GW	A1A190402006	8081A	1	AQ	Decachlorobiphenyl	23	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	25	50.0	150.0	10.0	All Target
FWGSCFmw-001-1682-GW	A1A190402015	8081A	10	AQ	Decachlorobiphenyl	36	50.0	150.0	10.0	All Target
		8082	1		Decachlorobiphenyl	23	50.0	150.0	10.0	All Target
FWGSCFmw-DUP1-1697-GW	A1A190402021	8082	1	AQ	Tetrachloro-m-xylene	234	50.0	150.0	10.0	All Target

Project Number and Name: ***030240.0006 - RVAAP (OH)***

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 1024280 **Analysis Method :** 9012A **Analysis Date :** 01/24/2011

Preparation Batch : 1024280 **Preparation Type :** Gen Prep **Preparation Date :** 01/24/2011

Lab Reporting Batch : A1A190402 **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
FWGLL2mw-269C-1647-	A1A190402033S	AQ	Cyanide	50		40.00	80.00	120.00	20.00
FWGLL2mw-269C-1647-	A1A190402033D		Cyanide	54		40.00	80.00	120.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE2-1699-GW	A1A190402025
FWGFBQmw-169C-1670-GW	A1A190402008
FWGFBQmw-172C-1671-GW	A1A190402010
FWGFBQmw-173C-1672-GW	A1A190402012
FWGLL2mw-266C-1645-GW	A1A190402027
FWGLL2mw-267C-1646-GW	A1A190402029
FWGLL2mw-269C-1647-GW	A1A190402033
FWGLL2mw-DUP3-1694-GW	A1A190402031
FWGLL3mw-236C-1648-GW	A1A190402035
FWGLL3mw-237C-1649-GW	A1A190402023
FWGLL3mw-242C-1652-GW	A1A190402037
FWGLL3mw-243C-1703-GW	A1A190402039
FWGMBSmw-001C-1681-GW	A1A190402002
FWGNTAmw-112C-1679-GW	A1A190402004
FWGNTAmw-113C-1680-GW	A1A190402006
FWGSCFmw-001-1682-GW	A1A190402015
FWGSCFmw-002-1683-GW	A1A190402017
FWGSCFmw-004-1685-GW	A1A190402019
FWGSCFmw-DUP1-1697-GW	A1A190402021

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 030240.0006 - RVAAP (OH)

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A1A190402 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
8270C	AQ	bis(2-Ethylhexyl) phthalate	FWGLL2mw-267C	RES	3.2	J B	FWGLL2mw-DUP	RES	1.5	J B	72.3	30	ug/L
	AQ	Di-n-butyl phthalate		RES	0.76	J B		RES	1.0	U	200.0	30	ug/L
9012A	AQ	Cyanide		RES	0.010	U		RES	0.0064	B	200.0	30	mg/L
6020	AQ	Zinc	FWGSCFmw-004-	ES/TO	10.0	U	FWGSCFmw-DU	ES/TO	3.1	B	200.0	30	ug/L
8260B	AQ	Carbon disulfide	FWGSCFmw-004-	RES	0.53	J	FWGSCFmw-DU	RES	0.88	J	49.6	30	ug/L

Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.

Project Number and Name: ***030240.0006 - RVAAP (OH)***

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 1020016 **Analysis Method :** 7470A **Analysis Date :** 01/26/2011

Preparation Batch : 1020016 **Preparation Type :** 7470A **Preparation Date :** 01/20/2011

Lab Reporting Batch : A1A190402 **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
FWGLL2mw-269C-1647-	A1A190402034S	AQ	Mercury	121		30.00	80.00	120.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
FWGEQUIPRINSE2-1699-GW	A1A190402025
FWGFBQmw-169C-1670-GF	A1A190402009
FWGFBQmw-172C-1671-GF	A1A190402011
FWGFBQmw-173C-1672-GF	A1A190402013
FWGLL2mw-266C-1645-GF	A1A190402028
FWGLL2mw-267C-1646-GF	A1A190402030
FWGLL2mw-269C-1647-GF	A1A190402034
FWGLL2mw-DUP3-1694-GF	A1A190402032
FWGLL3mw-236C-1648-GF	A1A190402036
FWGLL3mw-237C-1649-GF	A1A190402024
FWGLL3mw-242C-1652-GF	A1A190402038
FWGLL3mw-243C-1703-GF	A1A190402040
FWGMBSmw-001C-1681-GF	A1A190402003
FWGNTAmw-112C-1679-GF	A1A190402005
FWGNTAmw-113C-1680-GF	A1A190402007
FWGSCFmw-001-1682-GF	A1A190402016
FWGSCFmw-002-1683-GF	A1A190402018
FWGSCFmw-004-1685-GF	A1A190402020
FWGSCFmw-DUP1-1697-GF	A1A190402022

* 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)***

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011
TA Sample Delivery Group: A1A180417

Date: March 15, 2011
Revision: 0

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

QA/QC Summary

On January 17, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1A180417.

Field Sample ID	Analytes	Method
FWGLL1mw-084c-1643-GW	Explosives Nitroguanidine Nitrocellulose	SW846 8330 SW846 M8330 TAL- SOP WS-WC-0050
FWGLL1mw-DUP2-1693-GW		
FWGEQUIPRinse1-1698-GW		
FWGLL1mw-085c-1644-GW		
FWGLL1mw-067c-1640-GW		
FWGLL1mw-082c-1642-GW		
FWGLL1mw-081c-1641-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 0.9°C – 2.7°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

LC12- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC12 was used as confirmation.

Samples FWGLL1mw-DUP2-1693-GW and FWGLL1mw-084c-1643-GW were analyzed at dilution to bring the 4,-amino-2,6-dinitrotoluene results within calibration range.

MRL Recovery
LC10- the following outliers were noted:

- The MRL analyzed 1/24/11 @ 2033 recovered above control limits with a %D of 43% for RDX.
- The MRL analyzed 1/26/11 @ 2058 recovered above control limits with a %D of 34% for RDX.

The RDX results for samples FWGLL1mw-084c-1643-GW, FWGLL1mw-DUP2-1693-GW and FWGLL1mw-081c-1641-GW were qualified as estimated, "J".

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011
TA Sample Delivery Group: A1A180417

Date: March 15, 2011
Revision: 0

LC12- The MRL analyzed 1/25/11 @ 1106 recovered above control limits with a %D of 36% for RDX. No qualification was made for the RDX outliers as LC12 was used for confirmation, and bracket field samples with detected RDX were already qualified as estimated from MRL outliers on the initial analysis.

Blanks
2,4,6-trinitrotolune was detected in FWGEQUIPRinse1-1698-GW at 0.071ug/L. No qualifications were made as detected 2,46-trinitrotoluene results in the associated field samples were >5x contamination.

Second Column Confirmation
The second column confirmation RPD was above control limits for 1,3,5-trinitrobenzeneand HMX in samples FWGLL1mw-084c-1643-GW and FWGLL1mw-DUP2-1693-GW and above limits for 1,3,5-trinitrobenzene in sample FWGLL1mw-081c-1641-GW. The HMX and 1,3,5-trinitrobenzene results for samples FWGLL1mw-084c-1643-GW and FWGLL1mw-DUP2-1693-GW and the HMX result for sample FWGLL1mw-081c-1641-GW were qualified as estimated, "J".

Surrogate Recovery
The surrogate, 3,4-dinitrotoluene recovered above control limits in samples FWGLL1mw-DUP2-1693-GW and FWGLL1mw-084c-1643-GW at 507% and 519%. Detected results for samples FWGLL1mw-DUP2-1693-GW and FWGLL1mw-084c-1643-GW were qualified as estimated, "J".

Field Duplicate RPD
The RPD for the field duplicate FWGLL1mw-DUP2-1693-GW and FWGLL1mw-084c-1643-GW was above control limits for 3-nitrotoluene at 200%. No qualification of the data was made as 3-nitrotoluene was not detected in the parent sample, FWGLL1mw-084c-1643-GW.

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 - 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

No QC outliers were noted.

SAMPLE SUMMARY

A1A180417

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDEVK	001	FWGLL1mw-084C-1643-GW	01/17/11	15:07
MDEVM	002	FWGLL1mw-DUP2-1693-GW	01/17/11	16:10
MDEVN	003	FWGEQUIPRINSE1-1698-GW/GF	01/17/11	17:20
MDEVP	004	FWGLL1mw-085C-1644-GW	01/17/11	14:25
MDEVV	005	FWGLL1mw-067C-1640-GW	01/17/11	15:30
MDEVW	006	FWGLL1mw-082C-1642-GW	01/17/11	16:50
MDEVX	007	FWGLL1mw-081C-1641-GW	01/17/11	15:10

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica Laboratory location: North Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica 14 — THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact			
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: M. Loeb
Address: 1800 Carillon Blvd.	Telephone:	Telephone:	Telephone:
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com		
Phone: 513-825-7500		TAT if different from below: Please	
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Pick-up	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	
Project Number: 30240.0006	Shipping/Tracking No: NA		
PO# 16726			

COC No: Team 1 1/17/11

1 of 1 COCs

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered (Y/N)	Composite (C/G)	Analyses: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants 9012	Cyanide 9012/Colorized 9014	Metals 6010/7470	Hg/Mn 353.2	Perchlorates	Sample Specific Notes / Special Instructions:
FWGLLImw-084C-1643-GW	1/17/11	15:07		X						3	1		9		N	G	X	X	X	X	X	X	X				Cooler 1D A291
FWGLLImw-084C-1643-GF	1/17/11	15:07		X					1				1		Y	G								X	1/17/11	X	A291
FWGLLImw-DUP2-1693-GW	1/17/11	16:10		X						3	1		9		N	G	X	X	X	X	X	X	X				A250
FWGLLImw-DUP2-1693-GF	1/17/11	16:10		X					1				1		Y	G								X	EC	X	A250
FWGEQUIPRINSE1-1698-GW/GF	1/17/11	17:20		X					1	3	1		10		N	G	X	X	X	X	X	X	X	X		X	Not filtered L820
FWGTeam1-Trip	1/17/11	1300		X						2					N	G	X										A291
					EC			1/17/11																			

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 and perchlorates are field filtered. Temps may not meet requirements if sample collection is close to lab pick-up.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/17/11 17:56	AC Rodman	TAL-NC	1/17/11 1756
AC Rodman	TA-NC	1/17/11 1804			
			Received in Laboratory by: Cleona (Detroit)	Company: TAL NC	Date/Time: 1/18/11 in.

All VOCs in cooler A291

©2008, TestAmerica Laboratories, Inc. All rights reserved. TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

TAL-0018 (1008)

North Canton

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	11-7-11	000452
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
1800 Carillon Blvd	513 825 7500 (7495)	330 497 9396	
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Cincinnati Oh 45240	ECorbin	MWebb	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP Ravenna Oh	Lab Pickup		
Contract/Purchase Order/Quote No.			
30240.000.6 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	Zn(Ac) NaOH	Analysis (Attach list if more space is needed): VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Perchlorate 6850	Metals 6010	Special Instructions/ Conditions of Receipt
FWG Team 2 - Trip	11-7-11	1300		X						2			X									L875
FWGLLI mw-085C-1644-GW	1	1425		X			9			3	1		X	X	X	X	X	X	X	X	X	A206
FWGLLI mw-085C-1644-GF	1	1		X			1		1											X	X	* Filtered Metals only * A206
FWGLLI mw-067C-1640-GW	1	1530		X			9			3	1		X	X	X	X	X	X	X	X	X	L875
FWGLLI mw-067C-1640-GF	1	1		X			1		1											X	X	* Filtered Metals only * L875
FWGLLI mw-082C-1642-GW	1	1050		X			9			3	1		X	X	X	X	X	X	X			L582
FWGLLI mw-082C-1642-GF	1	1		X			1		1											X	X	Filtered Perch + Metals L582

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)
perchlorates were not FIELD FILTERED @ 085 OR 067 ***

1. Relinquished By	Date	Time	1. Received By	Date	Time
	11-7-11	1756		11/7/11	1756
2. Relinquished By	Date	Time	2. Received By	Date	Time
	11/7/11	1854		11/8/11	700
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

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

All VOAs in L875

North Canton

Chain of Custody Record

TestAmerica 16
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: CANTON
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Erik Corbin	M. Loeb	117201173
Address: 1800 Carillon Blvd	Telephone: 513 825 7500 (Fax 7495)	Telephone: 513 825 7500	Telephone: 330 497 9396	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com			
Phone:				
Project Name: RVAAP (OH)	Method of Shipment/Carrier: Lab Pick UP	TAT if different from below: PER SOW ☒ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 30240.0006	Shipping/Tracking No: N/A			
PO# 116726				

Analyses

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered	VOA 8260B	SVOC 8270	PEST 8081	PCB 8082	Explo 8330	Propellants	CN, nitrate, 9012	Metals 6010/6020/7470	Perchlorate	Sample Specific Notes / Special Instructions:
FWGTeam3-Trip	1-17-11	1300		X						2					N	X									A286
FWGLIMW-081C-1641-GW	1-17-11	1510		X				3		9	3		27		N	X	X	X	X	X	X	X			19416, L859, A286
FWGLIMW-081C-1641-GF	1-17-11	1510		X					3				3		Y								X	X	19416, L859, A286

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

ALL VOAS IN COOLER A286

Temps may not meet requirements if sample time is close to lab pick up.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Lisa M. Sebastian	EQM	1-17-11		TAL-NC	1/17/11 1756
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL-NC	1/17/11 1854			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Diana Schott	TAL NC	1/18/11 700

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

TAL-0018 (1008)

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number: A1A180417**
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 1/18/11 Opened on 1/18/11
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 12 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
084C-1643	<2 >12	1/18/11	JM
DUP2-1693	<2 >12		
EQUIPRinse1	<2 >12		
085C-1644	<2 >12		
067C-1640	<2 >12		
082C-1642	<2 >12		
081C-1641	<2 <2 <2 >12 >12 >12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
A250	1.8	IR	Ice
L820	1.5		
A291	2.4		
A206	1.4		
L875	2.0		
L582	2.6		
A286	0.9		
L946	1.9		
L859	2.7		

Discrepancies Cont'd:

CASE NARRATIVE

A1A180417

The following report contains the analytical results for seven water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 30240.0006. The samples were received January 18, 2011, according to documented sample acceptance procedures.

All analysis was performed at the TestAmerica West Sacramento Laboratory. Refer to the TestAmerica West Sacramento narrative 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 January 28, 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 0.9 to 2.7° C.

NITROAROMATICS AND NITRAMINES-8330

Result concentration exceeds the calibration range. Refer to the sample report pages for the affected compound(s) flagged with "E".

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The analyses reported herein were performed using an instrument that has two columns(GC) or detectors(HPLC), one of which is used to confirm the results of the other. Peak interferences may result in some cases, which cause a quantitation difference between the two columns/detectors. If the difference between the two results is greater than 40%, the higher of the two results or the primary column/detector is normally reported. The reported results are flagged with "PG".

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.



TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

Case Narrative

TestAmerica West Sacramento Project Number A1A180417

General Comments
The samples were received at 0 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 integrations being performed. The following samples and analytes required a manual integration:

Instrument LC10
8330 MRL standard (analyzed on 01/24/11 @ 20:33) - 2,4,6-Trinitrotoluene

8330 MRL standard (analyzed on 01/25/11 @ 07:04) – RDX

Sample 6 - HMX

WATER, 8330, Explosives
Sample(s): 1, 2
These samples have high surrogate recoveries due to visible chromatographic interferences. Results for these samples may be biased high. The surrogate recoveries in the associated method blank and laboratory control sample (LCS) were within established control limits.

Sample(s): 1, 2, 3, 4, 5, 6, 7, 7MS, 7MSD
The percent difference values for RDX are above the project specific acceptance limit in the MRL standard, indicating a high bias. This standard was analyzed prior to (instrument LC10) and after (instrument LC12) the associated samples. For corrective action a standard at approximately 2X the MDL was analyzed and the analyte was detected.

There were no other anomalies associated with this project.

WATER, 8330, Explosives

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A180417 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 0.9°C – 2.7°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 1/24/11 @ 2033 recovered above control limits with a %D of 43% for RDX. • The MRL analyzed 1/26/11 @ 2058 recovered above control limits with a %D of 34% for RDX. The RDX results for samples FWGLL1mw-084c-1643-GW, FWGLL1mw-DUP2-1693-GW and FWGLL1mw-081c-1641-GW were qualified as estimated, "J"., LC12- The MRL analyzed 1/25/11 @ 1106 recovered above control limits with a %D of 36% for RDX. No qualification was made for the RDX outliers as LC12 was used for confirmation, and bracket field samples with detected RDX were already qualified as estimated from MRL outliers on the initial analysis.	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 12/17/10, 12/29/10(confirmation)	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 , LC12 12/17/10@ 0417, 12/30/10 @ 0242, LC12 ; 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC12 was used as confirmation.	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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A180417 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%?	✓			LC12- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC12 was used as confirmation.	LCG Table 5 D>15% (neg) = J/R D>15% (pos) = J
15. Was a method blank prepared and analyzed with each batch?	✓				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. 2,4,6-trinitrotolune was detected in FWGEQUIPRinse1-1698-GW at 0.071ug/L. No qualifications were made as detected 2,46-trinitrotoluene results in the associated field samples were >5x contamination.	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?		✓		Checked by ADR. The RPD for the field duplicate FWGLL1mw-DUP2-1693-GW and FWGLL1mw-084c-1643-GW was above control limits for 3-nitrotoluene at 200%. No qualification of the data was made as 3-nitrotoluene was not detected in the parent sample, FWGLL1mw-084c-1643-GW.	QAPP Table 3-2 RPD >30=J
20. Were all positive results confirmed with a second column confirmation? Were the RPDs ≤ 40%?		✓		The second column confirmation RPD was above control limits for 1,3,5-trinitrobenzeneand HMX in samples FWGLL1mw-084c-1643-GW and FWGLL1mw-DUP2-1693-GW and above limits for 1,3,5-trinitrobenzene in sample FWGLL1mw-081c-1641-GW. The HMX and 1,3,5-trinitrobenzene results for samples FWGLL1mw-084c-1643-GW and FWGLL1mw-DUP2-1693-GW and the HMX result for sample FWGLL1mw-081c-1641-GW were qualified as estimated, "J".	LCG Table 5 RPD>40%=J
21. Was an LCS prepared and analyzed with each batch?	✓				STL SOP Section 9.6
22. Were the LCS recoveries within limits specified in LCG Appendix C?	✓			Checked by ADR.	LCG Appendix C <UL=J; 30-LL=J/UJ; <30%=J/R
23. Was a MS/MSD pair prepared with each batch?	✓				STL SOP Section 9.7
24. Was the MS/MSD parent a Ravenna sample?	✓				
25. Were MS/MSD recoveries 40-140% and RPD ≤20%?	✓			Checked by ADR.	QAPP Table 3-2 Pj

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A180417 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
27. Were reported sample concentrations within calibration range?	✓			Samples FWGLL1mw-DUP2-1693-GW and FWGLL1mw-084c-1643-GW were analyzed at dilution to bring the 4,-amino-2,6-dinitrotoluene results 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 in samples FWGLL1mw-DUP2-1693-GW and FWGLL1mw-084c-1643-GW at 507% and 519%. Detected results for samples FWGLL1mw-DUP2-1693-GW and FWGLL1mw-084c-1643-GW were qualified as estimated, "J".

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1643-GW

HPLC

Lot-Sample #...: A1A180417-001 Work Order #...: MDEVK1AA Matrix.....: WG
Date Sampled...: 01/17/11 15:07 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/24/11
Prep Batch #...: 1020123
Dilution Factor: 1 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	5.8 PG	0.10	ug/L	0.030
1,3-Dinitrobenzene	1.1	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	17	0.10	ug/L	0.10
2,4,6-Trinitrotoluene	13	0.10	ug/L	0.050
2,4-Dinitrotoluene	4.0	0.10	ug/L	0.050
2,6-Dinitrotoluene	1.3	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-Nitrotoluene	ND	0.50	ug/L	0.088
HMX	1.0 PG	0.10	ug/L	0.036
Nitrobenzene	ND	0.10	ug/L	0.050
Nitroglycerin	ND	0.65	ug/L	0.33
RDX	0.69	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	507 *,E	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

E Estimated result. Result concentration exceeds the calibration range.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLLlmw-084C-1643-GW

HPLC

Lot-Sample #...: A1A180417-001 Work Order #...: MDEVK2AA Matrix.....: WG
Date Sampled...: 01/17/11 15:07 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/26/11
Prep Batch #...: 1020123
Dilution Factor: 5.04 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4-Amino-2,6-dinitrotoluene	29 Q	0.50	ug/L	0.25

NOTE(S):

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1693-GW

HPLC

Lot-Sample #...: A1A180417-002 Work Order #...: MDEVM1AA Matrix.....: WG
Date Sampled...: 01/17/11 16:10 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/25/11
Prep Batch #...: 1020123
Dilution Factor: 0.97 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	5.1 PG	0.097	ug/L	0.029
1,3-Dinitrobenzene	0.86	0.097	ug/L	0.048
2-Amino-4,6-dinitrotoluene	16	0.097	ug/L	0.097
2,4,6-Trinitrotoluene	12	0.097	ug/L	0.048
2,4-Dinitrotoluene	3.2	0.097	ug/L	0.048
2,6-Dinitrotoluene	1.1	0.097	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.085
3-Nitrotoluene	0.40 J	0.48	ug/L	0.055
4-Nitrotoluene	ND	0.48	ug/L	0.085
HMX	0.99 PG	0.097	ug/L	0.035
Nitrobenzene	ND	0.097	ug/L	0.048
Nitroglycerin	ND	0.63	ug/L	0.32
RDX	0.66	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	519 *,E	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

E Estimated result. Result concentration exceeds the calibration range.

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-DUP2-1693-GW

HPLC

Lot-Sample #...: A1A180417-002 Work Order #...: MDEVM2AA Matrix.....: WG
Date Sampled...: 01/17/11 16:10 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/26/11
Prep Batch #...: 1020123
Dilution Factor: 4.87 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4-Amino-2,6-dinitrotoluene	29 Q	0.49	ug/L	0.24

NOTE(S):

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1698-GW/GF

HPLC

Lot-Sample #...: A1A180417-003 Work Order #...: MDEVN1AA Matrix.....: WQ
Date Sampled...: 01/17/11 17:20 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/25/11
Prep Batch #...: 1020123
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	**0.071 J**	**0.096**	**ug/L**	**0.048**
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1644-GW

HPLC

Lot-Sample #...: A1A180417-004 Work Order #...: MDEVP1AA Matrix.....: WG
Date Sampled...: 01/17/11 14:25 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/25/11
Prep Batch #...: 1020123
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	97	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1640-GW

HPLC

Lot-Sample #...: A1A180417-005 Work Order #...: MDEVV1AA Matrix.....: WG
Date Sampled...: 01/17/11 15:30 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/25/11
Prep Batch #...: 1020123
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	99	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1642-GW

HPLC

Lot-Sample #...: A1A180417-006 Work Order #...: MDEVW1AA Matrix.....: WG
Date Sampled...: 01/17/11 16:50 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/25/11
Prep Batch #...: 1020123
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	97	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1641-GW

HPLC

Lot-Sample #...: A1A180417-007 Work Order #...: MDEVX1AA Matrix.....: WG
Date Sampled...: 01/17/11 15:10 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/25/11
Prep Batch #...: 1020123
Dilution Factor: 1.06 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	0.11 PG	0.11	ug/L	0.032
1,3-Dinitrobenzene	ND	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	1.1	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	1.4	0.11	ug/L	0.053
4-Nitrotoluene	ND	0.53	ug/L	0.093
HMX	0.52	0.11	ug/L	0.038
Nitrobenzene	ND	0.11	ug/L	0.053
Nitroglycerin	ND	0.69	ug/L	0.35
RDX	1.1	0.11	ug/L	0.038
PETN	ND	0.69	ug/L	0.32
Tetryl	ND	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)

NOTE(S):

PG The percent difference between the original and confirmation analyses is greater than 40%.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A180417 Work Order #...: MDHXX1AA Matrix.....: WATER
MB Lot-Sample #: G1A200000-123

Prep Date.....: 01/20/11
Analysis Date..: 01/24/11 Prep Batch #...: 1020123
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 #...: A1A180417 Work Order #...: MDHXX1AC Matrix.....: WATER
LCS Lot-Sample#: G1A200000-123
Prep Date.....: 01/20/11 Analysis Date..: 01/24/11
Prep Batch #...: 1020123
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	107	(53 - 135)	SW846 8330
1,3-Dinitrobenzene	109	(54 - 120)	SW846 8330
2-Amino-4,6-dinitrotoluene	106	(53 - 120)	SW846 8330
2,4,6-Trinitrotoluene	95	(37 - 120)	SW846 8330
2,4-Dinitrotoluene	105	(58 - 136)	SW846 8330
2,6-Dinitrotoluene	105	(52 - 144)	SW846 8330
2-Nitrotoluene	104	(52 - 120)	SW846 8330
3-Nitrotoluene	103	(48 - 136)	SW846 8330
4-Amino-2,6-dinitrotoluene	104	(58 - 159)	SW846 8330
4-Nitrotoluene	105	(46 - 136)	SW846 8330
HMX	101	(45 - 140)	SW846 8330
Nitrobenzene	108	(49 - 120)	SW846 8330
Nitroglycerin	99	(60 - 120)	SW846 8330
RDX	109	(39 - 120)	SW846 8330
PETN	99	(60 - 120)	SW846 8330
Tetryl	107	(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 #...: A1A180417 Work Order #...: MDEVX1AC-MS Matrix.....: WG
MS Lot-Sample #: A1A180417-007 MDEVX1AD-MSD
Date Sampled...: 01/17/11 15:10 Date Received..: 01/18/11
Prep Date.....: 01/20/11 Analysis Date..: 01/25/11
Prep Batch #...: 1020123
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	92	(50 - 150)			SW846 8330
	90	(50 - 150)	1.7	(0-50)	SW846 8330
1,3-Dinitrobenzene	106	(50 - 150)			SW846 8330
	105	(50 - 150)	0.47	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	98	(50 - 150)			SW846 8330
	99	(50 - 150)	0.58	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	97	(50 - 150)			SW846 8330
	95	(50 - 150)	0.59	(0-50)	SW846 8330
2,4-Dinitrotoluene	101	(50 - 150)			SW846 8330
	101	(50 - 150)	0.19	(0-50)	SW846 8330
2,6-Dinitrotoluene	97	(50 - 150)			SW846 8330
	97	(50 - 150)	0.06	(0-50)	SW846 8330
2-Nitrotoluene	105	(50 - 150)			SW846 8330
	104	(50 - 150)	0.76	(0-50)	SW846 8330
3-Nitrotoluene	104	(50 - 150)			SW846 8330
	103	(50 - 150)	0.09	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	97	(50 - 150)			SW846 8330
	101	(50 - 150)	1.8	(0-50)	SW846 8330
4-Nitrotoluene	105	(50 - 150)			SW846 8330
	104	(50 - 150)	0.09	(0-50)	SW846 8330
HMX	88	(50 - 150)			SW846 8330
	87	(50 - 150)	0.0	(0-50)	SW846 8330
Nitrobenzene	99	(50 - 150)			SW846 8330
	98	(50 - 150)	1.1	(0-50)	SW846 8330
Nitroglycerin	101	(50 - 150)			SW846 8330
	99	(50 - 150)	1.9	(0-50)	SW846 8330
RDX	97	(50 - 150)			SW846 8330
	92	(50 - 150)	2.0	(0-50)	SW846 8330
PETN	98	(50 - 150)			SW846 8330
	98	(50 - 150)	0.72	(0-50)	SW846 8330
Tetryl	101	(50 - 150)			SW846 8330
	100	(50 - 150)	0.29	(0-50)	SW846 8330

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A180417 Work Order #...: MDEVX1AC-MS Matrix.....: WG
MS Lot-Sample #: A1A180417-007 MDEVX1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(50 - 150)
	101	(50 - 150)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC10 Batch ID: 01242011
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	Dil'n	Comments
24-JAN-2011	14:33	NS	8330 PRIMER	A-000002.	0 g	0 mL	1	
24-JAN-2011	15:18	NS	8330 PRIMER	A-000003.	0 g	0 mL	1	
24-JAN-2011	16:03	NS	STD_06 10GCSV0523 8330 L6 200n	A-000004.	0 g	0 mL	1	
24-JAN-2011	16:48	NS	MDE3D1AA 1018138 G1A180000-138	A-000005.	1000 mL	20 mL	1	
24-JAN-2011	17:33	NS	MDE3D1AC 1018138 G1A180000-138	A-000006.	1000 mL	20 mL	1	
24-JAN-2011	18:18	NS	MDCNE1AA 1018138 G1A140472-1 1	A-000007.	911.82 mL	20 mL	1	E'4NT
24-JAN-2011	19:03	NS	MDAV01AA 1018138 G1A130497-29	A-000008.	1000 mL	20 mL	1	
24-JAN-2011	19:48	NS	STD_05 10GCSV0524 8330 L5 100n	A-000009.	0 g	0 mL	1	
24-JAN-2011	20:33	NS	STD_MRL 10GCSV0528 8330 L1 5ng	A-000010.	0 g	0 mL	1	RDX 1
24-JAN-2011	21:18	NS	STD_MRL 10GCSV0526 8330 L3 20n	A-000011.	0 g	0 mL	1	
24-JAN-2011	22:03	NS	MDHXX1AA 1020123 G1A200000-123	A-000012.	1000 mL	20 mL	1	
24-JAN-2011	22:48	NS	MDHXX1AC 1020123 G1A200000-123	A-000013.	1000 mL	20 mL	1	Tetryl@107.
24-JAN-2011	23:33	NS	MDEVK1AA 1020123 A1A180417-1 1	A-000014.	991.36 mL	20 mL	1	E'4AM+Sum
25-JAN-2011	00:18	NS	MDEVM1AA 1020123 A1A180417-2 1	A-000015.	1025.94 mL	20 mL	1	E'4AM+Sum
25-JAN-2011	01:03	NS	MDEVN1AA 1020123 A1A180417-3 1	A-000016.	1038 mL	20 mL	1	
25-JAN-2011	01:48	NS	MDEVP1AA 1020123 A1A180417-4 1	A-000017.	921.13 mL	20 mL	1	
25-JAN-2011	02:33	NS	MDEVV1AA 1020123 A1A180417-5 1	A-000018.	1000.83 mL	20 mL	1	
25-JAN-2011	03:18	NS	MDEVW1AA 1020123 A1A180417-6 1	A-000019.	973.62 mL	20 mL	1	
25-JAN-2011	04:03	NS	MDEVX1AA 1020123 A1A180417-7 1	A-000020.	935.39 mL	20 mL	1	
25-JAN-2011	04:48	NS	MDEVX1AC 1020123 A1A180417-7 S	A-000021.	996.31 mL	20 mL	1	
25-JAN-2011	05:33	NS	MDEVX1AD 1020123 A1A180417-7 D	A-000022.	988.96 mL	20 mL	1	
25-JAN-2011	06:18	NS	STD_05 10GCSV0524 8330 L5 100n	A-000023.	0 g	0 mL	1	
25-JAN-2011	07:04	NS	STD_MRL 10GCSV0528 8330 L1 5ng	A-000024.	0 g	0 mL	1	
25-JAN-2011	07:49	NS	STD_MRL 10GCSV0526 8330 L3 20n	A-000025.	0 g	0 mL	1	

SDG 1/27/11

TestAmerica West Sacramento

A-000010.D

Chromatography Summary

Injection Date: 1/24/2011 20:33 Operator: NS

DataFile: LC10.I\01242011.B\A-000010.D Vial Num: 4

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.I\01242011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1, ; , ,3;CAL sub, ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.15	304	5.5070<	5	10%	Acceptable		16.16	609	5.7780	5	16%	Fails		(±15)	
HMX	5.24	708	5.4710<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.41	651	7.1480<	5	43%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.49	872	10.8300	5	117%	Fails		8.49	1314	11.0600<	5	121%	Fails		(±15)	
1,3,5-Trinitrobenzene	9.63	859	5.4260<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.17	844	5.4500<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.12	571	6.1460<	5	23%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	13.78	392	5.4750<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.18	518	5.4980<	5	10%	Acceptable	M				5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.67	431	5.6610<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.66	461	5.4950<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.09	337	5.7140<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.76	512	5.3930<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.70	237	5.7170<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.45	294	5.8890<	5	18%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.08	314	6.3170<	5	26%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.26	408	5.9290<	5	19%	Fails		(±15)	45
PETN				5	-100%	Fails		26.78	293	7.8190<	5	56%	Fails		(±15)	45
3,5-Dinitroaniline	12.89	555	5.4730<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails					5	-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
Other (reason must be stated)
ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

Printed: 1/28/2011 1:40 PM

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC12 Batch ID: 01242011
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
24-JAN-2011	15:20	RN	PRIMER	C-000001.	0 g	0 mL	1	
24-JAN-2011	16:25	RN	PRIMER	C-000002.	0 g	0 mL	1	
24-JAN-2011	17:31	RN	STD_06 10GCSV0523 8330 200-500	C-000003.	0 g	0 mL	1	
24-JAN-2011	18:37	RN	MDE3D1AA 1018138 G1A180000-138	C-000004.	1000 mL	20 mL	1	
24-JAN-2011	19:43	RN	MDCNE1AA 1018138 G1A140472-1 1	C-000005.	911.82 mL	20 mL	1	
24-JAN-2011	20:49	RN	MDAV01AA 1018138 G1A130497-29	C-000006.	1000 mL	20 mL	1	E' 24DNT+2NT
24-JAN-2011	21:55	RN	STD_05 10GCSV0524 8330 100-250	C-000007.	0 g	0 mL	1	
24-JAN-2011	23:00	RN	STD_MRL 10GCSV0528 8330 5ng/mL	C-000008.	0 g	0 mL	1	
25-JAN-2011	00:06	RN	STD_MRL 10GCSV0526 8330 20ng/m	C-000009.	0 g	0 mL	1	
25-JAN-2011	01:12	RN	MDHXX1AA 1020123 G1A200000-123	C-000010.	1000 mL	20 mL	1	E' 4AM (see 5x)
25-JAN-2011	02:18	RN	MDEVK1AA 1020123 A1A180417-1 1	C-000011.	991.36 mL	20 mL	1	E' 4AM (see 5x)
25-JAN-2011	03:24	RN	MDEVM1AA 1020123 A1A180417-2 1	C-000012.	1025.94 mL	20 mL	1	E' 4AM (see 5x)
25-JAN-2011	04:30	RN	MDEVN1AA 1020123 A1A180417-3 1	C-000013.	1038 mL	20 mL	1	not needed
25-JAN-2011	05:36	RN	MDEVP1AA 1020123 A1A180417-4 1	C-000014.	921.13 mL	20 mL	1	
25-JAN-2011	06:42	RN	MDEVV1AA 1020123 A1A180417-5 1	C-000015.	1000.83 mL	20 mL	1	
25-JAN-2011	07:48	RN	MDEVW1AA 1020123 A1A180417-6 1	C-000016.	973.62 mL	20 mL	1	
25-JAN-2011	08:54	RN	MDEVX1AA 1020123 A1A180417-7 1	C-000017.	935.39 mL	20 mL	1	
25-JAN-2011	10:00	RN	STD_05 10GCSV0524 8330 100-250	C-000018.	0 g	0 mL	1	
25-JAN-2011	11:06	RN	STD_MRL 10GCSV0528 8330 5ng/mL	C-000019.	0 g	0 mL	1	RDX ↑
25-JAN-2011	12:12	RN	STD_MRL 10GCSV0526 8330 20ng/m	C-000020.	0 g	0 mL	1	
25-JAN-2011	13:18	RN	STD_06 E100811Q MET 200ng/mL	C-000021.	0 g	0 mL	1	
25-JAN-2011	14:24	RN	MDJ1P1AA 1021092 G1A210000-92	C-000022.	1000 mL	20 mL	1	
25-JAN-2011	15:30	RN	MDJA61AA 1021092 G1A200466-1 1	C-000023.	984.23 mL	20 mL	1	
25-JAN-2011	16:36	RN	MDJA71AA 1021092 G1A200466-2 1	C-000024.	998.69 mL	20 mL	1	
25-JAN-2011	17:42	RN	MDJA81AA 1021092 G1A200466-3 1	C-000025.	987.11 mL	20 mL	1	E' RDX
25-JAN-2011	18:48	RN	MDJCA1AA 1021092 G1A200466-4 1	C-000026.	980.27 mL	20 mL	1	
25-JAN-2011	19:54	RN	MDJCD1AA 1021092 G1A200466-5 1	C-000027.	992.37 mL	20 mL	1	
25-JAN-2011	21:00	RN	STD_05 10GCSV0524 8330 100-250	C-000028.	0 g	0 mL	1	
25-JAN-2011	22:06	RN	STD_05 E100811R MET 100ng/mL	C-000029.	0 g	0 mL	1	
25-JAN-2011	23:12	RN	MDHX61AA 1020125 G1A200000-125	C-000030.	1000 mL	20 mL	1	
26-JAN-2011	00:18	RN	MDGPP1AC 1020125 G1A190491-1 1	C-000031.	992.6 mL	20 mL	1	
26-JAN-2011	01:24	RN	MDGPQ1AA 1020125 G1A190491-2 1	C-000032.	977.1 mL	20 mL	1	
26-JAN-2011	02:30	RN	MDGPR1AA 1020125 G1A190491-3 1	C-000033.	990.9 mL	20 mL	1	
26-JAN-2011	03:36	RN	MDGPV1AA 1020125 G1A190491-4 1	C-000034.	976.5 mL	20 mL	1	
26-JAN-2011	04:42	RN	MDGPX1AA 1020125 G1A190491-5 1	C-000035.	985.26 mL	20 mL	1	
26-JAN-2011	05:48	RN	MDGP01AA 1020125 G1A190491-6 1	C-000036.	962.91 mL	20 mL	1	
26-JAN-2011	06:53	RN	MDGP11AA 1020125 G1A190491-7 1	C-000037.	987.77 mL	20 mL	1	
26-JAN-2011	07:59	RN	STD_05 10GCSV0524 8330 100-250	C-000038.	0 g	0 mL	1	
26-JAN-2011	09:05	RN	STD_05 E100811R MET 100ng/mL	C-000039.	0 g	0 mL	1	
26-JAN-2011	11:20	RN	STD_MRL 10GCSV0528 8330 5ng/mL	C-000040.	0 g	0 mL	1	
26-JAN-2011	12:26	RN	STD_MRL 10GCSV0526 8330 20ng/m	C-000041.	0 g	0 mL	1	
26-JAN-2011	13:32	RN	MDMF81AA 1024166 G1A240000-166	C-000042.	1000 mL	20 mL	1	RT, 12 hours
26-JAN-2011	14:38	RN	MDMF81AD 1024166 G1A240000-166	C-000043.	1000 mL	20 mL	1	
26-JAN-2011	15:44	RN	MDF5V1AA 1024166 A1A190406-6 1	C-000044.	1034.9 mL	20 mL	1	
26-JAN-2011	16:50	RN	MDF5W1AA 1024166 A1A190406-7 1	C-000045.	1009.05 mL	20 mL	1	
26-JAN-2011	17:56	RN	MDF521AA 1024166 A1A190406-11	C-000046.	962.78 mL	20 mL	1	
26-JAN-2011	19:02	RN	MDF551AA 1024166 A1A190406-14	C-000047.	1028.25 mL	20 mL	1	
26-JAN-2011	20:07	RN	MDF561AA 1024166 A1A190406-15	C-000048.	1023.19 mL	20 mL	1	
26-JAN-2011	21:13	RN	MDF581AA 1024166 A1A190406-17	C-000049.	944.09 mL	20 mL	1	
26-JAN-2011	22:19	RN	MDF591AA 1024166 A1A190406-18	C-000050.	897.12 mL	20 mL	1	

Sequence continued on next page

RPT 1/27/11

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page 2 of Batch 01242011 on Instrument LC12
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
26-JAN-2011	23:25	RN		MDF6A1AA 1024166 A1A190406-19	C-000051.	939.04 mL	20 mL	1	RT 12hours
27-JAN-2011	00:30	RN	✓	MDEVK2AA 1020123 A1A180417-1 5	C-000052.	991.36 mL	20 mL	5	↓
27-JAN-2011	01:36	RN	✓	MDEVM2AA 1020123 A1A180417-2 5	C-000053.	1025.94 mL	20 mL	5	↓
27-JAN-2011	02:42	RN		STD_05 10GCSV0524 8330 100-250	C-000054.	0 g	0 mL	1	
27-JAN-2011	03:48	RN		STD_MRL 10GCSV0528 8330 5ng/mL	C-000055.	0 g	0 mL	1	
27-JAN-2011	04:54	RN		STD_MRL 10GCSV0526 8330 20ng/m	C-000056.	0 g	0 mL	1	

TBM 1/27/11

TestAmerica West Sacramento

C-000019.D

Chromatography Summary

Injection Date: 1/25/2011 11:06 Operator: RN

DataFile: LC12.B\012420l1.B\C-000019.D Vial Num: 5

Instrument ID: LC12

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0528 8330 5ng/mL**

Method File: LC12.B\012420l1.B\8330CNAB.M

Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	0 mL	0 mL	0 g

Matrix: NONE SubList: CAL.SUB SpikeList: 0

Samp. Info: STD_MRL 10GCSV0528 8330 5ng/mL;2;

Misc. Info: ;1;;;;3;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	39.33	290	5.0050<	5	0%	Acceptable					5	-100%	Fails		(±15)	45
HMX	43.09	359	5.1590<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
RDX	33.12	305	6.8170<	5	36%	Fails					5	-100%	Fails		(±15)	45
Picric ACID				10	-100%	Fails					10	-100%	Fails		(±15)	
1,3,5-Trinitrobenzene	29.12	442	5.5000<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	26.00	555	5.3650<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	47.07	650	4.8630<	5	-3%	Acceptable					5	-100%	Fails		(±15)	45
Nitrobenzene	22.66	261	5.2680<	5	5%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	41.63	499	4.9660<	5	-1%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	37.84	402	4.9870<	5	0%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	37.35	445	4.9730<	5	-1%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	35.06	313	6.1470<	5	23%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	34.07	501	5.9440<	5	19%	Fails					5	-100%	Fails		(±15)	45
2-Nitrotoluene	29.92	368	10.9000<	10	9%	Acceptable					10	-100%	Fails		(±15)	45
4-Nitrotoluene				5	-100%	Fails					5	-100%	Fails		(±15)	
3-Nitrotoluene	30.53	250	6.2290<	5	25%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		45.47	499	5.0810	5	2%	Acceptable		(±15)	45
PETN				5	-100%	Fails		53.29	747	5.0240<	5	0%	Acceptable		(±15)	45
3,5-Dinitroaniline	32.44	473	6.3110<	5	26%	Fails					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails					5	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

Printed: 1/25/2011 3:06 PM

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 20

Inst ID: LC10 Batch ID: 01252011
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
25-JAN-2011	17:09	RN		8330 PRIMER	A-000001.	0 g	0 mL	1	
25-JAN-2011	17:59	RN		STD_06 10GCSV0523 8330 L6 200n	A-000002.	0 g	0 mL	1	
25-JAN-2011	18:44	RN		STD_MRL 10GCSV0528 8330 L1 5ng	A-000003.	0 g	0 mL	1	
25-JAN-2011	19:29	RN		STD_MRL 10GCSV0526 8330 L3 20n	A-000004.	0 g	0 mL	1	
25-JAN-2011	20:14	RN		MDMF81AA 1024166 G1A240000-166	A-000005.	1000 mL	20 mL	1	
25-JAN-2011	20:59	RN		MDMF81AD 1024166 G1A240000-166	A-000006.	1000 mL	20 mL	1	
25-JAN-2011	21:44	RN		MDMF81AC 1024166 G1A240000-166	A-000007.	1000 mL	20 mL	1	
25-JAN-2011	22:28	RN		MDF5J1AA 1024166 A1A190406-1 1	A-000008.	1034.57 mL	20 mL	1	
25-JAN-2011	23:13	RN		MDF5P1AA 1024166 A1A190406-2 1	A-000009.	1022.69 mL	20 mL	1	
25-JAN-2011	23:58	RN		MDF5Q1AA 1024166 A1A190406-3 1	A-000010.	1015.74 mL	20 mL	1	
26-JAN-2011	00:44	RN		MDF5R1AA 1024166 A1A190406-4 1	A-000011.	1036.8 mL	20 mL	1	
26-JAN-2011	01:29	RN		MDF5T1AA 1024166 A1A190406-5 1	A-000012.	1021.47 mL	20 mL	1	
26-JAN-2011	02:13	RN		STD_05 10GCSV0524 8330 L5 100n	A-000013.	0 g	0 mL	1	
26-JAN-2011	02:59	RN		STD_MRL 10GCSV0528 8330 L1 5ng	A-000014.	0 g	0 mL	1	
26-JAN-2011	03:44	RN		STD_MRL 10GCSV0526 8330 L3 20n	A-000015.	0 g	0 mL	1	
26-JAN-2011	04:29	RN		MDF5V1AA 1024166 A1A190406-6 1	A-000016.	1034.9 mL	20 mL	1	
26-JAN-2011	05:14	RN		MDF5W1AA 1024166 A1A190406-7 1	A-000017.	1009.05 mL	20 mL	1	
26-JAN-2011	05:59	RN		MDF5X1AA 1024166 A1A190406-8 1	A-000018.	927.81 mL	20 mL	1	
26-JAN-2011	06:44	RN		MDF501AA 1024166 A1A190406-9 1	A-000019.	842.38 mL	20 mL	1	
26-JAN-2011	07:29	RN		MDF511AA 1024166 A1A190406-10	A-000020.	951.6 mL	20 mL	1	
26-JAN-2011	08:14	RN		MDF521AA 1024166 A1A190406-11	A-000021.	962.78 mL	20 mL	1	
26-JAN-2011	08:59	RN		MDF531AA 1024166 A1A190406-12	A-000022.	928.67 mL	20 mL	1	
26-JAN-2011	09:44	RN		MDF541AA 1024166 A1A190406-13	A-000023.	934.01 mL	20 mL	1	
26-JAN-2011	10:29	RN		STD_05 10GCSV0524 8330 L5 100n	A-000024.	0 g	0 mL	1	
26-JAN-2011	11:14	RN		STD_MRL 10GCSV0528 8330 L1 5ng	A-000025.	0 g	0 mL	1	
26-JAN-2011	11:59	RN		STD_MRL 10GCSV0526 8330 L3 20n	A-000026.	0 g	0 mL	1	
26-JAN-2011	12:44	RN		MDF551AA 1024166 A1A190406-14	A-000027.	1028.25 mL	20 mL	1	
26-JAN-2011	13:29	RN		MDF561AA 1024166 A1A190406-15	A-000028.	1023.19 mL	20 mL	1	
26-JAN-2011	14:14	RN		MDF571AA 1024166 A1A190406-16	A-000029.	977.76 mL	20 mL	1	
26-JAN-2011	14:59	RN		MDF571AC 1024166 A1A190406-16	A-000030.	969.83 mL	20 mL	1	
26-JAN-2011	15:44	RN		MDF571AD 1024166 A1A190406-16	A-000031.	978.15 mL	20 mL	1	
26-JAN-2011	16:29	RN		MDF581AA 1024166 A1A190406-17	A-000032.	944.09 mL	20 mL	1	
26-JAN-2011	17:13	RN		MDF591AA 1024166 A1A190406-18	A-000033.	897.12 mL	20 mL	1	
26-JAN-2011	17:58	RN		MDF6A1AA 1024166 A1A190406-19	A-000034.	939.04 mL	20 mL	1	
26-JAN-2011	18:43	RN	✓	MDEVK2AA 1020123 A1A180417-1 5	A-000035.	991.36 mL	20 mL	5	
26-JAN-2011	19:28	RN	✓	MDEVM2AA 1020123 A1A180417-2 5	A-000036.	1025.94 mL	20 mL	5	
26-JAN-2011	20:13	RN		STD_05 10GCSV0524 8330 L5 100n	A-000037.	0 g	0 mL	1	
26-JAN-2011	20:58	RN		STD_MRL 10GCSV0528 8330 L1 5ng	A-000038.	0 g	0 mL	1	PBX 1
26-JAN-2011	21:43	RN		STD_MRL 10GCSV0526 8330 L3 20n	A-000039.	0 g	0 mL	1	

TestAmerica West Sacramento

A-000038.D

Chromatography Summary

Injection Date: 1/26/2011 20:58 Operator: RN

DataFile: LC10.B\01252011.B\A-000038.D Vial Num: 7

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.B\01252011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL,2

Misc. Info: ;1; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	16.15	323	5.8510<	5	17%	Fails	*	16.12	500	4.7440	5	-5%	Acceptable		(±15)	
HMX	5.24	714	5.5170<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.41	611	6.7090<	5	34%	Fails	NA				5	-100%	Fails		(±15)	45
Picric ACID	8.49	810	10.0600	5	101%	Fails		8.51	1218	10.2600<	5	105%	Fails		(±15)	
1,3,5-Trinitrobenzene	9.64	818	5.1670<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.18	826	5.3340<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	13.13	554	5.9630<	5	19%	Fails	*				5	-100%	Fails		(±15)	45
Nitrobenzene	13.72	389	5.4340<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.18	519	5.5090<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.66	415	5.4510<	5	9%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.66	486	5.7930<	5	16%	Fails	*				5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	18.07	365	6.1890<	5	24%	Fails	*				5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.74	528	5.5620<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.70	238	5.7410<	5	15%	Acceptable					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.34	292	5.8490<	5	17%	Fails	*				5	-100%	Fails		(±15)	45
3-Nitrotoluene	25.03	324	6.5180<	5	30%	Fails	*				5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.23	319	4.6360<	5	-7%	Acceptable		(±15)	45
PETN				5	-100%	Fails		26.80	179	4.7770<	5	-4%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.92	569	5.6110<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails					5	-100%	Fails		(±15)	

1/28/11

*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%

Printed: 1/27/2011 10:05 AM

EXECUTIVE SUMMARY - Detection Highlights

A1A180417

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWGLL1mw-084C-1643-GW 01/17/11 15:07	**001**			
1,3,5-Trinitrobenzene	5.8 PG	0.10	ug/L	SW846 8330
1,3-Dinitrobenzene	1.1	0.10	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	17	0.10	ug/L	SW846 8330
2,4,6-Trinitrotoluene	13	0.10	ug/L	SW846 8330
2,4-Dinitrotoluene	4.0	0.10	ug/L	SW846 8330
2,6-Dinitrotoluene	1.3	0.10	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	29 Q	0.50	ug/L	SW846 8330
HMX	1.0 PG	0.10	ug/L	SW846 8330
RDX	0.69	0.10	ug/L	SW846 8330
FWGLL1mw-DUP2-1693-GW 01/17/11 16:10	**002**			
1,3,5-Trinitrobenzene	5.1 PG	0.097	ug/L	SW846 8330
1,3-Dinitrobenzene	0.86	0.097	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	16	0.097	ug/L	SW846 8330
2,4,6-Trinitrotoluene	12	0.097	ug/L	SW846 8330
2,4-Dinitrotoluene	3.2	0.097	ug/L	SW846 8330
2,6-Dinitrotoluene	1.1	0.097	ug/L	SW846 8330
3-Nitrotoluene	0.40 J	0.48	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	29 Q	0.49	ug/L	SW846 8330
HMX	0.99 PG	0.097	ug/L	SW846 8330
RDX	0.66	0.097	ug/L	SW846 8330
FWGEQUIPRINSE1-1698-GW/GF 01/17/11 17:20	**003**			
2,4,6-Trinitrotoluene	0.071 J	0.096	ug/L	SW846 8330
FWGLL1mw-081C-1641-GW 01/17/11 15:10	**007**			
1,3,5-Trinitrobenzene	0.11 PG	0.11	ug/L	SW846 8330
2-Amino-4,6-dinitrotoluene	1.1	0.11	ug/L	SW846 8330
4-Amino-2,6-dinitrotoluene	1.4	0.11	ug/L	SW846 8330
HMX	0.52	0.11	ug/L	SW846 8330
RDX	1.1	0.11	ug/L	SW846 8330

TestAmerica West Sacramento

A-000020.D

Chromatography Summary

Injection Date: 1/25/2011 4:03 Operator: NS

DataFile: LC10.M01242011.B\A-000020.D Vial Num: 53

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample: **MDEVX1AA 1020123 A1A180417-7 1X**

Method File: LC10.M01242011.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	20 mL	935.39 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDEVX1AA 1020123 A1A180417-7 1X;0;

Misc. Info: ;;935.39;;20;1;WATER sub;;0;1;MDEVX1AA

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	16.14	-0.005	6822	2.6420<		16.14	-0.015	13613	2.7620		0.0000	0.00	
HMX	5.25	0.009	3130	0.5171<							0.0289	0.11	45
RDX	7.42	0.012	4548	1.0680<							0.0695	0.11	45
Picric ACID											0.1336	1.07	
1,3,5-Trinitrobenzene	9.52	-0.105	785	0.1060<							0.0331	0.11	45
1,3-Dinitrobenzene											0.0535	0.11	
TETRYL											0.0535	0.11	
Nitrobenzene											0.0535	0.11	
2,4,6-Trinitrotoluene	15.14	-0.035	160	0.0363<							0.0257	0.11	45
4-AM-2,6-DNT	15.68	0.012	5140	1.4440<							0.0235	0.11	45
2-AM-4,6-DNT	16.65	-0.011	4174	1.0640<							0.1069	0.21	45
2,6-Dinitrotoluene											0.0535	0.11	
2,4-Dinitrotoluene											0.0535	0.11	
2-Nitrotoluene											0.0770	0.53	
4-Nitrotoluene											0.0770	0.53	
3-Nitrotoluene											0.0663	0.53	
Nitroglycerin											0.3528	0.69	
PETN											0.3207	0.69	
3,5-Dinitroaniline	12.88	-0.008	1233	0.2600<							0.0267	1.07	45

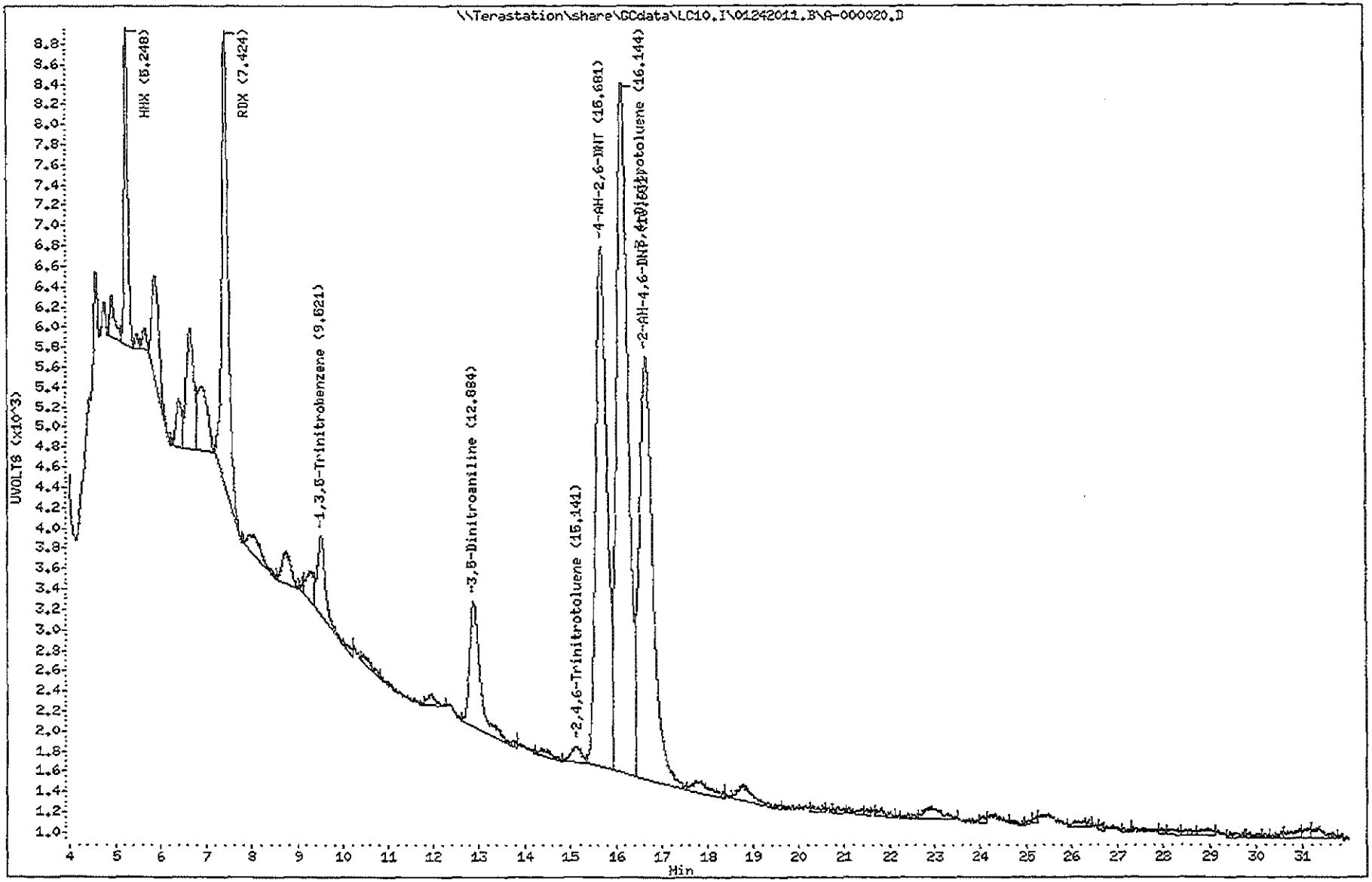
Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.6727	2.6420	99	2.6727	2.7620	103	(79-111)

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

Printed: 1/25/2011 9:39 AM

Data File: \\Terastation\share\GCdata\LC10.I\01242011.B\A-000020.D
Date : 25-JAN-2011 04:03
Client ID:
Sample Info: HDEVX1AA 1020123 A1A180417-7 1X:0;
Volume Injected (uL): 500.0
Column phase: SYNERGI HYDRORP C18

Instrument: LC10.i
Operator: NS
Column diameter: 4.60



North Canton

TestAmerica West Sacramento

C-000017.D

Chromatography Summary

Injection Date: 1/25/2011 8:54 Operator: RN

DataFile: LC12.I\01242011.B\C-000017.D Vial Num: 51

Instrument ID: LC12

Method 8330 Target Analyte Results

Sample : **MDEVX1AA 1020123 A1A180417-7 1X**

Method File: LC12.I\01242011.B\8330CNAB.M

Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	935.39 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDEVX1AA 1020123 A1A180417-7 1X;0;

Misc. Info: ;;935.39;;20;1;WATER.sub;;0;1;MDEVX1AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.36	-0.002	7107	2.6230<							0.0000	0.00	45
HMX	43.09	-0.032	1672	0.5137<							0.0289	0.11	45
RDX	33.19	0.011	2274	1.0870<							0.0695	0.11	45
Picric ACID											0.1336	1.07	
1,3,5-Trinitrobenzene	29.08	-0.066	134	0.0357<							0.0331	0.11	45
1,3-Dinitrobenzene											0.0535	0.11	
TETRYL											0.0535	0.11	
Nitrobenzene	22.86	0.148	206	0.0389<							0.0535	0.11	45
2,4,6-Trinitrotoluene											0.0257	0.11	
4-AM-2,6-DNT	37.90	-0.009	4994	1.3250<							0.0235	0.11	45
2-AM-4,6-DNT	37.40	-0.013	4094	0.9783<							0.1069	0.21	45
2,6-Dinitrotoluene											0.0535	0.11	
2,4-Dinitrotoluene											0.0535	0.11	
2-Nitrotoluene											0.0770	0.53	
4-Nitrotoluene											0.0770	0.53	
3-Nitrotoluene	30.42	-0.146	300	0.1598<							0.0663	0.53	45
Nitroglycerin											0.3528	0.69	
PETN											0.3207	0.69	
3,5-Dinitroaniline	32.44	-0.019	1057	0.3015<							0.0267	1.07	45

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.6727	2.6230	98	2.6727		0	(48-143)

Notes:

M = Manually Integrated

D = Operator Disabled Result

O = Over Calibration Range

< = Primary Value

4 = Signals Differ by More Than 40%

5 = Signals Differ by More Than 50%

Printed: 1/25/2011 10:17 AM

TestAmerica West Sacramento

A-000015.D

Chromatography Summary

Injection Date: 1/25/2011 0:18 Operator: NS

DataFile: LC10.B\01242011.B\A-000015.D Vial Num: 48

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **MDEVM1AA 1020123 A1A180417-2 1X**

Method File: LC10.B\01242011.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	20 mL	1025.94 mL	0 g

Matrix: WATER SubList: WATER sub SpikeList:

Samp. Info: MDEVM1AA 1020123 A1A180417-2 1X;0;

Misc. Info: ;;1025.94;;20;1;WATER.sub,;0;1;MDEVM1AA

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	16.19	0.037	35813	12.6500<	O	16.19	0.030	60998	11.2800	O	0.0000	0.00	
HMX	5.24	0.004	6594	0.9933<	cont. Pb.						0.0263	0.10	45
RDX	7.44	0.027	3071	0.6574<	cont						0.0634	0.10	45
Picric ACID	8.40	-0.086	3332	0.8069	NA						0.1218	0.97	45
1,3,5-Trinitrobenzene	9.66	0.030	41401	5.0980<	cont. Pb.						0.0302	0.10	45
1,3-Dinitrobenzene	12.22	0.044	6869	0.8648<	cont.						0.0487	0.10	45
TETRYL											0.0487	0.10	
Nitrobenzene	13.92	0.140	980	0.2668<	not cont.						0.0487	0.10	45
2,4,6-Trinitrotoluene	15.20	0.024	55737	11.5300<	cont.						0.0234	0.10	45
4-AM-2,6-DNT	15.72	0.047	113064	28.9500<	O see 5x						0.0214	0.10	45
2-AM-4,6-DNT	16.69	0.027	67806	15.7600<							0.0975	0.19	45
2,6-Dinitrotoluene	18.10	0.014	3325	1.0990<	cont.						0.0487	0.10	45
2,4-Dinitrotoluene	18.80	0.044	15338	3.1500<							0.0487	0.10	45
2-Nitrotoluene											0.0702	0.49	
4-Nitrotoluene											0.0702	0.49	
3-Nitrotoluene	25.24	0.160	1022	0.4038<	ND						0.0604	0.49	45
Nitroglycerin											0.3217	0.63	
PETN											0.2924	0.63	
3,5-Dinitroaniline	12.93	0.037	19775	3.8010<	NA						0.0244	0.97	45

pro 1/28/11

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4368	12.6500	519		2.4368	11.2800	463	(79-111)

MATRIX SUPPRESSION

Notes:

M = Manually Integrated

D = Operator Disabled Result

O = Over Calibration Range

< = Primary Value

4 = Signals Differ by More Than 40%

5 = Signals Differ by More Than 50%

Data File: \\Terastation\share\GCdata\LC10.I\01242011.B\A-000015.D

Page 3

Date : 25-JAN-2011 00:18

Client ID:

Instrument: LC10.i

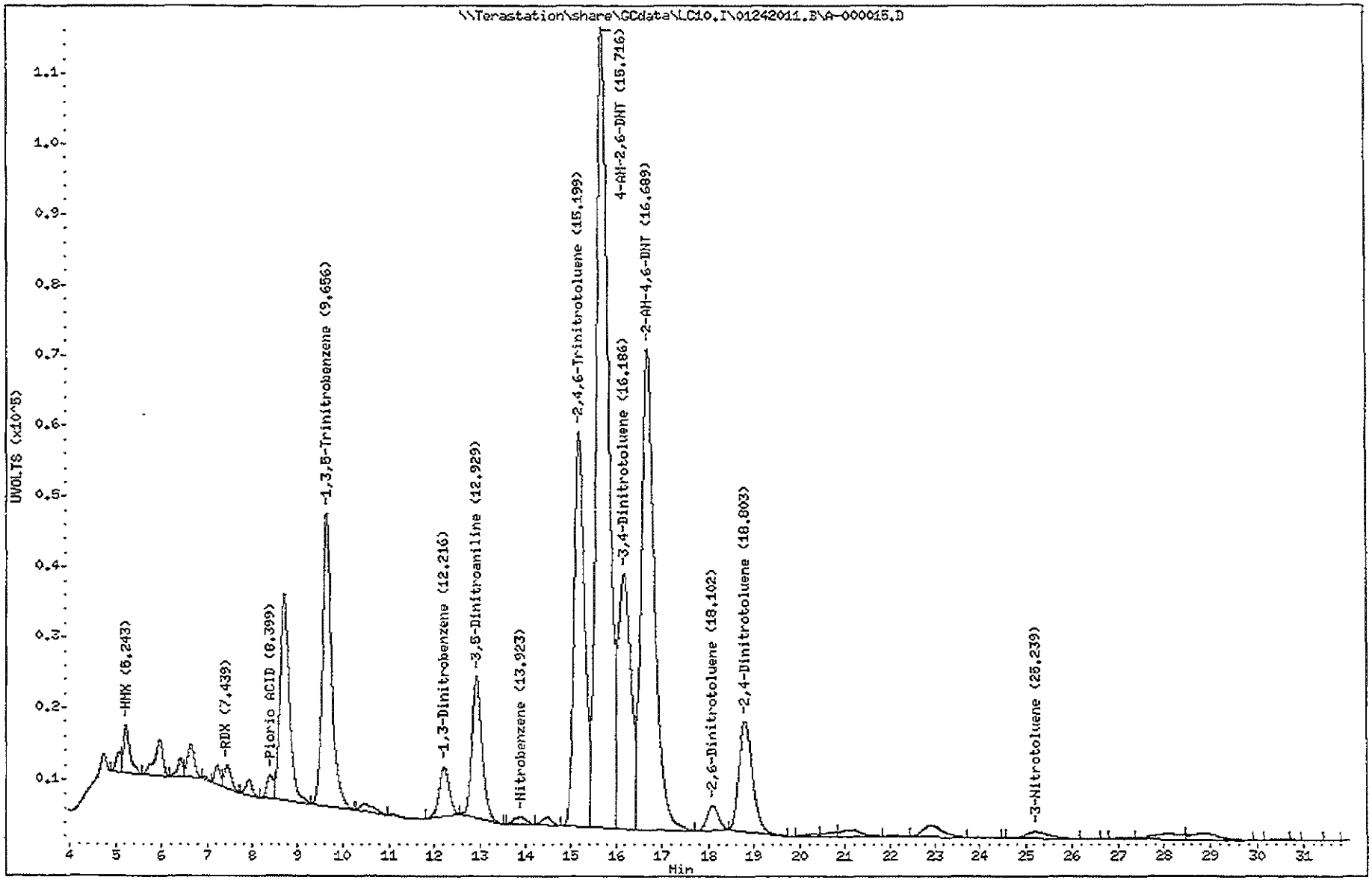
Sample Info: MDEVM1AA 1020123 A1A180417-2 1X;0;

Volume Injected (uL): 500.0

Operator: NS

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



North Canton

TestAmerica West Sacramento

A-000036.D

Chromatography Summary

Injection Date: 1/26/2011 19:28 Operator: RN

DataFile: LC10.I\01252011.B\A-000036 D Vial Num: 36

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **MDEVM2AA 1020123 A1A180417-2 5X**

Method File: LC10.I\01252011.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
5X	20 mL	1025.94 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDEVM2AA 1020123 A1A180417-2 5X;0;

Misc. Info: ;,1025 94;,20,1;WATER sub,;0.5;MDEVM2AA

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	16.24	0.135	7123	12.5800<	NA	16.25	0.139	12405	11.4700		0.0000	0.00	
HMX	5.30	0.059	1614	1.2160<							0.1316	0.49	45
RDX	7.47	0.062	738	0.7898<							0.3168	0.49	45
Picric ACID	8 45	0.005	796	0.9638							0.6092	4.87	45
1,3,5-Trinitrobenzene	9.69	0.059	8767	5.3980<							0.1511	0.49	45
1,3-Dinitrobenzene	12.25	0.085	1598	1.0060<							0.2437	0.49	45
TETRYL											0.2437	0.49	
Nitrobenzene											0.2437	0 49	
2,4,6-Trinitrotoluene	15.22	0.075	11163	11.5500<	cont.						0.1170	0.49	45
4-AM-2,6-DNT	15.74	0.105	22747	29.1200<							0.1072	0.49	45
2-AM-4,6-DNT	16.73	0.119	13695	15.9100<	NA						0.4874	0.97	45
2,6-Dinitrotoluene	18.17	0.139	670	1.1070<							0.2437	0.49	45
2,4-Dinitrotoluene	18.85	0.119	3109	3.1920<							0.2437	0.49	45
2-Nitrotoluene											0.3509	2.44	
4-Nitrotoluene											0.3509	2.44	
3-Nitrotoluene											0.3022	2.44	
Nitroglycerin											1.6083	3 17	
PETN											1.4621	3.17	
3,5-Dinitroaniline	12.95	0.082	4257	4.0920<							0.1218	4.87	45

mr 1/28/11

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4368	12.5800	516		2.4368	11.4700	471	(79-111)

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: 1/27/2011 10:01 AM

TestAmerica West Sacramento

C-000012.D

Chromatography Summary

Injection Date: 1/25/2011 3:24 Operator: RN

DataFile: LC12.I\01242011.B\C-000012.D Vial Num: 46

Method 8330 Target Analyte Results

Instrument ID: LC12

Sample: **MDEVM1AA 1020123 A1A180417-2 1X**

Method File: LC12.I\01242011.B\8330CNAB.M

Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	1025.94 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDEVM1AA 1020123 A1A180417-2 1X;0;

Misc. Info: ;;1025.94;;20;1;WATER.sub;;0;1;MDEVM1AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.36	-0.008	7489	2.5200<							0.0000	0.00	45
HMX	43.10	-0.028	1232	0.3451<							0.0263	0.10	45
RDX	33.19	0.008	1362	0.5934<							0.0634	0.10	45
Picric ACID											0.1218	0.97	
1,3,5-Trinitrobenzene	29.21	0.065	46072	11.1800<							0.0302	0.10	45
1,3-Dinitrobenzene	26.07	-0.005	4514	0.8506<							0.0487	0.10	45
TETRYL											0.0487	0.10	
Nitrobenzene											0.0487	0.10	
2,4,6-Trinitrotoluene	41.64	-0.015	55831	10.8300<							0.0234	0.10	45
4-AM-2,6-DNT	37.91	0.005	108300	26.1900<							0.0214	0.10	45
2-AM-4,6-DNT	37.41	-0.002	66004	14.3800<							0.0975	0.19	45
2,6-Dinitrotoluene	35.13	-0.025	3283	1.2570<							0.0487	0.10	45
2,4-Dinitrotoluene	34.12	-0.028	14722	3.4050<							0.0487	0.10	45
2-Nitrotoluene											0.0702	0.49	
4-Nitrotoluene											0.0702	0.49	
3-Nitrotoluene											0.0604	0.49	
Nitroglycerin											0.3217	0.63	
PETN						53.16	-0.158	7406	0.9711<		0.2924	0.63	45
3,5-Dinitroaniline	32.46	-0.005	15411	4.0080<							0.0244	0.97	45

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4368	2.5200	103		2.4368		0	(48-143)

Notes:

M = Manually Integrated

D = Operator Disabled Result

O = Over Calibration Range

< = Primary Value

4 = Signals Differ by More Than 40%

5 = Signals Differ by More Than 50%

Printed: 1/25/2011 10:14 AM

TestAmerica West Sacramento

C-000020.D

Chromatography Summary

Injection Date: 1/28/2011 8:24 Operator: RN

DataFile: LC12.B\01272011.B\C-000020.D Vial Num: 87

Method 8330 Target Analyte Results

Instrument ID: LC12

Sample : **MDEVM2AA 1020123 A1A180417-2 5X**

Method File: LC12.B\01272011.B\8330CNAB.M

Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
5X	20 mL	1025.94 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDEVM2AA 1020123 A1A180417-2 5X,0;

Misc. Info: ,,1025.94;,20,1,WATER.sub,;0,5,MDEVM2AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.40	0.074	1373	2.3100<	NA						0.0000	0.00	45
HMX	43.10	0.017	223	0.3123<							0.1316	0.49	45
RDX	33.20	0.067	266	0.5795<							0.3168	0.49	45
Picric ACID											0.6092	4.87	
1,3,5-Trinitrobenzene	29.26	0.157	9184	11.1400<							0.1511	0.49	45
1,3-Dinitrobenzene	26.11	0.090	980	0.9234<							0.2437	0.49	45
TETRYL											0.2437	0.49	
Nitrobenzene											0.2437	0.49	
2,4,6-Trinitrotoluene	41.66	0.074	10973	10.6400<							0.1170	0.49	45
4-AM-2,6-DNT	37.95	0.077	21569	26.0800<	cont.						0.1072	0.49	45
2-AM-4,6-DNT	37.45	0.080	13265	14.4500<							0.4874	0.97	45
2,6-Dinitrotoluene	35.20	0.094	679	1.3000<							0.2437	0.49	45
2,4-Dinitrotoluene	34.17	0.074	2953	3.4150<							0.2437	0.49	45
2-Nitrotoluene											0.3509	2.44	
4-Nitrotoluene											0.3509	2.44	
3-Nitrotoluene											0.3022	2.44	
Nitroglycerin											1.6083	3.17	
PETN											1.4621	3.17	
3,5-Dinitroaniline	32.50	0.080	3193	4.1520<							0.1218	4.87	45

1/28/11

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.4368	2.3100	95	2.4368		0	(48-143)

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-000014.D

Chromatography Summary

Injection Date: 1/24/2011 23:33 Operator: NS

DataFile: LC10.R01242011.B\A-000014.D Vial Num: 47

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample: **MDEVK1AA 1020123 A1A180417-1 1X**

Method File: LC10.R01242011.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	20 mL	991.36 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDEVK1AA 1020123 A1A180417-1 1X;0;

Misc. Info: ;;991.36;;20;1;WATER sub;;0;1;MDEVK1AA

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	16.18	0.031	34962	12.7800<	O	16.18	0.024	59916	11.4700	O	0.0000	0.00	
HMX	5.24	0.004	6405	0.9984<	cont. pb.						0.0272	0.10	45
RDX	7.44	0.028	3113	0.6896<	cont.						0.0656	0.10	45
Picric ACID	8.39	-0.092	3421	0.8573	NA	8.43	-0.056	763	0.1296<		0.1261	1.01	45
1,3,5-Trinitrobenzene	9.66	0.031	45255	5.7670<	cont. pb.						0.0313	0.10	45
1,3-Dinitrobenzene	12.21	0.038	8364	1.0900<	cont.						0.0504	0.10	45
TETRYL											0.0504	0.10	
Nitrobenzene	13.87	0.091	903	0.2315<	not cont						0.0504	0.10	45
2,4,6-Trinitrotoluene	15.20	0.021	60627	12.9800<	cont						0.0242	0.10	45
4-AM-2,6-DNT	15.71	0.041	111413	29.5200<	O see Ex						0.0222	0.10	45
2-AM-4,6-DNT	16.68	0.021	68957	16.5800<	> cont.						0.1009	0.20	45
2,6-Dinitrotoluene	18.10	0.008	3819	1.3060<							0.0504	0.10	45
2,4-Dinitrotoluene	18.81	0.048	18668	3.9670<							0.0504	0.10	45
2-Nitrotoluene											0.0726	0.50	
4-Nitrotoluene											0.0726	0.50	
3-Nitrotoluene											0.0625	0.50	
Nitroglycerin											0.3329	0.66	
PETN											0.3026	0.66	
3,5-Dinitroaniline	12.92	0.028	21716	4.3200<	NA						0.0252	1.01	45

MM 1/28/11

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.5218	12.7800	507		2.5218	11.4700	455	(79-111)

↑ Matrix interference See NCM

Notes:

M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

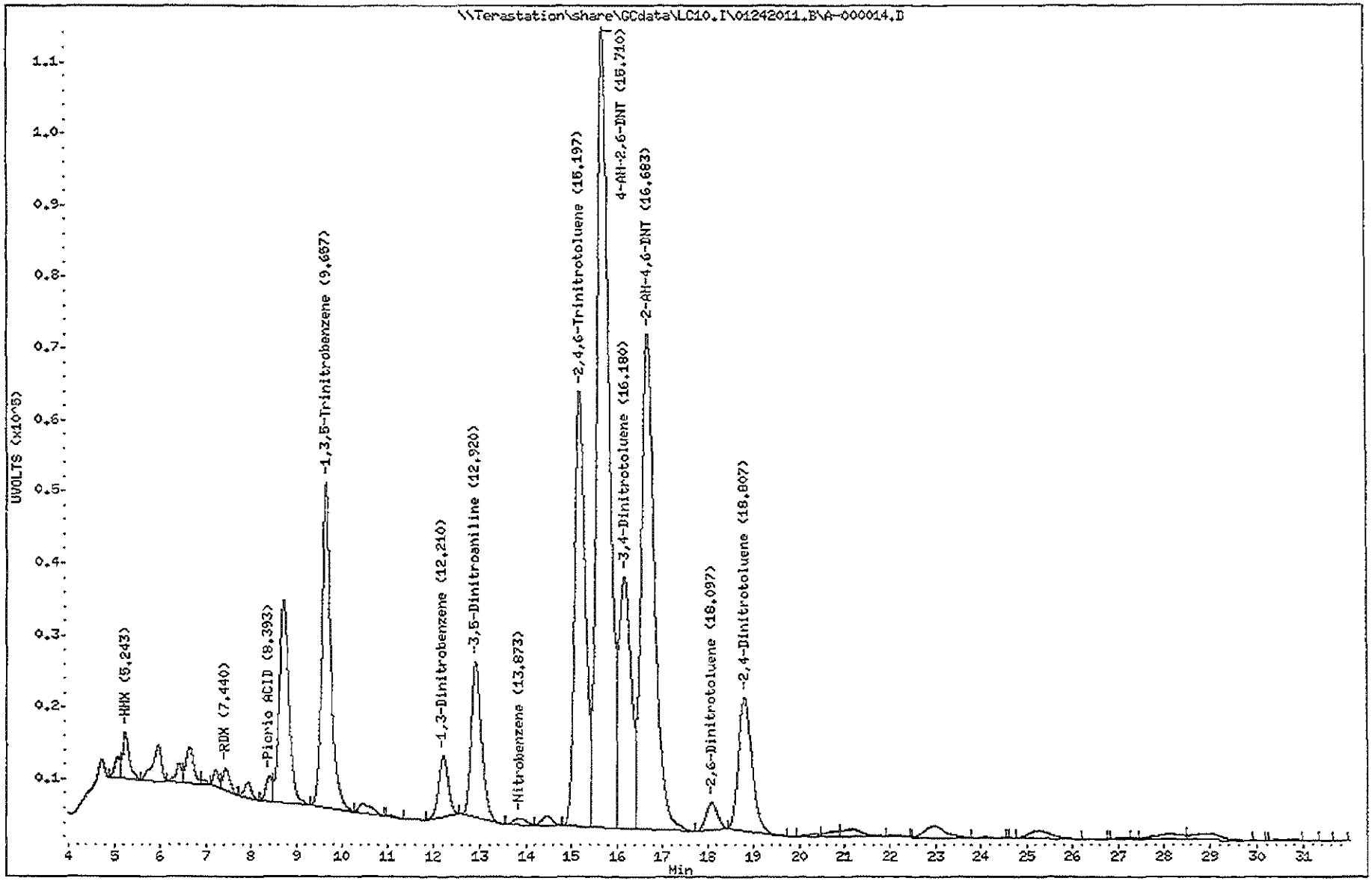
TNT: $\frac{60627 \text{ cts}}{94.21572} \times \frac{20 \text{ mL}}{991.36 \text{ mL}} = 12.981991$ ✓

DL 1-28-11

Printed: 1/25/2011 9:35 AM

Data File: \\Terastation\share\GCdata\LC10.I\01242011.B\A-000014.D
Date : 24-JAN-2011 23:33
Client ID:
Sample Info: MDEVK1AA 1020123 A1A180417-1 1X;0;
Volume Injected (uL): 500.0
Column phase: SYNERGI HYDRORP C18

Instrument: LC10.i
Operator: NS
Column diameter: 4.60



North Canton

TestAmerica West Sacramento

A-000035.D

Chromatography Summary

Injection Date: 1/26/2011 18:43 Operator: RN

DataFile: LC10.B01252011.B\A-000035.D Vial Num: 35

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **MDEVK2AA 1020123 A1A180417-1 5X**

Method File: LC10.B01252011 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
5X	20 mL	991.36 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDEVK2AA 1020123 A1A180417-1 5X;0;

Misc. Info: ,;991.36,,20;1;WATER.sub;;0;5;MDEVK2AA

	Synergi Hydro-RP C18(250nm-265nm)					Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	16.27	0.157	6865	12.5400<		16.27	0.157	12055	11.5400		0.0000	0.00	
HMX	5.30	0.057	1441	1.1230<	NA						0.1362	0.50	45
RDX	7.48	0.074	752	0.8329<							0.3278	0.50	45
Picric ACID	8.46	0.007	829	1.0390							0.6304	5.04	45
1,3,5-Trinitrobenzene	9.69	0.064	9521	6.0660<							0.1564	0.50	45
1,3-Dinitrobenzene	12.27	0.101	1811	1.1800<							0.2522	0.50	45
TETRYL											0.2522	0.50	
Nitrobenzene											0.2522	0.50	
2,4,6-Trinitrotoluene	15.23	0.087	11962	12.8100<							0.1210	0.50	45
4-AM-2,6-DNT	15.76	0.124	22008	29.1600<	cont.						0.1110	0.50	45
2-AM-4,6-DNT	16.75	0.137	13739	16.5200<	NA						0.5044	1.01	45
2,6-Dinitrotoluene	18.15	0.114	789	1.3500<							0.2522	0.50	45
2,4-Dinitrotoluene	18.86	0.121	3697	3.9280<							0.2522	0.50	45
2-Nitrotoluene											0.3631	2.52	
4-Nitrotoluene											0.3631	2.52	
3-Nitrotoluene											0.3127	2.52	
Nitroglycerin											1.6644	3.28	
PETN											1.5131	3.28	
3,5-Dinitroaniline	12.97	0.094	4532	4.5080<							0.1261	5.04	45

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.5218	12.5400	497	2.5218	11.5400	458	(79-111)

1/28/11

Notes:

M = Manually Integrated

D = Operator Disabled Result

O = Over Calibration Range

Signals Differ by More Than 40%

Signals Differ by More Than 50%

Printed: 1/27/2011 10:00 AM

TestAmerica West Sacramento

C-000011.D

Chromatography Summary

Injection Date: 1/25/2011 2:18 Operator: RN

DataFile: LC12.I\01242011.B\C-000011.D Vial Num: 45

Method 8330 Target Analyte Results

Instrument ID: LC12

Sample: **MDEVK1AA 1020123 A1A180417-1 1X**

Method File: LC12.I\01242011.B\8330CNAB.M

Start Cal Date: 12/16/2010 18:24 End Cal Date: 12/30/2010 0:30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
1X	20 mL	991.36 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDEVK1AA 1020123 A1A180417-1 1X,0;

Misc. Info: ;;991.36,;20,1;WATER.sub;;0;1;MDEVK1AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.37	0.008	7192	2.5040<							0.0000	0.00	45
HMX	43.11	-0.019	1147	0.3325<	cont PG.						0.0272	0.10	45
RDX	33.19	0.008	1371	0.6182<	cont.						0.0656	0.10	45
Picric ACID											0.1261	1.01	
1,3,5-Trinitrobenzene	29.21	0.071	46758	11.7400<							0.0313	0.10	45
1,3-Dinitrobenzene	26.07	0.001	5513	1.0750<							0.0504	0.10	45
TETRYL											0.0504	0 10	
Nitrobenzene											0.0504	0.10	
2,4,6-Trinitrotoluene	41.65	-0.006	60524	12.1500<	cont						0.0242	0.10	45
4-AM-2,6-DNT	37.93	0.024	106066	26.5500<	dil 5x.						0.0222	0.10	45
2-AM-4,6-DNT	37.43	0.017	65629	15.0200<	cont.						0.1009	0.20	45
2,6-Dinitrotoluene	35.17	0.024	3704	1.4670<							0.0504	0.10	45
2,4-Dinitrotoluene	34.14	-0.006	17779	4.2560<							0.0504	0.10	45
2-Nitrotoluene											0.0726	0 50	
4-Nitrotoluene											0.0726	0.50	
3-Nitrotoluene											0.0625	0.50	
Nitroglycerin											0.3329	0.66	
PETN						53.15	-0.163	6856	0.9304<		0.3026	0.66	45
3,5-Dinitroaniline	32.47	0.011	16857	4.5370<							0.0252	1.01	45

1/28/11

Surrogates:	Spiked	Recovered	%Rec		Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.5218	2.5040	99		2.5218		0	(48-143)

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

Printed: 1/25/2011 10:14 AM

TestAmerica West Sacramento

C-000019.D

Chromatography Summary

Injection Date: 1/28/2011 7:18 Operator: RN

DataFile: LC12.B\01272011.B\C-000019.D Vial Num: 86

Instrument ID: LC12

Method 8330 Target Analyte Results

Sample : **MDEVK2AA 1020123 A1A180417-1 5X**

Method File: LC12.B\01272011.B\8330CNAB.M

Start Cal Date: 12/16/2010 18 24 End Cal Date: 12/30/2010 0 30

Dilution Factor	Extract Volume	Sample Volume	Sample Weight
5X	20 mL	991.36 mL	0 g

Matrix: WATER SubList: WATER.sub SpikeList:

Samp. Info: MDEVK2AA 1020123 A1A180417-1 5X;0;

Misc. Info: ;;991.36;;20;1;WATER.sub,,0;5,MDEVK2AA

	LC12					Column2							
Compound Name	RT	Diff	Response	Conc (ug/L)	Flag	RT	Diff	Response	Conc (ug/L)	Flag	MDL	RL	Flag
3,4-Dinitrotoluene	39.39	0.065	1435	2.4980<							0.0000	0.00	45
HMX	43.11	0.032	219	0.3174<							0.1362	0.50	45
RDX	33.22	0.088	278	0.6268<							0.3278	0.50	45
Picric ACID											0 6304	5.04	
1,3,5-Trinitrobenzene	29.25	0.145	9214	11.5700<							0.1564	0.50	45
1,3-Dinitrobenzene	26.10	0.078	1168	1.1390<							0.2522	0.50	45
TETRYL											0 2522	0.50	
Nitrobenzene											0.2522	0.50	
2,4,6-Trinitrotoluene	41.65	0.062	11761	11.8100<							0.1210	0.50	45
4-AM-2,6-DNT	37.94	0.065	21032	26.3200<							0.1110	0.50	45
2-AM-4,6-DNT	37.44	0.068	13359	15.0600<							0.5044	1.01	45
2,6-Dinitrotoluene	35.18	0.075	750	1.4860<							0.2522	0.50	45
2,4-Dinitrotoluene	34.16	0.068	3513	4.2050<							0.2522	0.50	45
2-Nitrotoluene											0.3631	2.52	
4-Nitrotoluene											0 3631	2.52	
3-Nitrotoluene											0.3127	2.52	
Nitroglycerin											1.6644	3.28	
PETN											1.5131	3.28	
3,5-Dinitroaniline	32.50	0 075	3485	4 6900<							0.1261	5 04	45

cont.

1/28/11

Surrogates:	Spiked	Recovered	%Rec	Spiked	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.5218	2.4980	99	2.5218		0	(48-143)

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: 1/28/2011 1:23 PM

WATER, Nitroguanidine

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A180417 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 0.9°C – 2.7°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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A180417 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: PWGLL1mw-084C-1643-GW

Dissolved HPLC

Lot-Sample #...:	A1A180417-001	Work Order #...:	MDEVK1AD	Matrix.....:	WG
Date Sampled...:	01/17/11 15:07	Date Received..:	01/18/11		
Prep Date.....:	01/21/11	Analysis Date..:	01/26/11		
Prep Batch #...:	1021215				
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-DUP2-1693-GW

Dissolved HPLC

Lot-Sample #...:	A1A180417-002	Work Order #...:	MDEVM1AD	Matrix.....:	WG
Date Sampled...:	01/17/11 16:10	Date Received..:	01/18/11		
Prep Date.....:	01/21/11	Analysis Date..:	01/26/11		
Prep Batch #...:	1021215				
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: FWGEQUIPRINSE1-1698-GW/GF

Dissolved HPLC

Lot-Sample #...: A1A180417-003 Work Order #...: MDEVN1AD Matrix.....: WQ
Date Sampled...: 01/17/11 17:20 Date Received..: 01/18/11
Prep Date.....: 01/21/11 Analysis Date..: 01/26/11
Prep Batch #...: 1021215
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-1644-GW

Dissolved HPLC

Lot-Sample #...: A1A180417-004 Work Order #...: MDEVP1AD Matrix.....: WG
Date Sampled...: 01/17/11 14:25 Date Received..: 01/18/11
Prep Date.....: 01/21/11 Analysis Date..: 01/26/11
Prep Batch #...: 1021215
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-1640-GW

Dissolved HPLC

Lot-Sample #...: A1A180417-005 Work Order #...: MDEVV1AD Matrix.....: WG
Date Sampled...: 01/17/11 15:30 Date Received..: 01/18/11
Prep Date.....: 01/21/11 Analysis Date..: 01/26/11
Prep Batch #...: 1021215
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-082C-1642-GW

Dissolved HPLC

Lot-Sample #...: A1A180417-006 Work Order #...: MDEVW1AD Matrix.....: WG
Date Sampled...: 01/17/11 16:50 Date Received..: 01/18/11
Prep Date.....: 01/21/11 Analysis Date..: 01/26/11
Prep Batch #...: 1021215
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-081C-1641-GW

Dissolved HPLC

Lot-Sample #...: A1A180417-007 Work Order #...: MDEVX1AH Matrix.....: WG
Date Sampled...: 01/17/11 15:10 Date Received..: 01/18/11
Prep Date.....: 01/21/11 Analysis Date..: 01/26/11
Prep Batch #...: 1021215
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 #...: A1A180417 Work Order #...: MDK0L1AA Matrix.....: WATER
MB Lot-Sample #: G1A210000-215

Prep Date.....: 01/21/11
Analysis Date..: 01/26/11 Prep Batch #...: 1021215
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 #...: A1A180417 Work Order #...: MDK0L1AC Matrix.....: WATER
LCS Lot-Sample#: G1A210000-215
Prep Date.....: 01/21/11 Analysis Date..: 01/26/11
Prep Batch #...: 1021215
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 #...: A1A180417 Work Order #...: MDEVX1AJ-MS Matrix.....: WG
MS Lot-Sample #: A1A180417-007 MDEVX1AK-MSD
Date Sampled...: 01/17/11 15:10 Date Received..: 01/18/11
Prep Date.....: 01/21/11 Analysis Date..: 01/26/11
Prep Batch #...: 1021215
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	105	(73 - 117)			SW846 8330 (Modified
	106	(73 - 117)	0.53	(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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A180417 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 0.9°C – 2.7°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 1/26/11 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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A180417 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

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-084C-1643-GW

General Chemistry

Lot-Sample #...: A1A180417-001 Work Order #...: MDEVK Matrix.....: WG
Date Sampled...: 01/17/11 15:07 Date Received..: 01/18/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/21-01/26/11	1021111

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-DUP2-1693-GW

General Chemistry

Lot-Sample #...: A1A180417-002 Work Order #...: MDEVM Matrix.....: WG
Date Sampled...: 01/17/11 16:10 Date Received..: 01/18/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/21-01/26/11	1021111

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE1-1698-GW/GF

General Chemistry

Lot-Sample #...: A1A180417-003 Work Order #...: MDEVN Matrix.....: WQ
Date Sampled...: 01/17/11 17:20 Date Received..: 01/18/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/21-01/26/11	1021111

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-085C-1644-GW

General Chemistry

Lot-Sample #...: A1A180417-004 Work Order #...: MDEVP Matrix.....: WG
Date Sampled...: 01/17/11 14:25 Date Received..: 01/18/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/21-01/26/11	1021111

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-067C-1640-GW

General Chemistry

Lot-Sample #...: A1A180417-005 Work Order #...: MDEVV Matrix.....: WG
Date Sampled...: 01/17/11 15:30 Date Received..: 01/18/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/21-01/26/11	1021111

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-082C-1642-GW

General Chemistry

Lot-Sample #...: A1A180417-006 Work Order #...: MDEVW Matrix.....: WG
Date Sampled...: 01/17/11 16:50 Date Received..: 01/18/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/21-01/26/11	1021111

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL1mw-081C-1641-GW

General Chemistry

Lot-Sample #...: A1A180417-007 Work Order #...: MDEVX Matrix.....: WG
Date Sampled...: 01/17/11 15:10 Date Received..: 01/18/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/21-01/26/11	1021111

Dilution Factor: 1 MDL.....: 0.48

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1A180417 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MDJ621AA		MB Lot-Sample #:	G1A210000-111	
	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/21-01/26/11	1021111
		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 #...: A1A180417 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MDJ621AC	LCS Lot-Sample#: G1A210000-111		
	80	(26 - 144)	TAL-SOP WS-WC-005	01/21-01/26/11	1021111
		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 #...: A1A180417 Matrix.....: WG
Date Sampled...: 01/17/11 15:10 Date Received..: 01/18/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: MDEVX1AF-MS/MDEVX1AG-MSD			MS Lot-Sample #: A1A180417-007		
	79	(26 - 144)			TAL-SOP WS-WC-005	01/21-01/26/11	1021111
	79	(26 - 144)	0.73	(0-45)	TAL-SOP WS-WC-005	01/21-01/26/11	1021111
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

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 automatically adds reason codes listed here when the user manually adds qualifiers for these categories if the option for applying reason codes was selected during automated data review.

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A180417										
8330	FWGEQUIPRINSE1-1698-GW/GF	AQ	EB							
				2,4,6-TNT	0.096	0.071J		J	ug/L	L
8330	FWGLL1mw-081C-1641-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.11	0.11PG		J	ug/L	Pj
				RDX	0.11	1.1		J	ug/L	Pj
8330	FWGLL1mw-084C-1643-GW	AQ	N							
				1,3,5-Trinitrobenzene	0.10	5.8PG		J	ug/L	Pj,G
				1,3-Dinitrobenzene	0.10	1.1		J	ug/L	G
				2,4,6-TNT	0.10	13		J	ug/L	G
				2,4-Dinitrotoluene	0.10	4.0		J	ug/L	G
				2,6-Dinitrotoluene	0.10	1.3		J	ug/L	G
				2-Amino-4,6-dinitrotoluene	0.10	17		J	ug/L	G
				HMX	0.10	1.0PG		J	ug/L	Pj,G
				RDX	0.10	0.69		J	ug/L	Pj,G
8330	FWGLL1mw-DUP2-1693-GW	AQ	FD							
				1,3,5-Trinitrobenzene	0.097	5.1PG		J	ug/L	Pj,G
				1,3-Dinitrobenzene	0.097	0.86		J	ug/L	G
				2,4,6-TNT	0.097	12		J	ug/L	G
				2,4-Dinitrotoluene	0.097	3.2		J	ug/L	G
				2,6-Dinitrotoluene	0.097	1.1		J	ug/L	G
				2-Amino-4,6-dinitrotoluene	0.097	16		J	ug/L	G
				3-Nitrotoluene	0.48	0.40J		J	ug/L	G,L
				HMX	0.097	0.99PG		J	ug/L	Pj,G
				RDX	0.097	0.66		J	ug/L	Pj,G

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 : FWGEQUIPRINSE1-1698-GW/GF **Lab Report Batch :** A1A180417 **Lab ID :** TALCAN

Sample Date : 01/17/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A180417003

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 0.96**															
2,4,6-TNT	0.071		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-081C-1641-GW **Lab Report Batch :** A1A180417 **Lab ID :** TALCAN

Sample Date : 01/17/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A180417007

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 1.06**															
1,3,5-Trinitrobenzene	0.11		ug/L	PG	YES	J															Pj
RDX	1.1		ug/L		YES	J															Pj

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-084C-1643-GW **Lab Report Batch :** A1A180417 **Lab ID :** TALCAN

Sample Date : 01/17/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A180417001

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 1**															
1,3,5-Trinitrobenzene	5.8		ug/L	PG	YES	J							J								Pj,G
1,3-Dinitrobenzene	1.1		ug/L		YES	J							J								G
2,4,6-TNT	13		ug/L		YES	J							J								G
2,4-Dinitrotoluene	4.0		ug/L		YES	J							J								G
2,6-Dinitrotoluene	1.3		ug/L		YES	J							J								G
2-Amino-4,6-dinitrotoluene	17		ug/L		YES	J							J								G
HMX	1.0		ug/L	PG	YES	J							J								Pj,G
RDX	0.69		ug/L		YES	J							J								Pj,G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL1mw-DUP2-1693-GW **Lab Report Batch :** A1A180417 **Lab ID :** TALCAN

Sample Date : 01/17/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A180417002

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 0.97**															
1,3,5-Trinitrobenzene	5.1		ug/L	PG	YES	J							J								Pj,G
1,3-Dinitrobenzene	0.86		ug/L		YES	J							J								G
2,4,6-TNT	12		ug/L		YES	J							J								G
2,4-Dinitrotoluene	3.2		ug/L		YES	J							J								G
2,6-Dinitrotoluene	1.1		ug/L		YES	J							J								G
2-Amino-4,6-dinitrotoluene	16		ug/L		YES	J							J								G
3-Nitrotoluene	0.40		ug/L	J	YES	J							J	J							G,L
HMX	0.99		ug/L	PG	YES	J							J								Pj,G
RDX	0.66		ug/L		YES	J							J								Pj,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

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: A1A180417 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE1-1698	A1A180417003	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGLL1mw-067C-1640-G	A1A180417005	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL1mw-081C-1641-G	A1A180417007	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.53	0.21	ug/L
				3-Nitrotoluene	U	0.53	0.21	ug/L
				4-Nitrotoluene	U	0.53	0.21	ug/L
FWGLL1mw-082C-1642-G	A1A180417006	8330	AQ	2-Nitrotoluene	U	0.51	0.20	ug/L
				3-Nitrotoluene	U	0.51	0.20	ug/L
				4-Nitrotoluene	U	0.51	0.20	ug/L
FWGLL1mw-084C-1643-G	A1A180417001	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGLL1mw-085C-1644-G	A1A180417004	8330	AQ	2,4-Dinitrotoluene	U	0.11	0.11	ug/L
				2,6-Dinitrotoluene	U	0.11	0.11	ug/L
				2-Nitrotoluene	U	0.54	0.22	ug/L
				3-Nitrotoluene	U	0.54	0.22	ug/L
				4-Nitrotoluene	U	0.54	0.22	ug/L
FWGLL1mw-DUP2-1693-	A1A180417002	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **30240.0006 - RVAAP (OH)**

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A1A180417 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGEQUIPRINSE1-1698	A1A180417003	8330	AQ	2,4,6-TNT	J	0.071	0.096	ug/L
FWGLL1mw-DUP2-1693-	A1A180417002			3-Nitrotoluene	J	0.40	0.48	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A1A180417 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
8330	AQ	3-Nitrotoluene	FWGLL1mw-084C	RES	0.50	U	FWGLL1mw-DUP	DL	0.40	J	200.0	30	ug/L

Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.

Project Number and Name: ***30240.0006 - RVAAP (OH)***

Surrogate Recovery Outlier Report

Lab Report Batch: A1A180417 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Dilution	Matrix	Surrogate	Percent Recovery	Criteria (percent) Lower Limit	Upper Limit	Reject Point	Associated Target Analytes
FWGLL1mw-084C-1643-GW	A1A180417001	8330	1	AQ	3,4-Dinitrotoluene	507	50.0	150.0	10.0	All Target
FWGLL1mw-DUP2-1693-GW	A1A180417002	8330	0.97	AQ	3,4-Dinitrotoluene	519	50.0	150.0	10.0	All Target

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: January 2011
TA Sample Delivery Group: A1A200534

Date: March 15, 2011
Revision: 0

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

QA/QC Summary

On January 20, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1A200534.

Field Sample ID	Analytes	Method
FWGEBGmw-126c-1668-GW	Explosives Nitroguanidine Nitrocellulose	SW846 8330 SW846 M8330 TAL- SOP WS-WC-0050
FWGEBGmw-129c-1669-GW		
FWGEBGmw-124c-1667-GW		
FWGEBGmw-123c-1666-GW		
FWGCPmw-002c-1660-GW		
FWGCPmw-006c-1662-GW		
FWGCPmw-DUP4-1695-GW		
FWGCBPmw-004c-1656-GW		
FWGEQUIPRinse4-1701-GW		
FWGCPmw-005c-1661-GW		
FWGCBPmw-001c-1655-GW		
FWGCBPmw-007c-1658-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 1.7°C – 3.3°C. The samples received for FWGCBP-007C-1658-GW were marked on the COC as FWGCBP-007C-1664-GW. Samples were logged per label.

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

LC12- 4-Nitrotoluene appears to not have been spiked and/or recover; however the compound is co-eluting with 2-nitrotoluene. No qualifications made as LC12 was used as confirmation.

MRL Recovery

LC10- the following outliers were noted:

- The MRL analyzed 1/29/11 @1628 recovered above control limits with a %D of 31% for tetryl.

- The MRL analyzed 1/29/11 @ 0513 recovered above control limits with a %D of 46% for RDX.
- The MRL analyzed 1/30/11 @0127 recovered above control limits with a %D of 49% for RDX.

No qualifications were made for the tetryl outliers as the samples were reanalyzed with passing MRL recoveries for tetryl. No qualification was made for the RDX outliers as there were no detected RDX concentrations in bracketed field samples.

CCV
LC10-

- The CCV analyzed 1/29/11 @0428 and 1543 recovered above limits for tetryl with a %D of 22%.
- The CCV analyzed 1/30/11 @0042 recovered above limits for tetryl with a %D of 21%.

No qualifications were made as the samples were reanalyzed with passing CCVs for tetryl.

Blanks
Due to excessive particulates, samples FWGCPmw-DUP4-1695-GW and FWGCBPmw-004c-1656-GW required filtration. A filter blank was prepared and analyzed.

Field Duplicate RPD
The RPD for the field duplicate FWGCPmw-DUP4-1695-GW and FWGCPmw-006c-1662-GW was above control limits for 2,4,6-TNT at 200%. No qualification of the data was made as 2,4,6-TNT was not detected in the parent sample, FWGCPmw-006c-1662-GW.

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 - 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

MRL Recovery
The closing MRL check analyzed on 1/27/11 at 1531 recovered above control limits at 160%. No qualifications were made as there were no detected nitrocellulose concentrations reported in the bracketed field samples.

CASE NARRATIVE

A1A200534

The following report contains the analytical results for twelve water samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 030240.0006. The samples were received January 20, 2011, according to documented sample acceptance procedures.

All analysis was performed at the TestAmerica West Sacramento Laboratory. Refer to the TestAmerica West Sacramento narrative provided 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 February 03, 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 1.7 to 3.3° C.

See TestAmerica's Cooler Receipt Form for additional information.

NITROAROMATICS AND NITRAMINES-8330

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptanee criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

Case Narrative

TestAmerica West Sacramento Project Number A1A200534

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 integrations being performed. The following samples and analytes required a manual integration:

LC10 instrument:
8330 MRL (analyzed on 1/29/11 @ 05:13) – Tetryl
8330 MRL (analyzed on 1/30/11 @ 01:27) – 3,4-Dinitrotoluene & 4-Amino-2,6-dinitrotoluene
8330 MRL (analyzed on 2/10/11 @15:22) – Tetryl
8330 MRL (analyzed on 2/11/11 @ 00:22) – Tetryl

LC12 instrument:
8330 CCV (analyzed on 1/30/11 @ 06:31) – 1,3,5-Trinitrobenzene
8330 MRL (analyzed on 1/30/11 @ 18:35) – 1,3,5-Trinitrobenzene, 2-Nitrotoluene, & 3-Nitrotoluene
8330 MRL (analyzed on 1/31/11 @ 03:22) – 1,3,5-Trinitrobenzene, 4-Amino-2,6-dinitrotoluene, & 2-Amino-4,6-dinitrotoluene

WATER, 8330, Explosives
Sample(s): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 10, 10, 11, 12
The percent difference values for analytes listed below are above the method acceptance limits in the MRL standard. This standard was analyzed prior to and after the associated samples. A standard at approximately 2X the method detection limit was analyzed and the affected analytes were detected.

LC10, 01/29/11, 05:13
RDX, Project Criteria 30%D, Actual 46%D
LC10, 01/29/11, 16:28
Tetryl, Project Criteria 30%D, Actual 31%D
LC10, 01/30/11, 01:27
RDX, Project Criteria 30%D, Actual 49%D

Case Narrative

TestAmerica West Sacramento Project Number A1A200534

Sample(s): 7, 8
These samples were filtered prior to extraction since they contained excessive sediment/particulates. A filtered blank was included with the batch.

WATER, Nitrocellulose
Sample(s): 1, 2, 3
The ending continuing calibration standard and bracketing MRL standards had high percent difference values. Since the associated sample results were all non-detect, no corrective action was performed.

Sample(s): 4, 5, 6, 7, 8, 9, 10, 10MS, 10MSD, 11, 12
The bracketing continuing calibration standards and bracketing MRL standards had high percent difference values. Since the associated sample results were all non-detect, no corrective action was performed.

There were no other anomalies associated with this project.

SAMPLE SUMMARY

A1A200534

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDJPE	001	FWGEBGmw-126C-1668-GW	01/20/11	09:23
MDJPF	002	FWGEBGmw-129C-1669-GW	01/20/11	10:42
MDJPG	003	FWGEBGmw-124C-1667-GW	01/20/11	12:02
MDJPH	004	FWGEBGmw-123C-1666-GW	01/20/11	13:06
MDJPJ	005	FWGCPmw-002C-1660-GW	01/20/11	09:10
MDJPK	006	FWGCPmw-006C-1662-GW	01/20/11	10:40
MDJPL	007	FWGCPmw-DUP4-1695-GW	01/20/11	12:00
MDJPM	008	FWGCBPmw-004C-1656-GW	01/20/11	12:30
MDJPN	009	FWGEQUIPRINSE4-1701-GW	01/20/11	14:30
MDJPP	010	FWGCPmw-005C-1661-GW	01/20/11	09:10
MDJPQ	011	FWGCBPmw-001C-1655-GW	01/20/11	12:35
MDJPR	012	FWGCBPmw-007C-1658-GW	01/20/11	14:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Chain of Custody Record

TestAmerica 14
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Erik Corbin	Mark Loeb	Team1-1/20/11
Address: 1800 Carillon Blvd.	Telephone:	Telephone:	Telephone:	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com			
Phone: 513-825-7500		TAT if different from below Rec'd 5pm	Analyses	
Project Name: RVAAP (OH)	Method of Shipment/Carrier: L&L courier	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 030240.0006	Shipping/Tracking No: NA			
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Lab Sample (Y/N)	VOCs 8260	SVOCs 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Total/Dissolved Metals 6010/6020/7470			Sample Specific Notes / Special Instructions:
FWGTeam1-Trip	1/20/11	0800		X						2					N	G	X										L227
FWGEBGmw-126C-1668-GW	1/20/11	0923		X						3	1		9		N	G	X	X	X	X	X	X	X				L227
FWGEBGmw-126C-1668-GF	1/20/11	0923		X					1						Y	G								X			L227
FWGEBGmw-129C-1669-GW	1/20/11	1042		X						3	1		9		N	G	X	X	X	X	X	X	X				A115
FWGEBGmw-129C-1669-GF	1/20/11	1042		X					1						Y	G								X			A115
FWGEBGmw-124C-1667-GW	1/20/11	1202		X						3	1		9		N	G	X	X	X	X	X	X	X				A580
FWGEBGmw-124C-1667-GF	1/20/11	1202		X					1						Y	G								X			A580
FWGEBGmw-123C-1666-GW	1/20/11	1306		X						3	1		9		N	G	X	X	X	X	X	X	X				L458
FWGEBGmw-123C-1666-GF	1/20/11	1306		X					1						Y	G								X			L458
					EC																						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
metals are field filtered. Temperatures may not meet requirements if collection times are close to lab pick up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erik Corbin	EQ	1/20/11 15:15		TAL-NC	1/20/11 1515
	TAL NC	1/20/11 1626			
				TA NC	1/20/11 1626

All VOCs in Cooler L227

©2009, TestAmerica Laboratories, Inc. All rights reserved
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

TAL-0018 (1006)

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

15

TAL-4142 (0408)

Client: EQM	Project Manager: J Miller	Date: 1-20-11	Chain of Custody Number: 000456
Address: 1800 CAILLON BLVD	Telephone Number (Area Code)/Fax Number: 513 8257500 (7495)	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 Ravenna OH	Carrier/Waybill Number: LAB PICKUP		
Contract/Purchase Order/Quote No.: PN30240.0006.22 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	Zn Ac/ NaOH	Analysis: VOC 8260	SVOC 8270	PEST 8081	PCB 8082	EXPLO 8330	Propellants	Cyanide 9012	Metals 6010B	Special Instructions/ Conditions of Receipt: Cooler ID #
FWG Team2-Trip	1/20/11	0800		X						2			X								L692
FWGCPmw-002C-16660-GW	1/20/11	0910		X			9			3	1		X	X	X	X	X	X	X		L692
FWGCPmw-002C-16660-GF	1	1		X					1											X	L692
FWGCPmw-006C-16662-GW	1	1040		X			9			3	1		X	X	X	X	X	X	X		A235
FWGCPmw-006C-16662-GF	1	1		X					1											X	A235
FWGCPmw-DUP4-16695-GW	1	1200		X			9			3	1		X	X	X	X	X	X	X		L649
FWGCPmw-DUP4-16695-GF	1	1		X					1											X	L649
FWGCBPmw-004C-16656-GW	1	1230		X			9			3	1		X	X	X	X	X	X	X		A166
FWGCBPmw-004C-16656-GF	1	1		X					1											X	A166
FWGEQUIPRINS84-1701-GW	1	1430		X			9		1	3	1		X	X	X	X	X	X	X	X	NOT FILTERED A260

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown	Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)		
Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other PERSON	QC Requirements (Specify): (GF) Metals were field filtered.		
1. Relinquished By: Eric Corbin EQ	Date: 1/20/11 Time: 1815	1. Received By: FedEx	Date: 1/20/11 Time: 1515
2. Relinquished By: FedEx	Date: 1/20/11 Time: 1626	2. Received By:	Date: 1/20/11 Time: 1626
3. Relinquished By	Date: Time:	3. Received By	Date: Time:

Comments: TEMPS ON SAMPLES COLLECTED CLOSE TO LAB PICK UP MAY NOT MEET REQUIREMENTS.

ALL VOAS IN L692

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: EQM	Project Manager: John Miller	Date: 1/20/11	Chain of Custody Number: 000460
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500	Lab Number: 330-497-9396	Page 1 of 1
City: Cincinnati / State: OH / Zip Code: 45240	Site Contact: Erik 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 PN 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 8260B	SVOC 8270C	PEST 8081A	PCB 8082A	Filtered 8330 Propellants	Nitrate 300.0	Metals 6010B/7470A	Special Instructions/ Conditions of Receipt
FWGTeam3-Trip	1/20/11	0800		X						2			X							A247
FWGCPMW-005C-Wa01-GW		0910		X					2	3			X	X	X	X	X	X	X	NH3, A247, A217
FWGCPMW-005C-Wa01-GF		0910		X					3										X	NH3, A247, A217
FWGCBPMW-001C-W055-GW		1235		X			9			3	1		X	X	X	X	X	X	X	L488
FWGCBPMW-001C-W055-GF		1235		X					1										X	L488
FWGCBPMW-007C-W004-GW		1420		X			9			3	1		X	X	X	X	X	X	X	L774
FWGCBPMW-007C-W004-GF		1420		X					1										X	L774

L. Corbin 1/19/11

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 PER SOW ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	1/20/11	15:15	1. Received By: FC Fedex	1/20/11	1515
2. Relinquished By: FC Fedex	1/20/11	1626	2. Received By:	1/20/11	1626
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments: Metals are field filtered

* ALL VOAS IN COOLER A247 *

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

Temps may not meet requirements if Sample Collection is Close to pickup time

North Canton

TestAmerica Cooler Receipt Form/Narrative **Lot Number: 41A200534**
North Canton Facility

Client EQM Project RVAAP (OH) By: Terry Burns
Cooler Received on 1/20/11 Opened on 1/21/11 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☑ Other ____
TestAmerica Cooler # ____ Multiple Coolers ☑ Foam Box ☐ Client Cooler ☐ Other ____

1. Were custody seals on the outside of the cooler(s)? Yes ☑ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 1 each Quantity Unsalvageable ____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☑ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? ____
2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☑
3. Did custody papers accompany the sample(s)? Yes ☑ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☑ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other ____
6. Cooler temperature upon receipt ____ °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ ____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☐ No ☒
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM MJL Date 1/21/11 by TB via Verbal ☑ Voice Mail ☐ Other ☐
Concerning #14

14. CHAIN OF CUSTODY

The following discrepancies occurred:

COC ID = FWGCBPMW-007C-1664-GW, Label ID = FWGCBPMW-007C-1658-GW
COC ID = FWGCBPMW-007C-1664-GF, Label ID = FWGCBPMW-007C-1658-GF
Will log IDs per 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
1668-GW	≥12	1/21/11	TB
-GF	<2		
1669-GW	>12		
-GF	<2		
1667-GW	>12		
-GF	<2		
1666-GW	>12		
-GF	<2		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1660-GW	>12	1/21/11	TB
-GF	<2		
1662-GW	>12		
-GF	<2		
1695-GW	>12		
-GF	<2		
1656-GW	>12		
1701-GW	<2, >12		
1656-GF	<2		
1661-GW	>12, >12, >12		
-GF	<2, <2, <2		
1655-GW	>12		
-GF	<2		
1658-GW	>12		
-GF	<2		

Cooler #	Temp. °C	Method	Coolant
L227	2.2°C	IR	wet ice
A115	3.3°C		
A580	2.5°C		
L458	3.1°C		
L692	2.4°C		
A235	2.6°C		
L649	3.2°C		
A166	3.6°C		
A260	1.7°C		
A43	1.7°C		
A247	2.1°C		
A217	3.3°C		
Discrepancies Cont'd:			
L488	2.1°C		
L774	2.2°C		

ANALYTICAL METHODS SUMMARY

A1A200534

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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A200534 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 1.7°C – 3.3°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 1/29/11 @1628 recovered above control limits with a %D of 31% for tetryl. • The MRL analyzed 1/29/11 @ 0513 recovered above control limits with a %D of 46% for RDX. • The MRL analyzed 1/30/11 @0127 recovered above control limits with a %D of 49% for RDX. No qualifications were made for the tetryl outliers as the samples were reanalyzed with passing MRL recoveries for tetryl. No qualification was made for the RDX outliers as there were no detected RDX concentrations in 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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A200534 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%?	✓			LC10- • The CCV analyzed 1/29/11 @0428 and 1543 recovered above limits for tetryl with a %D of 22%. • The CCV analyzed 1/30/11 @0042 recovered above limits for tetryl with a %D of 21%. No qualifications were made as the samples were reanalyzed with passing CCVs for tetryl.	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 FWGCPmw-DUP4-1695-GW and FWGCBPmw-004c-1656-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.	<5x=B
19. Was a field duplicate analyzed? Were the RPDs ≤30%?		✓		Checked by ADR. The RPD for the field duplicate FWGCPmw-DUP4-1695-GW and FWGCPmw-006c-1662-GW was above control limits for 2,4,6-TNT at 200%. No qualification of the data was made as 2,4,6-TNT was not detected in the parent sample, FWGCPmw-006c-1662-GW.	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%?	✓			Checked by ADR.	QAPP Table 3-2 Pj
27. Were reported sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A200534 R0
Analysis: SW846 8330 Explosives

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.	✓			See narrative.	

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 5 and Attachment A "Data Validation Guidelines.

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

STL SOP SAC-LC-0009 Rev. 2.0- Determination of Nitroaromatic, Nitramines, and Specialty Explosives Based on Method 8330, SW-846.

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-126C-1668-GW

HPLC

Lot-Sample #...: A1A200534-001 Work Order #...: MDJPE1AA Matrix.....: WG
Date Sampled...: 01/20/11 09:23 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.096	ug/L	0.029
1,3-Dinitrobenzene	ND	0.096	ug/L	0.048
2-Amino-4,6-dinitrotoluene	ND	0.096	ug/L	0.096
2,4,6-Trinitrotoluene	ND	0.096	ug/L	0.048
2,4-Dinitrotoluene	ND	0.096	ug/L	0.048
2,6-Dinitrotoluene	ND	0.096	ug/L	0.048
2-Nitrotoluene	ND	0.48	ug/L	0.084
3-Nitrotoluene	ND	0.48	ug/L	0.055
4-Amino-2,6-dinitrotoluene	ND	0.096	ug/L	0.048
4-Nitrotoluene	ND	0.48	ug/L	0.084
HMX	ND	0.096	ug/L	0.035
Nitrobenzene	ND	0.096	ug/L	0.048
Nitroglycerin	ND	0.62	ug/L	0.32
RDX	ND	0.096	ug/L	0.035
PETN	ND	0.62	ug/L	0.29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-126C-1668-GW

HPLC

Lot-Sample #...: A1A200534-001 Work Order #...: MDJPE2AA Matrix.....: WG
Date Sampled...: 01/20/11 09:23 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/10/11
Prep Batch #...: 1026163
Dilution Factor: 0.96 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.096	ug/L	0.048

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	107	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-129C-1669-GW

HPLC

Lot-Sample #...: A1A200534-002 Work Order #...: MDJPF1AA Matrix.....: WG
Date Sampled...: 01/20/11 10:42 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-129C-1669-GW

HPLC

Lot-Sample #...:	A1A200534-002	Work Order #...:	MDJPF2AA	Matrix.....:	WG
Date Sampled...:	01/20/11 10:42	Date Received..:	01/20/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1026163				
Dilution Factor:	0.98	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-124C-1667-GW

HPLC

Lot-Sample #...: A1A200534-003 Work Order #...: MDJPG1AA Matrix.....: WG
Date Sampled...: 01/20/11 12:02 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-124C-1667-GW

HPLC

Lot-Sample #...:	A1A200534-003	Work Order #...:	MDJPG2AA	Matrix.....:	WG
Date Sampled...:	01/20/11 12:02	Date Received..:	01/20/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/10/11		
Prep Batch #...:	1026163				
Dilution Factor:	0.98	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-123C-1666-GW

HPLC

Lot-Sample #...: A1A200534-004 Work Order #...: MDJPH1AA Matrix.....: WG
Date Sampled...: 01/20/11 13:06 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-123C-1666-GW

HPLC

Lot-Sample #...: A1A200534-004 Work Order #...: MDJPH2AA Matrix.....: WG
Date Sampled...: 01/20/11 13:06 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/11/11
Prep Batch #...: 1026163
Dilution Factor: 0.98 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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: FWGCPmw-002C-1660-GW

HPLC

Lot-Sample #...: A1A200534-005 Work Order #...: MDJPJ1AA Matrix.....: WG
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-002C-1660-GW

HPLC

Lot-Sample #...:	A1A200534-005	**Work Order #...:**	MDJPJ2AA	**Matrix.....:**	WG
Date Sampled...:	01/20/11 09:10	**Date Received..:**	01/20/11		
Prep Date.....:	01/26/11	**Analysis Date..:**	02/11/11		
Prep Batch #...:	1026163				
Dilution Factor:	1.05	**Method.....:**	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-006C-1662-GW

HPLC

Lot-Sample #...: A1A200534-006 Work Order #...: MDJPK1AA Matrix.....: WG
Date Sampled...: 01/20/11 10:40 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-006C-1662-GW

HPLC

Lot-Sample #...:	A1A200534-006	Work Order #...:	MDJPK2AA	Matrix.....:	WG
Date Sampled...:	01/20/11 10:40	Date Received..:	01/20/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/11/11		
Prep Batch #...:	1026163				
Dilution Factor:	1	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	91	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-DUP4-1695-GW

HPLC

Lot-Sample #...: A1A200534-007 Work Order #...: MDJPL1AA Matrix.....: WG
Date Sampled...: 01/20/11 12:00 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
Dilution Factor: 0.98 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,3,5-Trinitrobenzene	ND	0.098	ug/L	0.029
1,3-Dinitrobenzene	ND	0.098	ug/L	0.049
2-Amino-4,6-dinitrotoluene	ND	0.098	ug/L	0.098
2,4,6-Trinitrotoluene	**0.059 J**	**0.098**	**ug/L**	**0.049**
2,4-Dinitrotoluene	ND	0.098	ug/L	0.049
2,6-Dinitrotoluene	ND	0.098	ug/L	0.049
2-Nitrotoluene	ND	0.49	ug/L	0.086
3-Nitrotoluene	ND	0.49	ug/L	0.056
4-Amino-2,6-dinitrotoluene	ND	0.098	ug/L	0.049
4-Nitrotoluene	ND	0.49	ug/L	0.086
HMX	ND	0.098	ug/L	0.035
Nitrobenzene	ND	0.098	ug/L	0.049
Nitroglycerin	ND	0.64	ug/L	0.32
RDX	ND	0.098	ug/L	0.035
PETN	ND	0.64	ug/L	0.29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-DUP4-1695-GW

HPLC

Lot-Sample #...: A1A200534-007 Work Order #...: MDJPL2AA Matrix.....: WG
Date Sampled...: 01/20/11 12:00 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/11/11
Prep Batch #...: 1026163
Dilution Factor: 0.98 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.098	ug/L	0.049

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-004C-1656-GW

HPLC

Lot-Sample #...: A1A200534-008 Work Order #...: MDJPM1AA Matrix.....: WG
Date Sampled...: 01/20/11 12:30 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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	**0.062 J**	**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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	88	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-004C-1656-GW

HPLC

Lot-Sample #...:	A1A200534-008	Work Order #...:	MDJPM2AA	Matrix.....:	WG
Date Sampled...:	01/20/11 12:30	Date Received..:	01/20/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/11/11		
Prep Batch #...:	1026163				
Dilution Factor:	1.13	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.11	ug/L	0.056

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	89	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1701-GW

HPLC

Lot-Sample #...: A1A200534-009 Work Order #...: MDJPN1AA Matrix.....: WQ
Date Sampled...: 01/20/11 14:30 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1701-GW

HPLC

Lot-Sample #...:	A1A200534-009	Work Order #...:	MDJPN2AA	Matrix.....:	WQ
Date Sampled...:	01/20/11 14:30	Date Received..:	01/20/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/11/11		
Prep Batch #...:	1026163				
Dilution Factor:	1.05	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-005C-1661-GW

HPLC

Lot-Sample #...: A1A200534-010 Work Order #...: MDJPP1AA Matrix.....: WG
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-005C-1661-GW

HPLC

Lot-Sample #...:	A1A200534-010	Work Order #...:	MDJPP2AA	Matrix.....:	WG
Date Sampled...:	01/20/11 09:10	Date Received..:	01/20/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/11/11		
Prep Batch #...:	1026163				
Dilution Factor:	1.11	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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: FWGCBPmw-001C-1655-GW

HPLC

Lot-Sample #...: A1A200534-011 Work Order #...: MDJPQ1AA Matrix.....: WG
Date Sampled...: 01/20/11 12:35 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-001C-1655-GW

HPLC

Lot-Sample #...:	A1A200534-011	Work Order #...:	MDJPQ2AA	Matrix.....:	WG
Date Sampled...:	01/20/11 12:35	Date Received..:	01/20/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/11/11		
Prep Batch #...:	1026163				
Dilution Factor:	1.1	Method.....:	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.11	ug/L	0.055

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-007C-1658-GW

HPLC

Lot-Sample #...: A1A200534-012 Work Order #...: MDJPR1AA Matrix.....: WG
Date Sampled...: 01/20/11 14:20 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-007C-1658-GW

HPLC

Lot-Sample #...:	A1A200534-012	**Work Order #...:**	MDJPR2AA	**Matrix.....:**	WG
Date Sampled...:	01/20/11 14:20	**Date Received..:**	01/20/11		
Prep Date.....:	01/26/11	**Analysis Date..:**	02/11/11		
Prep Batch #...:	1026163				
Dilution Factor:	1	**Method.....:**	SW846 8330		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetryl	ND	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A200534 **Work Order #...:** MDP3J1AA **Matrix.....:** WATER
MB Lot-Sample #: G1A260000-163

Prep Date.....: 01/26/11
Analysis Date..: 01/29/11 **Prep Batch #...:** 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A200534 **Work Order #...:** MDP3J1AD **Matrix.....:** WATER
MB Lot-Sample #: G1A260000-163

Prep Date.....: 01/26/11
Analysis Date..: 01/29/11 **Prep Batch #...:** 1026163
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	94	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A200534 **Work Order #...:** MDP3J1AE **Matrix.....:** WATER
MB Lot-Sample #: G1A260000-163

Prep Date.....: 01/26/11
Analysis Date..: 02/10/11 **Prep Batch #...:** 1026163
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: A1A200534 Work Order #...: MDP3J1AG Matrix.....: WATER
MB Lot-Sample #: G1A260000-163

Prep Date.....: 01/26/11
Analysis Date..: 02/10/11 Prep Batch #...: 1026163
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Tetryl	ND	0.10	ug/L	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	95	(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 #...: A1A200534 Work Order #...: MDP3J1AC Matrix.....: WATER
LCS Lot-Sample#: G1A260000-163
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,3,5-Trinitrobenzene	105	(53 - 135)	SW846 8330
1,3-Dinitrobenzene	108	(54 - 120)	SW846 8330
2-Amino-4,6-dinitrotoluene	106	(53 - 120)	SW846 8330
2,4,6-Trinitrotoluene	94	(37 - 120)	SW846 8330
2,4-Dinitrotoluene	105	(58 - 136)	SW846 8330
2,6-Dinitrotoluene	105	(52 - 144)	SW846 8330
2-Nitrotoluene	106	(52 - 120)	SW846 8330
3-Nitrotoluene	104	(48 - 136)	SW846 8330
4-Amino-2,6-dinitrotoluene	105	(58 - 159)	SW846 8330
4-Nitrotoluene	105	(46 - 136)	SW846 8330
HMX	99	(45 - 140)	SW846 8330
Nitrobenzene	107	(49 - 120)	SW846 8330
Nitroglycerin	99	(60 - 120)	SW846 8330
RDX	108	(39 - 120)	SW846 8330
PETN	101	(60 - 120)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A200534 **Work Order #...:** MDP3J1AF **Matrix.....:** WATER
LCS Lot-Sample#: G1A260000-163
Prep Date.....: 01/26/11 **Analysis Date..:** 02/10/11
Prep Batch #...: 1026163
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetryl	**97**	**(30 - 120)**	**SW846 8330**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	96	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A200534 Work Order #...: MDJPP1AE-MS Matrix.....: WG
MS Lot-Sample #: A1A200534-010 MDJPP1AF-MSD
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 01/29/11
Prep Batch #...: 1026163
Dilution Factor: 1.12

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3,5-Trinitrobenzene	105	(50 - 150)			SW846 8330
	103	(50 - 150)	5.8	(0-50)	SW846 8330
1,3-Dinitrobenzene	109	(50 - 150)			SW846 8330
	107	(50 - 150)	5.4	(0-50)	SW846 8330
2-Amino-4,6-dinitrotoluene	108	(50 - 150)			SW846 8330
	106	(50 - 150)	4.7	(0-50)	SW846 8330
2,4,6-Trinitrotoluene	95	(50 - 150)			SW846 8330
	93	(50 - 150)	5.2	(0-50)	SW846 8330
2,4-Dinitrotoluene	107	(50 - 150)			SW846 8330
	105	(50 - 150)	5.5	(0-50)	SW846 8330
2,6-Dinitrotoluene	106	(50 - 150)			SW846 8330
	105	(50 - 150)	4.2	(0-50)	SW846 8330
2-Nitrotoluene	108	(50 - 150)			SW846 8330
	106	(50 - 150)	6.1	(0-50)	SW846 8330
3-Nitrotoluene	106	(50 - 150)			SW846 8330
	104	(50 - 150)	5.3	(0-50)	SW846 8330
4-Amino-2,6-dinitrotoluene	105	(50 - 150)			SW846 8330
	104	(50 - 150)	4.6	(0-50)	SW846 8330
4-Nitrotoluene	109	(50 - 150)			SW846 8330
	105	(50 - 150)	6.9	(0-50)	SW846 8330
HMX	99	(50 - 150)			SW846 8330
	96	(50 - 150)	5.8	(0-50)	SW846 8330
Nitrobenzene	107	(50 - 150)			SW846 8330
	105	(50 - 150)	5.3	(0-50)	SW846 8330
Nitroglycerin	101	(50 - 150)			SW846 8330
	99	(50 - 150)	6.4	(0-50)	SW846 8330
RDX	108	(50 - 150)			SW846 8330
	105	(50 - 150)	6.2	(0-50)	SW846 8330
PETN	101	(50 - 150)			SW846 8330
	101	(50 - 150)	4.3	(0-50)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)
	98	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: A1A200534 **Work Order #...:** MDJPP1AL-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200534-010 MDJPP1AM-MSD
Date Sampled...: 01/20/11 09:10 **Date Received..:** 01/20/11
Prep Date.....: 01/26/11 **Analysis Date..:** 02/11/11
Prep Batch #...: 1026163
Dilution Factor: 1.12

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Tetryl	98	(50 - 150)			SW846 8330
	98	(50 - 150)	4.1	(0-50)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(50 - 150)
	97	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica West Sacramento

A-000054.D

Chromatography Summary

Injection Date: 1/29/2011 4:28 Operator: RN

DataFile: LC10.I\01272011.B\A-000054.D Vial Num: 3

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample: **STD_05 10GCSV0524 8330 L5 100ng/mL**

Method File: LC10.I\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_05 10GCSV0524 8330 L5 100ng/mL;2

Misc. Info: ;5; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.90	5741	104.0000<	100	4%	Acceptable		15.90	10575	100.3000	100	0%	Acceptable		(±15)	
HMX	5.21	12791	98.8400<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.35	9234	101.4000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	8.39	17256	214.4000	200	7%	Acceptable		8.39	25507	214.8000<	200	7%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.55	16089	101.6000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.06	15685	101.3000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	12.94	11349	122.2000<	100	22%	Fails					100	-100%	Fails		(±15)	45
Nitrobenzene	13.60	7311	102.1000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.97	9410	99.8800<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.45	7839	103.0000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.42	8552	101.9000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.80	5987	101.5000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.51	9619	101.3000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	21.39	4219	101.8000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	23.03	5108	102.3000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	24.70	5048	101.6000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	Fails		14.03	6995	101.6000<	100	2%	Acceptable		(±15)	45
PETN				100	-100%	Fails		26.37	4094	109.2000<	100	9%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.77	10801	106.5000<	100	7%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails					100	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

Printed: 1/31/2011 9:48 AM

TestAmerica West Sacramento

A-000069.D

Chromatography Summary

Injection Date: 1/29/2011 15:43 Operator: RN

DataFile: LC10.D\01272011.B\A-000069.D Vial Num: 3

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_05 10GCSV0524 8330 L5 100ng/mL**

Method File: LC10.D\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_05 10GCSV0524 8330 L5 100ng/mL;2

Misc. Info: ;5;;;;3;CAL.sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)							
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.90	5705	103.3000<	100	3%	Acceptable		15.91	10750	102.0000	100	2%	Acceptable		(±15)	
HMX	5.21	12835	99.1800<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.35	9158	100.6000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	8.39	17284	214.7000	200	7%	Acceptable		8.39	25656	216.0000<	200	8%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.55	16097	101.7000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.06	15764	101.8000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	12.94	11364	122.3000<	100	22%	Fails					100	-100%	Fails		(±15)	45
Nitrobenzene	13.60	6990	97.6400<	100	-2%	Acceptable					100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.97	9398	99.7500<	100	0%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.46	7828	102.8000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.43	8534	101.7000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.82	5952	100.9000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.53	9639	101.5000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	21.42	4009	96.7100<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	23.06	4930	98.7500<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	24.74	4803	96.6300<	100	-3%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	Fails		14.03	7114	103.4000<	100	3%	Acceptable		(±15)	45
PETN				100	-100%	Fails		26.41	3973	106.0000<	100	6%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.77	10815	106.6000<	100	7%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails					100	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

Printed: 1/31/2011 10:03 AM

TestAmerica West Sacramento

A-000081.D

Chromatography Summary

Injection Date: 1/30/2011 0:42 Operator: RN

DataFile: LC10.R01272011.B\A-000081.D Vial Num: 2

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_05 10GCSV0524 8330 L5 100ng/mL**

Method File: LC10.R01272011.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: CAL.sub SpikeList:

Samp. Info: STD_05 10GCSV0524 8330 L5 100ng/mL;2

Misc. Info: ;5; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limit(%)	Flag
3,4-Dinitrotoluene	15.91	5735	103.9000<	100	4%	Acceptable		15.92	10658	101.1000	100	1%	Acceptable		(±15)	
HMX	5.21	12852	99.3100<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
RDX	7.35	9226	101.3000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
Picric ACID	8.39	17266	214.5000	200	7%	Acceptable		8.39	25550	215.1000<	200	8%	Acceptable		(±15)	
1,3,5-Trinitrobenzene	9.55	16090	101.6000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.06	15696	101.4000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
TETRYL	**12.94**	**11276**	**121.4000<**	**100**	**21%**	**Fails**					100	-100%	Fails		(±15)	45
Nitrobenzene	13.60	7257	101.4000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.98	9375	99.5000<	100	-1%	Acceptable					100	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.47	7798	102.4000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.44	8521	101.6000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.82	5931	100.6000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.53	9622	101.4000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
2-Nitrotoluene	21.42	4217	101.7000<	100	2%	Acceptable					100	-100%	Fails		(±15)	45
4-Nitrotoluene	23.07	5133	102.8000<	100	3%	Acceptable					100	-100%	Fails		(±15)	45
3-Nitrotoluene	24.74	5025	101.1000<	100	1%	Acceptable					100	-100%	Fails		(±15)	45
Nitroglycerin				100	-100%	Fails		14.05	7174	104.2000<	100	4%	Acceptable		(±15)	45
PETN				100	-100%	Fails		26.40	3787	101.0000<	100	1%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.78	10744	105.9000<	100	6%	Acceptable					100	-100%	Fails		(±15)	45
EGDN				100	-100%	Fails					100	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

TestAmerica West Sacramento

A-000070.D

Chromatography Summary

Injection Date: 1/29/2011 16:28 Operator: RN

DataFile: LC10.D\01272011.B\A-000070.D Vial Num: 4

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample : **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.D\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1;;;;3;CAL.sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.91	311	5.6340<	5	13%	Acceptable		15.93	550	5.2190	5	4%	Acceptable		(±15)	
HMX	5.21	713	5.5090<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.35	578	6.3470<	5	27%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.43	813	10.1000	5	102%	Fails					5	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.56	818	5.1670<	5	3%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.06	820	5.2950<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	12.94	609	6.5550<	5	31%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	13.60	383	5.3500<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.98	505	5.3600<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.49	430	5.6480<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.45	466	5.5550<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.81	339	5.7480<	5	15%	Acceptable					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.50	505	5.3200<	5	6%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.47	252	6.0790<	5	22%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.07	284	5.6880<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.72	277	5.5730<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.05	532	7.7310<	5	55%	Fails		(±15)	45
PETN				5	-100%	Fails		26.26	175	4.6700<	5	-7%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.78	568	5.6010<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails		8.43	1231	0.0000	5	-100%	Fails		(±15)	

Notes:
M = Manually Integrated
D = Operator Disabled Result
O = Over Calibration Range
< = Primary Value
4 = Signals Differ by More Than 40%
5 = Signals Differ by More Than 50%

Printed: 1/31/2011 10:03 AM

TestAmerica West Sacramento

A-000082.D

Chromatography Summary

Injection Date: 1/30/2011 1:27 Operator: RN

DataFile: LC10.D\01272011.B\A-000082.D Vial Num: 9

Instrument ID: LC10

Method 8330 Target Analyte Results

Method File: LC10.D\01272011.B\8330AB.M

Sample: **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1; ; ; ;3;CAL.sub; ;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.90	323	5.8510<	5	17%	Fails	M	15.90	560	5.3140	5	6%	Acceptable		(±15)	
HMX	5.21	690	5.3320<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.34	679	7.4560<	5	49%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.43	849	10.5500	5	111%	Fails					5	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.55	870	5.4950<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.07	829	5.3540<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	12.95	583	6.2750<	5	26%	Fails					5	-100%	Fails		(±15)	45
Nitrobenzene	13.60	398	5.5590<	5	11%	Acceptable					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	15.00	507	5.3810<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.49	418	5.4910<	5	10%	Acceptable	M				5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.46	471	5.6150<	5	12%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.83	341	5.7820<	5	16%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.55	522	5.4990<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.43	252	6.0790<	5	22%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.12	310	6.2090<	5	24%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.73	303	6.0960<	5	22%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.03	428	6.2200<	5	24%	Fails		(±15)	45
PETN				5	-100%	Fails		26.72	176	4.6970<	5	-6%	Acceptable		(±15)	45
3,5-Dinitroaniline	12.79	577	5.6900<	5	14%	Acceptable					5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails		8.44	1230	0.0000	5	-100%	Fails		(±15)	

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
6 "Peak Not Labeled"
8 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

1/31/11

Printed: 1/31/2011 10:56 AM

TestAmerica West Sacramento

A-000055.D

Chromatography Summary

Injection Date: 1/29/2011 5:13 Operator: RN

DataFile: LC10.I\01272011.D\A-000055.D Vial Num: 4

Instrument ID: LC10

Method 8330 Target Analyte Results

Sample: **STD_MRL 10GCSV0528 8330 L1 5ng/mL**

Method File: LC10.I\01272011.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: CAL.sub SpikeList:

Samp. Info: STD_MRL 10GCSV0528 8330 L1 5ng/mL;2

Misc. Info: ;1;;;;3;CAL.sub;;0;1

	Synergi Hydro-RP C18(250nm-265nm)							Synergi Hydro-RP C18(358nm-205nm)								
Compound Name	RT	Response	PPB	Spike Level	%D	Result	Flag	RT	Response	PPB	Spike Level	%D	Result	Flag	Limits(%)	Flag
3,4-Dinitrotoluene	15.88	308	5.5800<	5	12%	Acceptable		15.90	510	4.8390	5	-3%	Acceptable		(±15)	
HMX	5.21	701	5.4160<	5	8%	Acceptable					5	-100%	Fails		(±15)	45
RDX	7.35	663	7.2800<	5	46%	Fails					5	-100%	Fails		(±15)	45
Picric ACID	8.43	857	10.6400	5	113%	Fails	NA				5	-100%	Fails		(±15)	45
1,3,5-Trinitrobenzene	9.56	821	5.1860<	5	4%	Acceptable					5	-100%	Fails		(±15)	45
1,3-Dinitrobenzene	12.05	848	5.4760<	5	10%	Acceptable					5	-100%	Fails		(±15)	45
TETRYL	12.93	603	6.4900<	5	30%	Fails	M				5	-100%	Fails		(±15)	45
Nitrobenzene	13.59	448	6.2580<	5	25%	Fails					5	-100%	Fails		(±15)	45
2,4,6-Trinitrotoluene	14.97	533	5.6570<	5	13%	Acceptable					5	-100%	Fails		(±15)	45
4-AM-2,6-DNT	15.44	436	5.7270<	5	15%	Acceptable					5	-100%	Fails		(±15)	45
2-AM-4,6-DNT	16.42	450	5.3640<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2,6-Dinitrotoluene	17.82	346	5.8670<	5	17%	Fails					5	-100%	Fails		(±15)	45
2,4-Dinitrotoluene	18.53	509	5.3620<	5	7%	Acceptable					5	-100%	Fails		(±15)	45
2-Nitrotoluene	21.39	262	6.3200<	5	26%	Fails					5	-100%	Fails		(±15)	45
4-Nitrotoluene	23.04	299	5.9890<	5	20%	Fails					5	-100%	Fails		(±15)	45
3-Nitrotoluene	24.72	299	6.0160<	5	20%	Fails					5	-100%	Fails		(±15)	45
Nitroglycerin				5	-100%	Fails		14.01	376	5.4640<	5	9%	Acceptable	NA	(±15)	45
PETN				5	-100%	Fails					5	-100%	Fails	NA	(±15)	
3,5-Dinitroaniline	12.76	588	5.7980<	5	16%	Fails	M				5	-100%	Fails		(±15)	45
EGDN				5	-100%	Fails		8.44	1267	0.0000	5	-100%	Fails		(±15)	

±30% OK

±30% OK

2/2/11

Notes:
- M = Manually Integrated
- D = Operator Disabled Result
- O = Over Calibration Range
- < = Primary Value
- 4 = Signals Differ by More Than 40%
- 5 = Signals Differ by More Than 50%

RE-INTEGRATION CODES
1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
6 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)
ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED
RM 1/31/11

WATER, Nitroguanidine

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A200534 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 1.7°C – 3.3°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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A200534 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: FWGEBGmw-126C-1668-GW

Dissolved HPLC

Lot-Sample #...: A1A200534-001 Work Order #...: MDJPE1AD Matrix.....: WG
Date Sampled...: 01/20/11 09:23 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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: FWGEBGmw-129C-1669-GW

Dissolved HPLC

Lot-Sample #...:	A1A200534-002	Work Order #...:	MDJPF1AD	Matrix.....:	WG
Date Sampled...:	01/20/11 10:42	Date Received..:	01/20/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/01/11		
Prep Batch #...:	1026279				
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: FWGEBGmw-124C-1667-GW

Dissolved HPLC

Lot-Sample #...: A1A200534-003 Work Order #...: MDJPG1AD Matrix.....: WG
Date Sampled...: 01/20/11 12:02 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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: FWGEBGmw-123C-1666-GW

Dissolved HPLC

Lot-Sample #...: A1A200534-004 Work Order #...: MDJPH1AD Matrix.....: WG
Date Sampled...: 01/20/11 13:06 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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: FWGCPmw-002C-1660-GW

Dissolved HPLC

Lot-Sample #...: A1A200534-005 Work Order #...: MDJPJ1AD Matrix.....: WG
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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: FWGCPmw-006C-1662-GW

Dissolved HPLC

Lot-Sample #...: A1A200534-006 Work Order #...: MDJPK1AD Matrix.....: WG
Date Sampled...: 01/20/11 10:40 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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: FWGCPmw-DUP4-1695-GW

Dissolved HPLC

Lot-Sample #...:	A1A200534-007	Work Order #...:	MDJPL1AD	Matrix.....:	WG
Date Sampled...:	01/20/11 12:00	Date Received..:	01/20/11		
Prep Date.....:	01/26/11	Analysis Date..:	02/01/11		
Prep Batch #...:	1026279				
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: FWGCBPmw-004C-1656-GW

Dissolved HPLC

Lot-Sample #...: A1A200534-008 Work Order #...: MDJPM1AD Matrix.....: WG
Date Sampled...: 01/20/11 12:30 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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: FWGEQUIPRINSE4-1701-GW

Dissolved HPLC

Lot-Sample #...: A1A200534-009 Work Order #...: MDJPN1AD Matrix.....: WQ
Date Sampled...: 01/20/11 14:30 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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: FWGCPmw-005C-1661-GW

Dissolved HPLC

Lot-Sample #...: A1A200534-010 Work Order #...: MDJPP1AD Matrix.....: WG
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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: FWGCBPmw-001C-1655-GW

Dissolved HPLC

Lot-Sample #...: A1A200534-011 Work Order #...: MDJPQ1AD Matrix.....: WG
Date Sampled...: 01/20/11 12:35 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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: FWGCBPmw-007C-1658-GW

Dissolved HPLC

Lot-Sample #...: A1A200534-012 Work Order #...: MDJPR1AD Matrix.....: WG
Date Sampled...: 01/20/11 14:20 Date Received..: 01/20/11
Prep Date.....: 01/26/11 Analysis Date..: 02/01/11
Prep Batch #...: 1026279
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 #...: A1A200534 **Work Order #...:** MDQLM1AA **Matrix.....:** WATER
MB Lot-Sample #: G1A260000-279

Prep Date.....: 01/26/11
Analysis Date..: 02/01/11 **Prep Batch #...:** 1026279
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 #...: A1A200534 **Work Order #...:** MDQLM1AC **Matrix.....:** WATER
LCS Lot-Sample#: G1A260000-279
Prep Date.....: 01/26/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1026279
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Nitroguanidine	**105**	**(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 #...:	A1A200534	**Work Order #...:**	MDJPP1AJ-MS	**Matrix.....:**	WG
MS Lot-Sample #:	A1A200534-010		MDJPP1AK-MSD		
Date Sampled...:	01/20/11 09:10	**Date Received..:**	01/20/11		
Prep Date.....:	01/26/11	**Analysis Date..:**	02/01/11		
Prep Batch #...:	1026279				
Dilution Factor:	1				

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Nitroguanidine	**106**	**(73 - 117)**			**SW846 8330 (Modified**
	106	**(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

WATER, Nitrocellulose

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A200534 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 1.7°C – 3.3°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 1/27/11 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%?		✓		The closing MRL check analyzed on 1/27/11 at 1531 recovered above control limits at 160%. No qualifications were made as there were no detected nitrocellulose concentrations reported in the bracketed field samples.	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	✓				STL SOP Section

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 15, 2011

SDG: A1A200534 Rev 0
Analysis: TAL SOP WS-WC-0050

Review Questions:	Yes	No	N/A	Comments	Qualifier
results <1/2 the MRL?					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

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-126C-1668-GW

General Chemistry

Lot-Sample #...: A1A200534-001 Work Order #...: MDJPE Matrix.....: WG
Date Sampled...: 01/20/11 09:23 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-129C-1669-GW

General Chemistry

Lot-Sample #...: A1A200534-002 Work Order #...: MDJPF Matrix.....: WG
Date Sampled...: 01/20/11 10:42 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-124C-1667-GW

General Chemistry

Lot-Sample #...: A1A200534-003 Work Order #...: MDJPG Matrix.....: WG
Date Sampled...: 01/20/11 12:02 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEBGmw-123C-1666-GW

General Chemistry

Lot-Sample #...: A1A200534-004 Work Order #...: MDJPH Matrix.....: WG
Date Sampled...: 01/20/11 13:06 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-002C-1660-GW

General Chemistry

Lot-Sample #...: A1A200534-005 Work Order #...: MDJPJ Matrix.....: WG
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-006C-1662-GW

General Chemistry

Lot-Sample #...: A1A200534-006 Work Order #...: MDJPK Matrix.....: WG
Date Sampled...: 01/20/11 10:40 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-DUP4-1695-GW

General Chemistry

Lot-Sample #...: A1A200534-007 Work Order #...: MDJPL Matrix.....: WG
Date Sampled...: 01/20/11 12:00 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-004C-1656-GW

General Chemistry

Lot-Sample #...: A1A200534-008 Work Order #...: MDJPM Matrix.....: WG
Date Sampled...: 01/20/11 12:30 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE4-1701-GW

General Chemistry

Lot-Sample #...: A1A200534-009 Work Order #...: MDJPN Matrix.....: WQ
Date Sampled...: 01/20/11 14:30 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCPmw-005C-1661-GW

General Chemistry

Lot-Sample #...: A1A200534-010 Work Order #...: MDJPP Matrix.....: WG
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-001C-1655-GW

General Chemistry

Lot-Sample #...: A1A200534-011 Work Order #...: MDJPQ Matrix.....: WG
Date Sampled...: 01/20/11 12:35 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-007C-1658-GW

General Chemistry

Lot-Sample #...: A1A200534-012 **Work Order #...:** MDJPR **Matrix.....:** WG
Date Sampled...: 01/20/11 14:20 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078

Dilution Factor: 1 MDL.....: 0.48

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1A200534 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MDPPD1AA		MB Lot-Sample #:	G1A260000-078	
	ND	0.50	mg/L	TAL-SOP WS-WC-005	01/26-01/27/11	1026078
		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 #...: A1A200534 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		Work Order #: MDPPD1AC	LCS Lot-Sample#: G1A260000-078		
	110	(26 - 144)	TAL-SOP WS-WC-005	01/26-01/27/11	1026078
		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 #...: A1A200534 Matrix.....: WG
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrocellulose		WO#: MDJPP1AG-MS/MDJPP1AH-MSD			MS Lot-Sample #: A1A200534-010		
	95	(26 - 144)			TAL-SOP WS-WC-005	01/26-01/27/11	1026078
	98	(26 - 144)	3.1	(0-45)	TAL-SOP WS-WC-005	01/26-01/27/11	1026078
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

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: A1A200534										
8330	FWGCBPmw-004C-1656-GW	AQ	N							
				2,4,6-TNT	0.11	0.062J		J	ug/L	L
8330	FWGCPmw-DUP4-1695-GW	AQ	FD							
				2,4,6-TNT	0.098	0.059J		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGCBPmw-004C-1656-GW **Lab Report Batch :** A1A200534 **Lab ID :** TALCAN

Sample Date : 01/20/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A200534008

Reviewed By / Date : Angye Dragotta 3/15/2011 **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 : 8330						**Dilution: 1.13**															
2,4,6-TNT	0.062		ug/L	J	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: A1A200534 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGCBPmw-001C-1655-	A1A200534011	8330	AQ	2-Nitrotoluene	U	0.55	0.22	ug/L
				3-Nitrotoluene	U	0.55	0.22	ug/L
				4-Nitrotoluene	U	0.55	0.22	ug/L
FWGCBPmw-004C-1656-	A1A200534008	8330	AQ	2-Nitrotoluene	U	0.56	0.23	ug/L
				3-Nitrotoluene	U	0.56	0.23	ug/L
				4-Nitrotoluene	U	0.56	0.23	ug/L
FWGCBPmw-007C-1658-	A1A200534012	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGCPmw-002C-1660-G	A1A200534005	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L
FWGCPmw-005C-1661-G	A1A200534010	8330	AQ	2-Nitrotoluene	U	0.56	0.22	ug/L
				3-Nitrotoluene	U	0.56	0.22	ug/L
				4-Nitrotoluene	U	0.56	0.22	ug/L
FWGCPmw-006C-1662-G	A1A200534006	8330	AQ	2-Nitrotoluene	U	0.50	0.20	ug/L
				3-Nitrotoluene	U	0.50	0.20	ug/L
				4-Nitrotoluene	U	0.50	0.20	ug/L
FWGCPmw-DUP4-1695-G	A1A200534007	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGEBGmw-123C-1666-	A1A200534004	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	**U**	0.49	0.20	ug/L
FWGEBGmw-124C-1667-	A1A200534003	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **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: A1A200534 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEBGmw-126C-1668-	A1A200534001	8330	AQ	2-Nitrotoluene	U	0.48	0.19	ug/L
				3-Nitrotoluene	U	0.48	0.19	ug/L
				4-Nitrotoluene	U	0.48	0.19	ug/L
FWGEBGmw-129C-1669-	A1A200534002	8330	AQ	2-Nitrotoluene	U	0.49	0.20	ug/L
				3-Nitrotoluene	U	0.49	0.20	ug/L
				4-Nitrotoluene	U	0.49	0.20	ug/L
FWGEQUIPRINSE4-1701	A1A200534009	8330	AQ	2-Nitrotoluene	U	0.52	0.21	ug/L
				3-Nitrotoluene	U	0.52	0.21	ug/L
				4-Nitrotoluene	U	0.52	0.21	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: 030240.0006 - RVAAP (OH)

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A1A200534 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGCBPmw-004C-1656-	A1A200534008	8330	AQ	2,4,6-TNT	J	0.062	0.11	ug/L
FWGCPmw-DUP4-1695-G	A1A200534007			2,4,6-TNT	J	0.059	0.098	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A1A200534 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
8330	AQ	2,4,6-TNT	FWGCPmw-006C	RES	0.10	U	FWGCPmw-DUP4	DL	0.059	J	200.0	30	ug/L

Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** March 7, 2011
Sample Delivery Group: A1A200401 **Revision:** 0

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

QA/QC Summary

On Jan. 19, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1A200401.

Field Sample ID	Analytes	Method
FWGLNWmw-025c-1674-GW	VOCs	SW846 8260B
FWGWBGmw-007c-1677-GW	SVOCs	SW846 8270C
FWGFBQmw-174c-1673-GW	Pesticides	SW846 8081A
FWGLL4mw-197c-1654-GW	PCBs	SW846 8082
FWGLL4mw-196c-1653-GW	Cyanide	SW846 9012A
FWGSCFmw-005-1686-GW	Nitrate-Nitrite	353.2
FWGSCFmw-006-1687-GW		
FWGSCFmw-003-1684-GW		
FWGLL3mw-238c-1650-GW		
FWGWBGmw-005c-1675-GW		
FWGWBGmw-DUP5-1696-GW		
FWGWBGmw-006c-1676-GW		
FWGWBGmw-009c-1678-GW		
FWGEQUIPRinse3-1700-GW		
FWGLL3mw-239c-1651-GW		
FWGCBPmw-005c-1657-GW		
FWGCBPmw-008c-1659-GW		
FWGEQUIPRinse3-1700-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGLNWmw-025c-1674-GF	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGWBGmw-007c-1677-GF		
FWGFBQmw-174c-1673-GF		
FWGLL4mw-197c-1654-GF		
FWGLL4mw-196c-1653-GF		
FWGSCFmw-005-1686-GF		
FWGSCFmw-006-1687-GF		
FWGSCFmw-003-1684-GF		
FWGLL3mw-238c-1650-GF		
FWGWBGmw-005c-1675-GF		
FWGWBGmw-DUP5-1696-GF		
FWGWBGmw-006c-1676-GF		
FWGWBGmw-009c-1678-GF		
FWGLL3mw-239c-1651-GF		
FWGCBPmw-005c-1657-GF		
FWGCBPmw-008c-1659-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 – 2.8°C. The samples received for FWGCBP-005C-1658-GW/GF were marked on the COC as FWGCBP-007C-1664-GW/GF and on the labels as FWGCBP-005C-1658-GW/GF. Samples were logged per labels.

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** March 7, 2011
Sample Delivery Group: A1A200401 **Revision:** 0

The completeness objective for the project was 90%. The completeness objective was met for this SDG, 99.7%. 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 closing MRL check analyzed 1/21/2011 at 1934 had methylene chloride recover below control limits at 67%. All methylene chloride results except for samples FWGWBGmw-007c-1677-GW, FWGFBQmw-174c-1673-GW, FWGLL4mw-197c-1654-GW and FWGLL4mw-196c-1653-GW were qualified as estimated, "UJ".

Blanks

- FWGTEAM1-Trip had acetone detected at 13ug/L, 2-butanone at 0.68ug/L and 4-methyl-2-pentanone at FWGTEAM1-Trip had acetone detected at 13ug/L, 2-butanone at 0.59ug/L and 4-methyl-2-pentanone at 0.32ug/L.
- FWGTEAM3-Trip had acetone detected at 12ug/L, 2-butanone at 0.59ug/L and 4-methyl-2-pentanone at 0.34ug/L.
- FWGTEAM2-Trip had acetone detected at 13ug/L and 2-butanone at 0.62ug/L.
- 2-butanone was detected in FWGEQUIPRinse3-1700-GW at 3.3ug/L, acetone at 8.1ug/L and chloroform at 0.61ug/L.
- The acetone results for samples FWGFBQmw-174c-1673-GW and FWGEQUIPRinse3-1700-GW, the 2-butanone result for FWGEQUIPRinse3-1700-GW and the chloroform result for FWGLL3mw-239c-1651-GW were qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples

Matrix Spike Recovery Criteria
Only the matrix spike with the parent from this SDG was evaluated. The matrix spike and duplicate analyzed on sampleFWGSCFmw-003-1684-GW recovered below control limits for bromomethane at 62% and 59%, respectively. No qualification was made as there were no other bromomethane QC outliers.

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

Site: Ravenna Army Ammunition Plant **Date:** March 7, 2011
Sampling Event: Jan 2011 **Revision:** 0
Sample Delivery Group: A1A200401

- Field duplicate RPD criteria
- Laboratory Control Sample criteria
- Matrix Spike Recovery Criteria and RPD

The laboratory's case narrative incorrectly indicated that sample FWGCBPmw-008c-1659-GF had three acid surrogates outside control limits. Sample FWGWBGmw-006c-1676-GW should have been listed with the outliers instead of FWGCBPmw-008c-1659-GF.

Matrix Spike Recovery

- Both the matrix spike and matrix spike duplicate analyzed on sample FWGLNWmw-025c-1674-GW recovered below control limits for 3,3'-dichlorobenzidine at 4% and 13%, hexachlorocyclopentadiene at 30% and 31% and n-nitrosodiphenylamine at 38% and 43%. The 3,3'-dichlorobenzidine MS/MSD RPD had an RPD of 104%.
- Both the matrix spike and matrix spike duplicate analyzed on sample FWGSCFmw-003-1684-GW recovered below control limits for 3,3'-dichlorobenzidine at 32% and 31% and hexachlorocyclopentadiene at 23% and 26%. The hexachloroethane MS recovered at 44%.

No qualification was made for the for 3,3'-dichlorobenzidine, hexachloroethane or n-nitrosodiphenylamine outliers as the LCS recovered within limits. The hexachlorocyclopentadiene results for samples FWGLNWmw-025c-1674-GW and FWGSCFmw-003-1684-GW were qualified as estimated, "UJ".

Surrogate Recovery

The acid surrogates for sample FWGWBGmw-006c-1676-GW recovered below control limits. 2,4,6-tribromophenol recovered at 33%, 2-fluorophenol at 44% and phenol-d5 at 47%. The targets associated with the acid fraction of sample FWGWBGmw-006c-1676-GW were qualified as estimated, "J/UJ"

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

Samples FWGLNWmw-025c-1674-GW, FWGWBGmw-007c-1677-GW , FWGLL4mw-197c-1654-GW, FWGLL4mw-196c-1653-GW, FWGSCFmw-005-1686-GW, FWGWBGmw-005c-1675-GW , FWGWBGmw-DUP5-1696-GW , FWGWBGmw-006c-1676-GW and FWGCBPmw-005c-1657-GW were diluted, elevating reporting limits.

MRL Recovery

- On 1/25/11, the MRL at 0259(pest 3) had beta-BHC recover above control limits at 133%, heptachlor epoxide, endosulfan sulfate and alpha-chlordane at 132% and endrin aldehyde at 134%.
- On 1/24/11, the MRL at 1130(pest 3r) had delta-BHC recover above control limits at 160% and 4,4'-DDD at 136%.
- On 1/25/11, the MRL at 0259(pest 3r) had delta-BHC recover above control limits at 166% and 4,4'-DDD at 136%.
- On 2/4/11, the MRL at 1058 (pest 3) had endrin aldehyde recover above control limits at 134% and endosulfan sulfate at 131%.
- On 2/4/11, the MRL analyzed at 1702(pest3r) all analytes with the exception of alpha and delta-BHC, 4,4'-DDE, DDD and DDT and methoxychlor were above control limits.
- On 2/4/11, the MRL at 1058 (pest 3r) had delta-BHC recover above control limits at 161% .

- On 2/8/11, the MRL at 0308 (pest 3r) had heptachlor epoxide recover above control limits at 134% and alpha-chlordane at 136%.

As all outliers were above control limits, no qualification was made for nondetect results. beta-BHC for samples FWGLL3mw-238c-1650-GW and FWGLL3mw-239c-1651-GW were the only detected results and were qualified as estimated, "J".

ICV
The toxaphene ICV (3r) analyzed 1/20/10 had a %D above control limits. No qualification required as there were no detected toxaphene concentrations reported.

CCV

- The CCV analyzed 1/24/11 @ 2049(pest3) had an average %D of 29%. All target analytes with outlier %D were above control limits.
- The CCV analyzed 1/24/11 @ 2049(pest3r) had an average %D of 21%. All target analytes with outlier %D were above control limits.
- The CCV analyzed 2/4/11 @ 1632(pest3) had an average %D of 34%. All target analytes with outlier %D were above control limits.
- The CCV analyzed 2/4/11 @ 1632(pest 3r) had an average %D of 17.5%. All target analytes with outlier %D were above control limits and no detected concentrations were reported, so no qualifications were required.
- The CCV analyzed 2/8/11 @ 0004(pest 9) had an average %D of 12.2%. The %D was above control limits for delta-BHC at 21%.
- The CCV analyzed 2/8/11 @ 0245(pest 9) had an average %D of 19.4%. All target analytes with outlier %D were above control limits.
- The CCV analyzed 2/8/11 @ 0245(pest 9r) had an average %D of 19.8%. All target analytes with outlier %D were above control limits.

As all outliers were above control limits, no qualification was made for nondetect results. beta-BHC for samples FWGLL3mw-238c-1650-GW and FWGLL3mw-239c-1651-GW were the only detected results and were qualified as estimated, "J"

Surrogate Recovery
The surrogate, DCB, recovered below control limits for FWGCBPmw-005c-1657-GW at 34%, FWGFBQmw-174c-1673-GW at 46%, FWGLL3mw-238c-1650-GW at 31%, FWGLL4mw-196c-1653-GW at 32%, FWGLL4mw-197c-1654-GW at 37%, FWGLNWmw-025c-1674-GW at 21%, FWGSCFmw-005-1686-GW at 26%, FWGWBGmw-005c-1675-GW at 32%, FWGWBGmw-006c-1676-GW at 49%, FWGWBGmw-007c-1677-GW at 43% and FWGWBGmw-DUP5-1696-GW at 38%. The results for FWGCBPmw-005c-1657-GW, FWGFBQmw-174c-1673-GW, FWGLL3mw-238c-1650-GW, FWGLL4mw-196c-1653-GW, FWGLL4mw-197c-1654-GW, FWGLNWmw-025c-1674-GW, FWGSCFmw-005-1686-GW, FWGWBGmw-005c-1675-GW, FWGWBGmw-006c-1676-GW, FWGWBGmw-007c-1677-GW and FWGWBGmw-DUP5-1696-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

Hold Time
Due to surrogate outliers, sample FWGSCFmw-005-1686-GW was re-extracted. The re-extraction was completed outside of 2x hold. The sample was qualified as unusable, "R".

Site: Ravenna Army Ammunition Plant **Date:** March 7, 2011
Sampling Event: Jan 2011 **Revision:** 0
Sample Delivery Group: A1A200401

FWGSCFmw-005-1686-GW was re-extracted out of hold due to surrogate outliers in the initial analysis; the result for the reextract sample was reported.

CCV
The CCV analyzed on 1/26/11 at 1748 recovered above limits for aroclor1260 at 17%. No qualification was made as there were no detected results reported for aroclor 1260.

Surrogate Recovery
The surrogate, DCB, recovered below control limits for FWGCBPmw-005c-1657-GW at 42%, FWGLL3mw-238c-1650-GW at 37%, FWGLL4mw-196c-1653-GW at 43%, FWGLL4mw-197c-1654-GW at 41%, FWGLNWmw-025c-1674-GW at 23%, FWGSCFmw-005-1686-GW at 47%, FWGWBGmw-005c-1675-GW at 35% and FWGWBGmw-006c-1676-GW at 45%. The results for FWGCBPmw-005c-1657-GW, FWGLL3mw-238c-1650-GW, FWGLL4mw-196c-1653-GW, FWGLL4mw-197c-1654-GW, FWGLNWmw-025c-1674-GW, FWGSCFmw-005-1686-GW, FWGWBGmw-005c-1675-GW and FWGWBGmw-006c-1676-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

Field Duplicate RPD
The field duplicate RPD for samples FWGWBGmw-005c-1675-GF and FWGWBGmw-DUP5-1696-GF was above control limits for nickel at 45%. The aluminum result for samples FWGWBGmw-005c-1675-GF and FWGWBGmw-DUP5-1696-GF were qualified as estimated, "J".

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 1/25/11 had thallium detected at 0.18ug/L.

- The thallium result for samples FWGLNWmw-025c-1674-GF, FWGWBGmw-007c-1677-GF and FWGLL3mw-239c-1650-GF were <5x the ICB contamination and was qualified, "U".

The CCBs analyzed 1/25/11 had detected thallium from 0.17ug/L to 0.27ug/L and sodium at 18.5ug/L to 24ug/L.

- The thallium result for samples FWGLNWmw-025c-1674-GF, FWGWBGmw-007c-1677-GF and FWGLL3mw-239c-1650-GF were <5x the CCB contamination and was qualified, "U". No sodium qualifications were made as the detected sodium concentrations were >5 x contamination.

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011
Sample Delivery Group: A1A200401

Date: March 7, 2011
Revision: 0

The method blank had sodium detected at 43ug/L and zinc at 3.7ug/L. The following sample results were qualified, "B", due to sample results <5x blank contamination;

- Zinc results for samples FWGEQUIPRinse3-1700-GW, FWGFBQmw-174C-1673-GF, FWGLL3mw-238C-1650-GF, FWGLL3mw-239C-1651-GF and FWGWBGmw-009C-1678-GF.
- Sodium result for sample FWGEQUIPRinse3-1700-GW.

FWGEQUIPRinse3-1700-GW had sodium detected at 16.1ug/L, iron at 26.8ug/L and zinc at 3.1ug/L. The following sample results were qualified, "B", due to sample results <5x blank contamination;

- Zinc results for samples FWGFBQmw-174C-1673-GF, FWGLL3mw-238C-1650-GF, FWGLL3mw-239C-1651-GF and FWGWBGmw-009C-1678-GF.
- Iron results for samples FWGSCFmw-003-1684-GF and FWGSCFmw-006-1687-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

Blanks
The CCB analyzed 1/28/11 at 1518 had mercury detected at 0.2ug/L. No qualification was required as this CCB did not bracket any field samples with detected mercury concentrations. No qualifications were made for due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

Matrix Spike Recovery
The matrix spike analyzed on sample FWGSCFmw-003-1684-GF recovered above limits at 126%. The mercury results for samples FWGLNWmw-025c-1674-GF, FWGSCFmw-005-1686-GF, FWGSCFmw-003-1684-GF, FWGLL3mw-239c-1651-GF and FWGCBPmw-008c-1659-GF were qualified as estimated, "J". No qualifications were made for nondetect results.

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

Matrix Spike
The MS analyzed on sample FWGSCFmw-003-1684-GW recovered below control limits at 67%. The MS and MSD analyzed on sample FWGLNWmw-025c-1674-GW recovered below control limits at 63% and 79%, with and RPD of 22%. All cyanide results were qualified as estimated, "UJ".

Nitrate-Nitrite 353.2
The following QC criteria were reviewed with acceptable results, except as noted below:

- Holding times, preservation, sample handling
- Initial Calibration criteria

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011
Sample Delivery Group: A1A200401

Date: March 7, 2011
Revision: 0

- 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 QC outliers noted.

SAMPLE SUMMARY

A1A200401

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDHK5	001	FWGLNWmw-025C-1674-GW	01/19/11	09:03
MDHK7	002	FWGLNWmw-025C-1674-GF	01/19/11	09:03
MDHK8	003	FWGTEAM1-TRIP	01/19/11	08:00
MDHK9	004	FWGWBGmw-007C-1677-GW	01/19/11	11:19
MDHLA	005	FWGWBGmw-007C-1677-GF	01/19/11	11:19
MDHLC	006	FWGFBQmw-174C-1673-GW	01/19/11	13:21
MDHLD	007	FWGFBQmw-174C-1673-GF	01/19/11	13:21
MDHLE	008	FWGLL4mw-197C-1654-GW	01/19/11	15:04
MDHLF	009	FWGLL4mw-197C-1654-GF	01/19/11	15:04
MDHLG	010	FWGLL4mw-196C-1653-GW	01/19/11	16:29
MDHLH	011	FWGLL4mw-196C-1653-GF	01/19/11	16:29
MDHLJ	012	FWGTEAM2-TRIP	01/19/11	08:00
MDHLK	013	FWGSCFmw-005-1686-GW	01/19/11	09:15
MDHLL	014	FWGSCFmw-005-1686-GF	01/19/11	09:15
MDHLM	015	FWGSCFmw-006-1687-GW	01/19/11	11:20
MDHLN	016	FWGSCFmw-006-1687-GF	01/19/11	11:20
MDHLP	017	FWGSCFmw-003-1684-GW	01/19/11	12:50
MDHLQ	018	FWGSCFmw-003-1684-GF	01/19/11	12:50
MDHLR	019	FWGLL3mw-238C-1650-GW	01/19/11	15:25
MDHLT	020	FWGLL3mw-238C-1650-GF	01/19/11	15:25
MDHLV	021	FWGTEAM3-TRIP	01/19/11	08:00
MDHLW	022	FWGWBGmw-005C-1675-GW	01/19/11	09:05
MDHL0	023	FWGWBGmw-005C-1675-GF	01/19/11	09:05
MDHL1	024	FWGWBGmw-DUP5-1696-GW	01/19/11	10:05
MDHL2	025	FWGWBGmw-DUP5-1696-GF	01/19/11	10:05
MDHL3	026	FWGWBGmw-006C-1676-GW	01/19/11	11:15
MDHL4	027	FWGWBGmw-006C-1676-GF	01/19/11	11:15
MDHL5	028	FWGWBGmw-009C-1678-GW	01/19/11	12:30
MDHL6	029	FWGWBGmw-009C-1678-GF	01/19/11	12:30
MDHL7	030	FWGEQUIPRINSE3-1700-GW	01/19/11	13:30
MDHL8	031	FWGLL3mw-239C-1651-GW	01/19/11	15:00
MDHL9	032	FWGLL3mw-239C-1651-GF	01/19/11	15:00
MDHMA	033	FWGCBPmw-005C-1657-GW	01/19/11	16:10
MDHMC	034	FWGCBPmw-005C-1657-GF	01/19/11	16:10
MDHMD	035	FWGCBPmw-008C-1659-GW	01/19/11	17:05
MDHME	036	FWGCBPmw-008C-1659-GF	01/19/11	17:05

(Continued on next page)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	John Miller	Erik Corbin	Mark Loeb	Team1-1/19/11-1
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone:	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com			
Phone: 513-825-7500	Method of Shipment/Carrier: Lab Courier	TAT if different from below: Rerun		
Project Name: RVAAP (OH)	Shipping/Tracking No: NA	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 030240-0006				
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Analyses: VOC 8260	SVOC 8270	Pest 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012/6010	Metals 6010/7470	Sample Specific Notes / Special Instructions:
FWGLNWmw-025C-1674-GW	1/19/11	0903		X						9	3		27		N	G	X	X	X	X	X	X	X	MS/MSD A94, L743, K999
FWGLNWmw-025C-1674-GF	1/19/11	0903		X					3						Y	G							X	MS/MSD A94, L743, K999
FWGTeam1-Trip	1/19/11	0800		X						2					N	G	X							K999
FWGWBGmw-007C-1677-GW	1/19/11	11:19		X					B	3	1		9		N	G	X	X	X	X	X	X	X	A158
FWGWBGmw-007C-1677-GF	1/19/11	11:19		X					1						Y	G							X	A158
FWGWBGmw-007C-1677-GF	1/19/11	1321		X						3	1		9		N	G	X	X	X	X	X	X	X	L414
FWGFBQmw-174C-1673-GW	1/19/11	1321		X					1						Y	G							X	L414
FWGFBQmw-174C-1673-GF	1/19/11	1504		X						3	1		9		N	G	X	X	X	X	X	X	X	L754
FWGLL4mw-197C-1654-GW	1/19/11	1504		X					1						Y	G							X	L754
FWGLL4mw-197C-1654-GF	1/19/11	1629		X						3	1		9		N	G	X	X	X	X	X	X	X	L802
FWGLL4mw-196C-1653-GW	1/19/11	1629		X																				

EC 1/19/11

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Special Instructions/QC Requirements & Comments: metals are field filtered. Temperature requirements might not be met if sample collection time is close to lab pick-up time.

Relinquished by: Erik Corbin	Company: EQ	Date/Time: 1/19/11 1800	Received by: EC Febo	Company: TAL-NC	Date/Time: 1/19/11 1800
Relinquished by: EC Febo	Company: TAL-NC	Date/Time: 1/19/11 1915	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Greg Burns	Company: TA	Date/Time: 1/20/11 7:00

All VOCs in cooler K999

TAL-0018 (1008)

North Canton

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

Chain of Custody Record

TestAmerica 28
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact			
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Laeb
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone:
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com		
Phone: 513-825-7500	Method of Shipment/Carrier: Lab Courier		
Project Name: RVAAP (OH)	Shipping/Tracking No: NA		
Project Number: 030240.0006			
PO# 16726			

COC No: Team 1-1/19/11-2
2 of 2 COCs

Analysis Turnaround Time: CALENDAR DAYS / WORK DAYS
TAT if different from below LEE SOW
☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Analyses: VOC 8260	SVOC 8270	Pest 8082	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010B/6020A PLEL	Sample Specific Notes / Special Instructions:
FWGLL4-mw-196C-1653-GF	1/19/11	1629		X					1						Y	G					X		L802

EC 1/19/11

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 are field filtered. Temperature requirements might not be met if sample collection time is close to lab pick-up time.

Relinquished by: Erik Corbin	Company: EQ	Date/Time: 1/19/11 1800	Received by: TC Tobin	Company: TAL-NC	Date/Time: 1/19/11 1800
Relinquished by: TC Tobin	Company: TAL-NC	Date/Time: 1/19/11 1915	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Gary Burns	Company: TA	Date/Time: 1/20/11 7:00

TAL-0018 (1008)

All VOCs in cooler K999.

North Canton

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM
Project Manager: JOHN MILLER
Date: 1-19-11
Chain of Custody Number: 000454
Address: 1800 Carillon Blvd
Telephone Number (Area Code)/Fax Number: 513 825 7500 (7495)
Lab Number: 330497 9396
Page 1 of
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 PICK UP
Contract/Purchase Order/Quote No.: M3024.0006.22 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	Geo 8330	Propellants	Cyanide 9012	NO2/NO3 353.2	Metals 6010	Special Instructions/ Conditions of Receipt: Cooler ID#
FWG Team2 Trip	1-19-11	0800		X									X									L573
FWGSCFmw-005-1686-GW		0915		X			9	1		3	1		X	X	X	X	X	X	X	X		L901
FWGSCFmw-005-1686-GF				X					1												X	L901
FWGSCFmw-006-1687-GW		1120		X			9	1		3	1		X	X	X	X	X	X	X	X		A180
FWGSCFmw-006-1687-GF				X					1												X	A180
FWGSCFmw-003-1684-GW		1250		X			27	3		9	3		X	X	X	X	X	X	X	X		MS/MSD L520, A107, L984
FWGSCFmw-003-1684-GF				X					3												X	MS/MSD L520, A107, L984
FWGLL3mw-238C-1650-GW		1525		X									X	X	X	X	X	X	X			L573
FWGLL3mw-238C-1650-GF				X																	X	L573
		EB		1/19/11																		

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 [ ] Other per QAPP/SOW
QC Requirements (Specify): GF Metals were field filtered.

	Date	Time
1. Relinquished By: Gail Corbin EQ	1/19/11	1800
2. Relinquished By:	1/19/11	1915
3. Relinquished By:		

	Date	Time
1. Received By: FC Fedex	1/19/11	1800
2. Received By: Jerry Burns	1/20/11	7:00
3. Received By:		

Comments: ALL VOAs in cooler L573

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

Page 1 of COC 459

30

TAL-4142 (0408)

Client: EQM
Project Manager: John Muller
Date: 1/19/11
Chain of Custody Number: 000461
Address: 1800 Carillon Blvd
Telephone Number (Area Code)/Fax Number: 513 825 7500 (7495 fax)
Lab Number: 330 497 9396
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.: PN 030240.0006 PO # 167726

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

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	TCL+TAL 6010/7470	PCB 8082	Explo 8330	Propellants	Cyanide 9012	NH3 Lachat 10-107-06-1-B	* COOLER ID *
FWGTRWM3-TRIP	1/19/11	0800		X						2			X								L244
FWGWGBMW-005C-1675-GW		0905		X			9			3	1		X	X	X	X	X	X	X		L244
FWGWGBMW-005C-1675-GF		0905		X					1											X	L244
FWGWGBMW-DUP5-1696-GW		1005		X			9			3	1		X	X	X	X	X	X	X		A322
FWGWGBMW-DUP5-1696-GF		1005		X					1											X	A322
FWGWGBMW-006C-1676-GW		1115		X			9			3	1		X	X	X	X	X	X	X	1/25 1/19/11	A229
FWGWGBMW-006C-1676-GF		1115		X					1											X	A229
FWGWGBMW-009C-1678-GW		1220		X			9			3	1		X	X	X	X	X	X	X		L274
FWGWGBMW-009C-1678-GF		1220		X					1											X	L274
FWGEQUIPRINSE3-1700-GW		1330		X			9			3	1		X	X	X	X	X	X	X		L77
FWGEQUIPRINSE3-1700-GF		1330		X					1											X	L77

L Sebastian 1/19/11

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 PER SOW [ ] Other

QC Requirements (Specify)

	Date	Time
1. Relinquished By: Eric Corbin EQ	1/19/11	1800
2. Relinquished By: E Corbin	1/19/11	1915
3. Relinquished By		

	Date	Time
1. Received By: E Corbin	1/19/11	1800
2. Received By: Denny Burns	1/20/11	7:00
3. Received By		

* ALL VOAS IN COOLER L244 *

Comments
Metals are field filtered
* Terms Mod not most reasonable LC Allocation time is close to 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: 1/19/11	Chain of Custody Number: 000459
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513-825-7500	Lab Number: 330-497-9396	Page 2 of 2
City: Cincinnati / State: OH / Zip Code: 45240	Site Contact: Erik Corbin	Lab Contact: M. Loeb	
Project Name and Location (State): RVAAP 030240.0004 PO#16726	Carrier/Waybill Number: Lab Pick up		
Contract/Purchase Order/Quote No.: PN ↗ PO ↗			

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	Explo 8330	Perchlorate 6850	Cyanide 9012	Metals 6010/7470	Special Instructions/ Conditions of Receipt: COOLER ID
FWGLL3MW-239C-11051-GW	1/19/11	1500		X			9			3	1		X	X	X	X	X	X	X	1B 1/19/11	L921
FWGLL3MW-239C-11051-GF		1500		X					1											X	L921
FWGCBPMW-007C-11058-GW		1610		X			9			3	1		X	X	X	X	X	X	X		A648
FWGCBPMW-007C-11058-GF		1610		X					1											X	A648
FWGCBPMW-008C-11059-GW		1705		X									X	X	X	X	X	X	X		L926
FWGCBPMW-008C-11059-GF		1705		X																X	L926

K Tober 1/19/11

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 PER SOW ☐ Other ____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Erik Corbin EQ	1/19/11	1800	1. Received By: K Tober	1/19/11	1800
2. Relinquished By: K Tober	1/19/11	1915	2. Received By: Sherry Burns	1/20/11	7:00
3. Relinquished By			3. Received By		

Comments: Metals field filtered • ALL VOAS IN COOLER L244 •

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

* TDMPS Mail not must TDMPS requirements if Collection time is place in mail in time.

North Canton

31

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 410200401

North Canton Facility

Client EQM Project RVAAP (OH) By: Terry Bruno (Signature)

Cooler Received on 1/20/11 Opened on 1/20/11

FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other ____

TestAmerica Cooler # ____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other ____

Intact? Yes ☒ No ☐ NA ☐

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐
   If YES, Quantity 1 each 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? ____ Yes ☐ No ☒
2. Shippers' packing slip attached to the cooler(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
3. Did custody papers accompany the sample(s)? 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 ☒ + sep sheet
   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:

COC = FWGCBPMW-007C-1658-GW 1/19/11 @ 1610, Labels = FWGCPBMW-005C-1657-GW (all bottles) 1/19/11 @ 1610

COC = FWGCBPMW-007C-1658-GF 1/19/11 @ 1610, Label = FWGCPBMW-005C-1657-GF (metals bottle) 1/19/11 @ 1610

COC = FWGEQUIPRINSE3-1700-GF 1/19/11 @ 1300, Label = FWGEQUIPRINSE3-1700-GW 1/19/11 @ 1300 (metals bottle)

15. SAMPLE CONDITION will log per labels

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
1678-GW	>12	1/20/11	TB
GF	<2		
1651-GW	>12		
GF	<2		
1657-GW	>12		
GF	<2		
1659-GW	>12		
GF	<2		

Rinse3-1700-GW ≥2, ≥12

TestAmerica Multiple Cooler Receipt Form/Narrative — Lot Number: A1A 200401

North Canton Facility

Cooler #	Temp °C	Method	Coolant	Comments
L573	1.3°C	IR	wet ice	
L244	1.8°C			
A322	1.8°C			
A229	2.2°C			
L274	2.7°C			
L77	2.7°C			
L921	1.3°C			
A648	2.4°C			
L926	2.6°C			

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
1674-GW	>12, >12, >12	1/20/11	TB
GF	<2, <2, <2		
1677-GW	>12		
GF	<2		
1673-GW	>12		
GF	<2		
1654-GW	>12		
GF	<2		
1653-GW	>12		
GF	<2		
1686-GW	<2, >12		
GF	<2		
1697-GW	<2, >12		
GF	<2		
1684-GW	<2, <2, <2, >12, >12, >12		
GF	<2, <2, <2		
1650-GW	>12		
GF	<2		
1675-GW	>12		
GF	<2		
1696-GW	>12		
GF	<2		
1676-GW	>12		
GF	<2		

Cooler #	Temp. °C	Method	Coolant
A94	1.2°C	IR	wet ice
L743	1.4°C		
K999	2.8°C		
A158	2.8°C		
L414	1.6°C		
L754	1.9°C		
L802	1.8°C		
L901	1.6°C		
A180	1.3°C		
L520	1.3°C		
L984	1.2°C		
A109	1.1°C		

Discrepancies Cont'd:

ANALYTICAL METHODS SUMMARY

A1A200401

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
Nitrate-Nitrite	MCAWW 353.2
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:

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.

CASE NARRATIVE

A1A200401

The following report contains the analytical results for thirty-three water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 030240.0006. The samples were received January 20, 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 February 09, 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 2.8° C.

See TestAmerica's Cooler Receipt Form for additional information.

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.

The matrix spike/matrix spike duplicate(s) for FWGSCFmw-003-1684-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GC/MS SEMIVOLATILES

The sample(s) that 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 FWGLNWmw-025C-1674-GW and FWGSCFmw-003-1684-GW had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

Sample FWGCBPmw-008C-1659-GF has three (3) acid surrogate recoveries outside acceptance limits. However, since the recovery was greater than 10% and all associated QC met criteria, no corrective action was taken.

CASE NARRATIVE (continued)

PESTICIDES-8081

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The reporting limits are elevated due to matrix interference for samples FWGFBQmw-174C-1673-GW, FWGLL3mw-238C-1650-GW and FWGWBGmw-006C-1676-GW.

The opening CCV failed biased high for samples FWGWBGmw-005C-1675-GW, FWGWBGmw-DUP5-1696-GW, FWGWBGmw-009C-1678-GW, FWGEQUIPRINSE3-1700-GW, FWGLL3mw-239C-1651-GW, FWGCBPmw-005C-1657-GW, and FWGCBPmw-008C-1659-GW. Since the samples were non-detect or J-flag hits no corrective action was necessary.

The closing CCV failed biased high for samples FWGLNWmw-025C-1674-GW, FWGWBGmw-007C-1677-GW, FWGFBQmw-174C-1673-GW, FWGLL4mw-197C-1654-GW, FWGLL4mw-196C-1653-GW, FWGSCFmw-005-1686-GW, FWGSCFmw-006-1687-GW, FWGSCFmw-003-1684-GW, FWGLL3mw-238C-1650-GW, and FWGWBGmw-006C-1676-GW. Since the samples were non-detect or J-flag hits no corrective action was necessary.

The closing MRL passed average but failed Delta-BHC, DDD and Endosulfan Sulfate biased high for sample FWGWBGmw-006C-1676-GW. Since the samples were non-detect or J-flag hits no corrective action was necessary.

The closing MRL passed average but failed Heptachlor Epoxide biased high for samples FWGFBQ-174C-1673-GW and FWGLL3mw-238C-1650-GW. Since the samples were non-detect or J-flag hits no corrective action was necessary.

The opening CCV passed average but failed Alpha-BHC, Beta-BHC, Delta-BHC, Gamma-BHC, Aldrin, Heptachlor Epoxide and Endosulfan I biased high for samples FWGFBQ-174C-1673-GW and FWGLL3mw-238C-1650-GW. Since the samples are non-detect or J-flag hits no corrective action was necessary.

For samples FWGLNWmw-025C-1674-GW, FWGWBGmw-007C-1677-GW, FWGLL4mw-197C-1654-GW, FWGLL4mw-196C-1653-GW, FWGSCFmw-005-1686-GW, FWGWBGmw-005C-1675-GW, FWGWBGmw-DUP5-1696-GW, FWGWBGmw-006C-1676-GW, and FWGCBPmw-005C-1657-GW the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance limits, no corrective action was required. (surrogate was below acceptance but above 10%)

CASE NARRATIVE (continued)

POLYCHLORINATED BIPHENYLS-8082

For FWGLNWmw-025C-1674-GW, FWGLL4mw-197C-1654-GW, FWGLL4mw-196C-1653-GW, FWGLL3mw-238C-1650-GW, FWGWBGmw-005C-1675-GW, FWGWBGmw-006C-1676-GW, FWGCBPmw-005C-1657-GW, FWGSCFmw-005-1686-GW re-extract, the LCS for batch 1020064 and the LCSD for associated batch 1035268 the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance limits, no corrective action was required. (surrogate was below acceptance but above 10%)

The opening CCV failed high for samples FWGLNWmw-025C-1674-GW, FWGWBGmw-007C-1677-GW and FWGFBQmw-174C-1673-GW. Since the samples were non-detect, no corrective action was needed.

Surrogate recovery is out in sample FWGSCFmw-005-1686-GW. Re-extraction and/or reanalysis performed in accordance with exceeded criteria corrective action required by QAPjP. Re-extraction and/or reanalysis resulted in all surrogate recoveries within QC limits, but the re-extraction was performed outside of holding time. Both sets of data are reported.

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 matrix spike/matrix spike duplicate(s) for FWGSCFmw-003-1684-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 matrix spike associated with samples FWGLNWmw-025C-1674-GF and FWGSCFmw-003-1684-GF were outside (high) acceptance limits for Hg. A post digestion spike was not performed. Since the associated samples were below the requested reporting limit the results were accepted.

CASE NARRATIVE (continued)

GENERAL CHEMISTRY

The matrix spike/matrix spike duplicate(s) for FWGLNWmw-025C-1674-GW and FWGSCFmw-003-1684-GW had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

MANUAL INTEGRATION SUMMARY

Manual integrations were performed on samples(s) reported herein. A list of samples and analytes for which manual integration was necessary is provided following this Case Narrative.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

MANUAL INTEGRATION SUMMARY

Lot A1A200401

Client ID: FWGEQUIPRINSE3-1700
Compound Name: TCMX
Instrument ID: a2hp13.i
File Name: 064F5701.D
Inj. Date and Time: 27-JAN-2011 00:40
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 037F3701.D
Inj. Date and Time: 08-FEB-2011 12:10
Manual Integration Reason: Baseline Event

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 038F3801.D
Inj. Date and Time: 08-FEB-2011 12:27
Manual Integration Reason: Analyte not Identified by the Data System

Client ID: FWGFBQmw-174C-1673-
Compound Name: gamma-Chlordane
Instrument ID: a2hp3.i
File Name: 013F1301.D
Inj. Date and Time: 04-FEB-2011 14:32
Manual Integration Reason: Poor Chromatography

Client ID: FWGSCFmw-003-1684-G
Compound Name: alpha-BHC
Instrument ID: a2hp3.i
File Name: 018F1801.D
Inj. Date and Time: 24-JAN-2011 17:36
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: gamma-BHC (Lindane)
Instrument ID: a2hp3.i
File Name: 018F1801.D
Inj. Date and Time: 24-JAN-2011 17:36
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: beta-BHC
Instrument ID: a2hp3.i
File Name: 018F1801.D
Inj. Date and Time: 24-JAN-2011 17:36
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Lot A1A200401 (Continued)

Client ID: FWGSCFmw-003-1684-G
Compound Name: delta-BHC
Instrument ID: a2hp3.i
File Name: 018F1801.D
Inj. Date and Time: 24-JAN-2011 17:36
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: Heptachlor
Instrument ID: a2hp3.i
File Name: 018F1801.D
Inj. Date and Time: 24-JAN-2011 17:36
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: Aldrin
Instrument ID: a2hp3.i
File Name: 018F1801.D
Inj. Date and Time: 24-JAN-2011 17:36
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: 4,4'-DDE
Instrument ID: a2hp3.i
File Name: 018F1801.D
Inj. Date and Time: 24-JAN-2011 17:36
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: Dieldrin
Instrument ID: a2hp3.i
File Name: 018F1801.D
Inj. Date and Time: 24-JAN-2011 17:36
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: alpha-BHC
Instrument ID: a2hp3.i
File Name: 019F1901.D
Inj. Date and Time: 24-JAN-2011 18:06
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: gamma-BHC (Lindane)
Instrument ID: a2hp3.i
File Name: 019F1901.D
Inj. Date and Time: 24-JAN-2011 18:06
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Lot A1A200401 (Continued)

Client ID: FWGSCFmw-003-1684-G
Compound Name: beta-BHC
Instrument ID: a2hp3.i
File Name: 019F1901.D
Inj. Date and Time: 24-JAN-2011 18:06
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: delta-BHC
Instrument ID: a2hp3.i
File Name: 019F1901.D
Inj. Date and Time: 24-JAN-2011 18:06
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: Heptachlor
Instrument ID: a2hp3.i
File Name: 019F1901.D
Inj. Date and Time: 24-JAN-2011 18:06
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: Aldrin
Instrument ID: a2hp3.i
File Name: 019F1901.D
Inj. Date and Time: 24-JAN-2011 18:06
Manual Integration Reason: Baseline Event

Client ID: FWGLNWmw-025C-1674-
Compound Name: beta-BHC
Instrument ID: a2hp3.i
File Name: 009F0901.D
Inj. Date and Time: 24-JAN-2011 13:00
Manual Integration Reason: Baseline Event

Client ID: FWGLNWmw-025C-1674-
Compound Name: delta-BHC
Instrument ID: a2hp3.i
File Name: 009F0901.D
Inj. Date and Time: 24-JAN-2011 13:00
Manual Integration Reason: Baseline Event

Client ID: FWGLNWmw-025C-1674-
Compound Name: Heptachlor
Instrument ID: a2hp3.i
File Name: 009F0901.D
Inj. Date and Time: 24-JAN-2011 13:00
Manual Integration Reason: Baseline Event

MANUAL INTEGRATION SUMMARY

Lot A1A200401 (Continued)

Client ID: FWGLNWmw-025C-1674-
Compound Name: Aldrin
Instrument ID: a2hp3.i
File Name: 009F0901.D
Inj. Date and Time: 24-JAN-2011 13:00
Manual Integration Reason: Baseline Event

Client ID: FWGLNWmw-025C-1674-
Compound Name: beta-BHC
Instrument ID: a2hp3.i
File Name: 010F1001.D
Inj. Date and Time: 24-JAN-2011 13:31
Manual Integration Reason: Poor Chromatography

Client ID: FWGLNWmw-025C-1674-
Compound Name: Aldrin
Instrument ID: a2hp3.i
File Name: 010F1001.D
Inj. Date and Time: 24-JAN-2011 13:31
Manual Integration Reason: Baseline Event

Client ID: FWGWBGmw-006C-1676-
Compound Name: Tetrachloro-m-xylene
Instrument ID: a2hp3.i
File Name: 015F1501.D
Inj. Date and Time: 04-FEB-2011 15:32
Manual Integration Reason: Baseline Event

Client ID: FWGSCFmw-003-1684-G
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: MDHLP1AX.D
Inj. Date and Time: 31-JAN-2011 17:03
Manual Integration Reason: Poor Chromatography

Client ID: INTRA-LAB CHECK
Compound Name: AROCLOR-1260
Instrument ID: a2hp13.i
File Name: 069F6201.D
Inj. Date and Time: 27-JAN-2011 02:03
Manual Integration Reason: Analyte not Identified by the Data System

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 3, 2011

SDG: A1A200401 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 2.8 °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 A3UX10– Jan 20, 2011 Instrument A3UX11– Jan 13, 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?	✓			Instrument A3UX10 Bromoform and methylene chloride used a weighted linear curve. Instrument A3UX11 Acetone and methylene chloride 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?	✓			Instrument A3UX10-12/16/10 Instrument A3UX11-1/24/2011	LCG Table 1 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 3, 2011

SDG: A1A200401 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓				LCG Table 1
16. Were the QC/MRL recoveries 70-130%?		✓		The closing MRL check analyzed 1/21/2011 at 1934 had methylene chloride recover below control limits at 67%. All methylene chloride results except for samples FWGWBGmw-007c-1677-GW, FWGFBQmw-174c-1673-GW, FWGLL4mw-197c-1654-GW and FWGLL4mw-196c-1653-GW were qualified as estimated, "UJ".	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed? Were results 80-120%?	✓			1/20/2011 @1209, 1/13/2011 @1314	LCG Table 1, <60%=J/R >120%=J; 60-80%=J/UJ
18. Was a CCV run every 12 hours?	✓			A3aux10-Samples were analyzed on the same day as the curve A3aux11-1/21/11 @1008	LCG Table 1
19. Did the CCCs have a %Difference < 20%?	✓				LCG Table 1
20. Were the minimum RFs for the SPCCs within limits?	✓				LCG Table 1
21. Was the average of all target analytes ≤ 20%D with a maximum D for each target analyte ≤30%?	✓				LCG Table 1 Avg D>20% and D>30% =R; Avg %D<20% and D>30% =J D>20% (neg) = J/R D>30% (pos) = J
22. Were the internal standards added to every sample?	✓				LCG Table 1
23. Were the retention times for all IS compounds within ±30 seconds from the RT of the mid-point standard in the ICAL?	✓				LCG Table 1 R
24. Was the EICP area between -50% and +100% of the ICAL mid-point standard?	✓				LCG Table 1 R
25. Was a method blank prepared and analyzed with each batch?	✓				LCG Table 1
26. Were target analytes detected in the method blank >1/2 the MRL?		✓		Checked by ADR.	LCG Table 1 <5/10X =B

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 3, 2011

SDG: A1A200401 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse3-1700-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGTEAM1-Trip had acetone detected at 13ug/L, 2-butanone at 0.59ug/L and 4-methyl-2-pentanone at 0.32ug/L. • FWGTEAM3-Trip had acetone detected at 12ug/L, 2-butanone at 0.59ug/L and 4-methyl-2-pentanone at 0.34ug/L. • FWGTEAM2-Trip had acetone detected at 13ug/L and 2-butanone at 0.62ug/L. • 2-butanone was detected in FWGEQUIPRinse3-1700-GW at 3.3ug/L, acetone at 8.1ug/L and chloroform at 0.61ug/L. The acetone results for samples FWGFBQmw-174c-1673-GW and FWGEQUIPRinse3-1700-GW, the 2-butanone result for FWGEQUIPRinse3-1700-GW and the chloroform result for FWGLL3mw-239c-1651-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;	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%?		✓		Only the matrix spike with the parent from this SDG was evaluated. The matrix spike and duplicate analyzed on sampleFWGSCFmw-003-1684-GW recovered below control limits for bromomethane at 62% and 59%, respectively. No qualification was made as there were no other bromomethane QC outliers.	LCG Table 1 Pj

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 3, 2011

SDG: A1A200401 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% - 50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLNWmw-025C-1674-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-001 Work Order #...: MDHK51AA Matrix.....: WG
Date Sampled...: 01/19/11 09:03 Date Received..: 01/20/11
Prep Date.....: 01/21/11 Analysis Date..: 01/21/11
Prep Batch #...: 1021112
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: FWGLNWmw-025C-1674-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-001 **Work Order #...:** MDHK51AA **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	78	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A200401-003 **Work Order #...:** MDHK81AA **Matrix.....:** WQ
Date Sampled...: 01/19/11 08:00 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1021112
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	**13**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**0.59 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	**0.32 J**	**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 #...: A1A200401-003 **Work Order #...:** MDHK81AA **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	78	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-007C-1677-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-004 **Work Order #...:** MDHK91AA **Matrix.....:** WG
Date Sampled...: 01/19/11 11:19 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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: FWGWBGmw-007C-1677-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-004 **Work Order #...:** MDHK91AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	88	(50 - 150)
4-Bromofluorobenzene	90	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-006 **Work Order #...:** MDHLC1AA **Matrix.....:** WG
Date Sampled...: 01/19/11 13:21 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromochloromethane	ND	1.0	ug/L	0.29
1,2-Dibromoethane	ND	1.0	ug/L	0.24
o-Xylene	ND	1.0	ug/L	0.14
m-Xylene & p-Xylene	ND	2.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
Chloromethane	ND	1.0	ug/L	0.30
Bromomethane	ND	1.0	ug/L	0.41
Vinyl chloride	ND	1.0	ug/L	0.22
Chloroethane	ND	1.0	ug/L	0.29
Methylene chloride	ND	2.0	ug/L	0.33
Acetone	**3.1 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	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: FWGFBQmw-174C-1673-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-006 **Work Order #...:** MDHLC1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	95	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1654-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-008 **Work Order #...:** MDHLE1AA **Matrix.....:** WG
Date Sampled...: 01/19/11 15:04 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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-197C-1654-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-008 **Work Order #...:** MDHLE1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	93	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-010 **Work Order #...:** MDHLG1AA **Matrix.....:** WG
Date Sampled...: 01/19/11 16:29 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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-196C-1653-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-010 **Work Order #...:** MDHLG1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(50 - 150)
1,2-Dichloroethane-d4	93	(50 - 150)
Toluene-d8	86	(50 - 150)
4-Bromofluorobenzene	88	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A200401-012 **Work Order #...:** MDHLJ1AA **Matrix.....:** WQ
Date Sampled...: 01/19/11 08:00 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/20/11
Prep Batch #...: 1020164
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	13	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	0.62 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A200401-012 **Work Order #...:** MDHLJ1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Styrene	ND	1.0	ug/L	0.11
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(50 - 150)
1,2-Dichloroethane-d4	96	(50 - 150)
Toluene-d8	94	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1686-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-013 **Work Order #...:** MDHLK1AA **Matrix.....:** WG
Date Sampled...: 01/19/11 09:15 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1021112
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: FWGSCFmw-005-1686-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-013 **Work Order #...:** MDHLK1AA **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	78	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1687-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-015 **Work Order #...:** MDHLM1AA **Matrix.....:** WG
Date Sampled...: 01/19/11 11:20 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1021112
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: FWGSCEmw-006-1687-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-015 **Work Order #...:** MDHLM1AA **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	78	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1684-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-017 **Work Order #...:** MDHLP1AA **Matrix.....:** WG
Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1021112
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: FWGSCFmw-003-1684-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-017 **Work Order #...:** MDHLP1AA **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	78	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	81	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-019 **Work Order #...:** MDHLR1AA **Matrix.....:** WG
Date Sampled...: 01/19/11 15:25 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1021112
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: FWGLL3mw-238C-1650-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-019 **Work Order #...:** MDHLR1AA **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	79	(50 - 150)
Toluene-d8	86	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A200401-021 **Work Order #...:** MDHLV1AA **Matrix.....:** WQ
Date Sampled...: 01/19/11 08:00 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1021112
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	**12**	**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	**0.59 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	**0.34 J**	**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: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A200401-021 **Work Order #...:** MDHLV1AA **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	77	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-005C-1675-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-022	**Work Order #...:** MDHLW1AA	**Matrix.....:** WG	
Date Sampled...: 01/19/11 09:05	**Date Received..:** 01/20/11		
Prep Date.....: 01/21/11	**Analysis Date..:** 01/21/11		
Prep Batch #...: 1021112			
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: FWGWBGmw-005C-1675-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-022 Work Order #...: MDHLW1AA 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	79	(50 - 150)
Toluene-d8	86	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-DUP5-1696-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-024 **Work Order #...:** MDHL11AA **Matrix.....:** WG
Date Sampled...: 01/19/11 10:05 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1021112
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: FWGWBGmw-DUP5-1696-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-024 **Work Order #...:** MDHL11AA **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	78	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-026 **Work Order #...:** MDHL31AA **Matrix.....:** WG
Date Sampled...: 01/19/11 11:15 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1021112
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: FWGWBGmw-006C-1676-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-026 **Work Order #...:** MDHL31AA **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	77	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-009C-1678-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-028	**Work Order #...:** MDHL51AA	**Matrix.....:** WG	
Date Sampled...: 01/19/11 12:30	**Date Received..:** 01/20/11		
Prep Date.....: 01/21/11	**Analysis Date..:** 01/21/11		
Prep Batch #...: 1021112			
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: FWGWBGmw-009C-1678-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-028 **Work Order #...:** MDHL51AA **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	78	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	86	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-030	**Work Order #...:** MDHL71AA	**Matrix.....:** WQ	
Date Sampled...: 01/19/11 13:30	**Date Received..:** 01/20/11		
Prep Date.....: 01/21/11	**Analysis Date..:** 01/21/11		
Prep Batch #...: 1021112			
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	**8.1 J**	**10**	**ug/L**	**1.1**
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	**0.61 J**	**1.0**	**ug/L**	**0.16**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	**3.3 J**	**10**	**ug/L**	**0.57**
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-030 **Work Order #...:** MDHL71AA **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	79	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-031 **Work Order #...:** MDHL81AA **Matrix.....:** WG
Date Sampled...: 01/19/11 15:00 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1021112
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	**0.41 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	**0.27 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-031 **Work Order #...:** MDHL81AA **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	76	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-005C-1657-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-033 **Work Order #...:** MDHMA1AA **Matrix.....:** WG
Date Sampled...: 01/19/11 16:10 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1021112
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: FWGCBPmw-005C-1657-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-033 **Work Order #...:** MDHMA1AA **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	78	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-008C-1659-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-035 **Work Order #...:** MDHMD1AA **Matrix.....:** WG
Date Sampled...: 01/19/11 17:05 **Date Received..:** 01/20/11
Prep Date.....: 01/21/11 **Analysis Date..:** 01/21/11
Prep Batch #...: 1021112
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: FWGCBPmw-008C-1659-GW

GC/MS Volatiles

Lot-Sample #...: A1A200401-035 **Work Order #...:** MDHMD1AA **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	77	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 **Work Order #...:** MDH351AA **Matrix.....:** WATER
MB Lot-Sample #: A1A200000-164

Prep Date.....: 01/20/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/20/11 **Prep Batch #...:** 1020164
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 **Work Order #...:** MDH351AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(50 - 150)
1,2-Dichloroethane-d4	92	(50 - 150)
Toluene-d8	95	(50 - 150)
4-Bromofluorobenzene	91	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 **Work Order #...:** MDJ7T1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A210000-112

Prep Date.....: 01/21/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/21/11 **Prep Batch #...:** 1021112
Dilution Factor: 1 **Initial Wgt/Vol:** 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 **Work Order #...:** MDJ7T1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	84	(50 - 150)
1,2-Dichloroethane-d4	78	(50 - 150)
Toluene-d8	85	(50 - 150)
4-Bromofluorobenzene	85	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 Work Order #...: MDH351AC Matrix.....: WATER
LCS Lot-Sample#: A1A200000-164
Prep Date.....: 01/20/11 Analysis Date..: 01/20/11
Prep Batch #...: 1020164
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
cis-1,2-Dichloroethene	102	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	106	(75 - 134)	SW846 8260B
1,2-Dibromoethane	104	(75 - 127)	SW846 8260B
Bromochloromethane	103	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	105	(75 - 122)	SW846 8260B
o-Xylene	106	(75 - 118)	SW846 8260B
Chloromethane	93	(58 - 135)	SW846 8260B
Bromomethane	91	(35 - 153)	SW846 8260B
Vinyl chloride	98	(73 - 134)	SW846 8260B
Chloroethane	98	(72 - 129)	SW846 8260B
Methylene chloride	103	(69 - 118)	SW846 8260B
Acetone	90	(51 - 157)	SW846 8260B
Carbon disulfide	106	(74 - 123)	SW846 8260B
1,1-Dichloroethene	108	(75 - 125)	SW846 8260B
1,1-Dichloroethane	103	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	104	(85 - 111)	SW846 8260B
Chloroform	102	(74 - 127)	SW846 8260B
1,2-Dichloroethane	102	(67 - 132)	SW846 8260B
2-Butanone	102	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	101	(70 - 127)	SW846 8260B
Carbon tetrachloride	100	(71 - 132)	SW846 8260B
Bromodichloromethane	100	(70 - 130)	SW846 8260B
1,2-Dichloropropane	102	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	97	(73 - 132)	SW846 8260B
Trichloroethene	103	(67 - 128)	SW846 8260B
Dibromochloromethane	99	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	106	(75 - 136)	SW846 8260B
Benzene	101	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	106	(74 - 131)	SW846 8260B
Bromoform	82	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	104	(59 - 150)	SW846 8260B
2-Hexanone	106	(53 - 139)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 **Work Order #...:** MDH351AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A200000-164

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	106	(75 - 129)	**SW846 8260B**
1,1,2,2-Tetrachloroethane	105	(68 - 129)	**SW846 8260B**
Toluene	106	(75 - 125)	**SW846 8260B**
Chlorobenzene	100	(75 - 127)	**SW846 8260B**
Ethylbenzene	105	(75 - 120)	**SW846 8260B**
Styrene	104	(75 - 130)	**SW846 8260B**
Xylenes (total)	105	(90 - 114)	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
Toluene-d8	100	(50 - 150)
4-Bromofluorobenzene	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 EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 Work Order #...: MDJ7T1AC Matrix.....: WATER
LCS Lot-Sample#: A1A210000-112
Prep Date.....: 01/21/11 Analysis Date..: 01/21/11
Prep Batch #...: 1021112
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
cis-1,2-Dichloroethene	97	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	94	(75 - 134)	SW846 8260B
1,2-Dibromoethane	93	(75 - 127)	SW846 8260B
Bromochloromethane	101	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	90	(75 - 122)	SW846 8260B
o-Xylene	93	(75 - 118)	SW846 8260B
Chloromethane	79	(58 - 135)	SW846 8260B
Bromomethane	72	(35 - 153)	SW846 8260B
Vinyl chloride	92	(73 - 134)	SW846 8260B
Chloroethane	80	(72 - 129)	SW846 8260B
Methylene chloride	89	(69 - 118)	SW846 8260B
Acetone	91	(51 - 157)	SW846 8260B
Carbon disulfide	99	(74 - 123)	SW846 8260B
1,1-Dichloroethene	94	(75 - 125)	SW846 8260B
1,1-Dichloroethane	95	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	96	(85 - 111)	SW846 8260B
Chloroform	98	(74 - 127)	SW846 8260B
1,2-Dichloroethane	94	(67 - 132)	SW846 8260B
2-Butanone	92	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	94	(70 - 127)	SW846 8260B
Carbon tetrachloride	97	(71 - 132)	SW846 8260B
Bromodichloromethane	98	(70 - 130)	SW846 8260B
1,2-Dichloropropane	95	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	93	(73 - 132)	SW846 8260B
Trichloroethene	99	(67 - 128)	SW846 8260B
Dibromochloromethane	97	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	92	(75 - 136)	SW846 8260B
Benzene	96	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	93	(74 - 131)	SW846 8260B
Bromoform	105	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	98	(59 - 150)	SW846 8260B
2-Hexanone	92	(53 - 139)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 **Work Order #...:** MDJ7T1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A210000-112

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	91	(75 - 129)	**SW846 8260B**
1,1,2,2-Tetrachloroethane	86	(68 - 129)	**SW846 8260B**
Toluene	91	(75 - 125)	**SW846 8260B**
Chlorobenzene	93	(75 - 127)	**SW846 8260B**
Ethylbenzene	95	(75 - 120)	**SW846 8260B**
Styrene	94	(75 - 130)	**SW846 8260B**
Xylenes (total)	91	(90 - 114)	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	89	(50 - 150)
1,2-Dichloroethane-d4	84	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	88	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 Work Order #...: MDF311AC-MS Matrix.....: WATER
MS Lot-Sample #: A1A190402-033 MDF311AD-MSD
Date Sampled...: 01/18/11 12:05 Date Received..: 01/19/11
Prep Date.....: 01/20/11 Analysis Date..: 01/20/11
Prep Batch #...: 1020164
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
	98	(70 - 130)	1.4	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	103	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.95	(0-30)	SW846 8260B
1,2-Dibromoethane	94	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.8	(0-30)	SW846 8260B
Bromochloromethane	100	(70 - 130)			SW846 8260B
	99	(70 - 130)	1.2	(0-30)	SW846 8260B
m-Xylene & p-Xylene	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.1	(0-30)	SW846 8260B
o-Xylene	102	(70 - 130)			SW846 8260B
	98	(70 - 130)	4.2	(0-30)	SW846 8260B
Chloromethane	90	(70 - 130)			SW846 8260B
	84	(70 - 130)	7.1	(0-30)	SW846 8260B
Bromomethane	92	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.4	(0-30)	SW846 8260B
Vinyl chloride	100	(70 - 130)			SW846 8260B
	95	(70 - 130)	4.6	(0-30)	SW846 8260B
Chloroethane	100	(70 - 130)			SW846 8260B
	94	(70 - 130)	6.1	(0-30)	SW846 8260B
Methylene chloride	92	(70 - 130)			SW846 8260B
	89	(70 - 130)	3.0	(0-30)	SW846 8260B
Acetone	92	(70 - 130)			SW846 8260B
	97	(70 - 130)	4.6	(0-30)	SW846 8260B
Carbon disulfide	109	(70 - 130)			SW846 8260B
	103	(70 - 130)	6.4	(0-30)	SW846 8260B
1,1-Dichloroethene	107	(70 - 130)			SW846 8260B
	108	(70 - 130)	0.13	(0-30)	SW846 8260B
1,1-Dichloroethane	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.3	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	101	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.2	(0-30)	SW846 8260B
Chloroform	99	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.2	(0-30)	SW846 8260B
1,2-Dichloroethane	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.5	(0-30)	SW846 8260B
2-Butanone	94	(70 - 130)			SW846 8260B
	100	(70 - 130)	6.1	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 Work Order #...: MDF311AC-MS Matrix.....: WATER
MS Lot-Sample #: A1A190402-033 MDF311AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	100	(70 - 130)			SW846 8260B
	95	(70 - 130)	5.2	(0-30)	SW846 8260B
Carbon tetrachloride	97	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.7	(0-30)	SW846 8260B
Bromodichloromethane	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.0	(0-30)	SW846 8260B
1,2-Dichloropropane	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.1	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	83	(70 - 130)			SW846 8260B
	88	(70 - 130)	5.6	(0-30)	SW846 8260B
Trichloroethene	99	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.4	(0-30)	SW846 8260B
Dibromochloromethane	92	(70 - 130)			SW846 8260B
	90	(70 - 130)	1.6	(0-30)	SW846 8260B
1,1,2-Trichloroethane	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.56	(0-30)	SW846 8260B
Benzene	97	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.93	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	90	(70 - 130)			SW846 8260B
	93	(70 - 130)	3.3	(0-30)	SW846 8260B
Bromoform	73	(70 - 130)			SW846 8260B
	76	(70 - 130)	3.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	92	(70 - 130)			SW846 8260B
	106	(70 - 130)	14	(0-30)	SW846 8260B
2-Hexanone	92	(70 - 130)			SW846 8260B
	113	(70 - 130)	21	(0-30)	SW846 8260B
Tetrachloroethene	102	(70 - 130)			SW846 8260B
	97	(70 - 130)	5.8	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	96	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.23	(0-30)	SW846 8260B
Toluene	101	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.6	(0-30)	SW846 8260B
Chlorobenzene	98	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.8	(0-30)	SW846 8260B
Ethylbenzene	101	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.4	(0-30)	SW846 8260B
Styrene	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.14	(0-30)	SW846 8260B
Xylenes (total)	102	(70 - 130)			SW846 8260B
	98	(70 - 130)	3.5	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 **Work Order #...:** MDF311AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A1A190402-033 MDF311AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(50 - 150)
	94	(50 - 150)
1,2-Dichloroethane-d4	91	(50 - 150)
	90	(50 - 150)
Toluene-d8	98	(50 - 150)
	95	(50 - 150)
4-Bromofluorobenzene	102	(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

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 Work Order #...: MDHK51AG-MS Matrix.....: WG
MS Lot-Sample #: A1A200401-001 MDHK51AH-MSD
Date Sampled...: 01/19/11 09:03 Date Received..: 01/20/11
Prep Date.....: 01/21/11 Analysis Date..: 01/21/11
Prep Batch #...: 1021112
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
	97	(70 - 130)	1.1	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	89	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.5	(0-30)	SW846 8260B
1,2-Dibromoethane	88	(70 - 130)			SW846 8260B
	96	(70 - 130)	8.0	(0-30)	SW846 8260B
Bromochloromethane	97	(70 - 130)			SW846 8260B
	100	(70 - 130)	3.9	(0-30)	SW846 8260B
m-Xylene & p-Xylene	88	(70 - 130)			SW846 8260B
	93	(70 - 130)	5.4	(0-30)	SW846 8260B
o-Xylene	92	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.4	(0-30)	SW846 8260B
Chloromethane	76	(70 - 130)			SW846 8260B
	76	(70 - 130)	0.22	(0-30)	SW846 8260B
Bromomethane	72	(70 - 130)			SW846 8260B
	71	(70 - 130)	2.5	(0-30)	SW846 8260B
Vinyl chloride	84	(70 - 130)			SW846 8260B
	91	(70 - 130)	8.4	(0-30)	SW846 8260B
Chloroethane	79	(70 - 130)			SW846 8260B
	78	(70 - 130)	0.76	(0-30)	SW846 8260B
Methylene chloride	81	(70 - 130)			SW846 8260B
	86	(70 - 130)	6.4	(0-30)	SW846 8260B
Acetone	77	(70 - 130)			SW846 8260B
	85	(70 - 130)	10	(0-30)	SW846 8260B
Carbon disulfide	87	(70 - 130)			SW846 8260B
	97	(70 - 130)	11	(0-30)	SW846 8260B
1,1-Dichloroethene	87	(70 - 130)			SW846 8260B
	91	(70 - 130)	4.9	(0-30)	SW846 8260B
1,1-Dichloroethane	90	(70 - 130)			SW846 8260B
	95	(70 - 130)	4.7	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	92	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.7	(0-30)	SW846 8260B
Chloroform	94	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.6	(0-30)	SW846 8260B
1,2-Dichloroethane	91	(70 - 130)			SW846 8260B
	97	(70 - 130)	6.2	(0-30)	SW846 8260B
2-Butanone	81	(70 - 130)			SW846 8260B
	91	(70 - 130)	12	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 Work Order #...: MDHK51AG-MS Matrix.....: WG
MS Lot-Sample #: A1A200401-001 MDHK51AH-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	86	(70 - 130)			SW846 8260B
	92	(70 - 130)	6.9	(0-30)	SW846 8260B
Carbon tetrachloride	87	(70 - 130)			SW846 8260B
	94	(70 - 130)	8.5	(0-30)	SW846 8260B
Bromodichloromethane	97	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.2	(0-30)	SW846 8260B
1,2-Dichloropropane	95	(70 - 130)			SW846 8260B
	99	(70 - 130)	4.0	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	91	(70 - 130)			SW846 8260B
	93	(70 - 130)	2.5	(0-30)	SW846 8260B
Trichloroethene	94	(70 - 130)			SW846 8260B
	99	(70 - 130)	5.9	(0-30)	SW846 8260B
Dibromochloromethane	94	(70 - 130)			SW846 8260B
	100	(70 - 130)	6.0	(0-30)	SW846 8260B
1,1,2-Trichloroethane	91	(70 - 130)			SW846 8260B
	94	(70 - 130)	3.2	(0-30)	SW846 8260B
Benzene	91	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.2	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	89	(70 - 130)			SW846 8260B
	97	(70 - 130)	8.3	(0-30)	SW846 8260B
Bromoform	95	(70 - 130)			SW846 8260B
	103	(70 - 130)	8.2	(0-30)	SW846 8260B
4-Methyl-2-pentanone	86	(70 - 130)			SW846 8260B
	95	(70 - 130)	10	(0-30)	SW846 8260B
2-Hexanone	80	(70 - 130)			SW846 8260B
	90	(70 - 130)	12	(0-30)	SW846 8260B
Tetrachloroethene	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.0	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	79	(70 - 130)			SW846 8260B
	84	(70 - 130)	5.2	(0-30)	SW846 8260B
Toluene	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.8	(0-30)	SW846 8260B
Chlorobenzene	91	(70 - 130)			SW846 8260B
	96	(70 - 130)	5.1	(0-30)	SW846 8260B
Ethylbenzene	92	(70 - 130)			SW846 8260B
	97	(70 - 130)	4.8	(0-30)	SW846 8260B
Styrene	92	(70 - 130)			SW846 8260B
	98	(70 - 130)	6.7	(0-30)	SW846 8260B
Xylenes (total)	90	(70 - 130)			SW846 8260B
	94	(70 - 130)	5.1	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHK51AG-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200401-001 MDHK51AH-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	88	(50 - 150)
	87	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
	82	(50 - 150)
Toluene-d8	83	(50 - 150)
	83	(50 - 150)
4-Bromofluorobenzene	88	(50 - 150)
	87	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 Work Order #...: MDHLP1AC-MS Matrix.....: WG
MS Lot-Sample #: A1A200401-017 MDHLP1AD-MSD
Date Sampled...: 01/19/11 12:50 Date Received..: 01/20/11
Prep Date.....: 01/21/11 Analysis Date..: 01/21/11
Prep Batch #...: 1021112
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	92	(70 - 130)			SW846 8260B
	92	(70 - 130)	0.27	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	89	(70 - 130)			SW846 8260B
	89	(70 - 130)	0.60	(0-30)	SW846 8260B
1,2-Dibromoethane	88	(70 - 130)			SW846 8260B
	91	(70 - 130)	3.2	(0-30)	SW846 8260B
Bromochloromethane	94	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.52	(0-30)	SW846 8260B
m-Xylene & p-Xylene	88	(70 - 130)			SW846 8260B
	90	(70 - 130)	1.9	(0-30)	SW846 8260B
o-Xylene	89	(70 - 130)			SW846 8260B
	93	(70 - 130)	3.6	(0-30)	SW846 8260B
Chloromethane	72	(70 - 130)			SW846 8260B
	70	(70 - 130)	3.1	(0-30)	SW846 8260B
Bromomethane	62 a	(70 - 130)			SW846 8260B
	59 a	(70 - 130)	4.0	(0-30)	SW846 8260B
Vinyl chloride	87	(70 - 130)			SW846 8260B
	90	(70 - 130)	3.0	(0-30)	SW846 8260B
Chloroethane	77	(70 - 130)			SW846 8260B
	73	(70 - 130)	4.2	(0-30)	SW846 8260B
Methylene chloride	76	(70 - 130)			SW846 8260B
	82	(70 - 130)	8.4	(0-30)	SW846 8260B
Acetone	74	(70 - 130)			SW846 8260B
	83	(70 - 130)	12	(0-30)	SW846 8260B
Carbon disulfide	87	(70 - 130)			SW846 8260B
	100	(70 - 130)	15	(0-30)	SW846 8260B
1,1-Dichloroethene	85	(70 - 130)			SW846 8260B
	92	(70 - 130)	7.6	(0-30)	SW846 8260B
1,1-Dichloroethane	91	(70 - 130)			SW846 8260B
	91	(70 - 130)	0.47	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	91	(70 - 130)			SW846 8260B
	90	(70 - 130)	0.16	(0-30)	SW846 8260B
Chloroform	91	(70 - 130)			SW846 8260B
	93	(70 - 130)	1.7	(0-30)	SW846 8260B
1,2-Dichloroethane	90	(70 - 130)			SW846 8260B
	92	(70 - 130)	2.2	(0-30)	SW846 8260B
2-Butanone	84	(70 - 130)			SW846 8260B
	95	(70 - 130)	13	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 Work Order #...: MDHLP1AC-MS Matrix.....: WG
MS Lot-Sample #: A1A200401-017 MDHLP1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	87	(70 - 130)			SW846 8260B
	90	(70 - 130)	4.2	(0-30)	SW846 8260B
Carbon tetrachloride	91	(70 - 130)			SW846 8260B
	94	(70 - 130)	3.8	(0-30)	SW846 8260B
Bromodichloromethane	89	(70 - 130)			SW846 8260B
	94	(70 - 130)	5.4	(0-30)	SW846 8260B
1,2-Dichloropropane	93	(70 - 130)			SW846 8260B
	92	(70 - 130)	1.0	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	87	(70 - 130)			SW846 8260B
	87	(70 - 130)	0.13	(0-30)	SW846 8260B
Trichloroethene	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.47	(0-30)	SW846 8260B
Dibromochloromethane	89	(70 - 130)			SW846 8260B
	94	(70 - 130)	5.4	(0-30)	SW846 8260B
1,1,2-Trichloroethane	88	(70 - 130)			SW846 8260B
	91	(70 - 130)	4.4	(0-30)	SW846 8260B
Benzene	90	(70 - 130)			SW846 8260B
	91	(70 - 130)	0.86	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	88	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.3	(0-30)	SW846 8260B
Bromoform	92	(70 - 130)			SW846 8260B
	99	(70 - 130)	7.2	(0-30)	SW846 8260B
4-Methyl-2-pentanone	87	(70 - 130)			SW846 8260B
	95	(70 - 130)	9.1	(0-30)	SW846 8260B
2-Hexanone	80	(70 - 130)			SW846 8260B
	94	(70 - 130)	17	(0-30)	SW846 8260B
Tetrachloroethene	89	(70 - 130)			SW846 8260B
	95	(70 - 130)	6.7	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	79	(70 - 130)			SW846 8260B
	84	(70 - 130)	6.6	(0-30)	SW846 8260B
Toluene	87	(70 - 130)			SW846 8260B
	89	(70 - 130)	2.2	(0-30)	SW846 8260B
Chlorobenzene	89	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.0	(0-30)	SW846 8260B
Ethylbenzene	90	(70 - 130)			SW846 8260B
	91	(70 - 130)	1.6	(0-30)	SW846 8260B
Styrene	91	(70 - 130)			SW846 8260B
	92	(70 - 130)	1.5	(0-30)	SW846 8260B
Xylenes (total)	89	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.5	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHLP1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200401-017 MDHLP1AD-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	87	(50 - 150)
	90	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
	85	(50 - 150)
Toluene-d8	84	(50 - 150)
	85	(50 - 150)
4-Bromofluorobenzene	88	(50 - 150)
	89	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10121A.b\UXJ5128.D
Report Date: 24-Jan-2011 09:11

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10121A.b\8260LLUX11.m
Misc Info: J10121A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	0.8031	80.31	70-130
	42	Trichloroethene	1.000	0.9630	96.31	70-130
	59	Chlorobenzene	1.000	1.034	103.46	70-130
	50	Toluene	1.000	0.9345	93.45	70-130
	41	Benzene	1.000	1.043	104.28	70-130
	16	Acetone	2.000	1.948	97.42	70-130
	20	Carbon Disulfide	1.000	0.8134	81.34	70-130
	9	Chloromethane	1.000	0.9266	92.66	70-130
	11	Bromomethane	1.000	0.8616	86.16	70-130
	10	Vinyl Chloride	1.000	1.090	109.04	70-130
	12	Chloroethane	1.000	0.8498	84.98	70-130
	21	Methylene Chloride	1.000	0.6730	67.31*	70-130
	28	1,1-Dichloroethane	1.000	0.9563	95.63	70-130
M	31	1,2-Dichloroethene	2.000	1.942	97.08	70-130
	35	Chloroform	1.000	0.9742	97.42	70-130
	40	1,2-Dichloroethane	1.000	1.023	102.27	70-130
	30	2-Butanone	2.000	2.031	101.57	70-130
	37	1,1,1-Trichloroeth	1.000	0.8944	89.44	70-130
	39	Carbon Tetrachlori	1.000	0.8096	80.96	70-130
	46	Bromodichlorometha	1.000	0.8986	89.86	70-130
	43	1,2-Dichloropropan	1.000	0.9790	97.90	70-130
	48	cis-1,3-Dichloropr	1.000	0.8064	80.65	70-130
	54	1,3-Dichloropropan	1.000	1.010	101.03	70-130
	57	Dibromochlorometha	1.000	0.8791	87.91	70-130
	53	1,1,2-Trichloroeth	1.000	1.077	107.72	70-130
	51	trans-1,3-Dichloro	1.000	0.7966	79.66	70-130
	49	4-Methyl-2-pentano	2.000	1.760	88.02	70-130
	56	2-Hexanone	2.000	1.740	86.99	70-130
	55	Tetrachloroethene	1.000	0.8500	85.00	70-130
	68	1,1,2,2-Tetrachlor	1.000	0.8983	89.83	70-130
	66	Bromoform	1.000	0.7453	74.53	70-130
	61	Ethylbenzene	1.000	0.9653	96.53	70-130
	65	Styrene	1.000	0.8662	86.62	70-130
M	63	Xylenes (total)	3.000	2.631	87.70	70-130
	32	cis-1,2-dichloroet	1.000	0.9892	98.92	70-130
	25	trans-1,2-Dichloro	1.000	0.9524	95.24	70-130
	8	Dichlorodifluorome	1.000	1.051	105.13	70-130
	13	Trichlorofluoromet	1.000	0.8119	81.19	70-130

70	1,2,3-Trichloropro	1.000	0.9366	93.66	70-130
18	Freon-113	1.000	0.7362	73.62	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10121A.b\UXJ5128.D
Report Date: 24-Jan-2011 09:11

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.8875	88.75	70-130
58 1,2-Dibromoethane	1.000	0.9574	95.74	70-130
67 Isopropylbenzene	1.000	0.7937	79.37	70-130
80 1,3-Dichlorobenzen	1.000	0.8861	88.61	70-130
81 1,4-Dichlorobenzen	1.000	0.9640	96.40	70-130
83 1,2-Dichlorobenzen	1.000	1.061	106.11	70-130
84 1,2-Dibromo-3-chlo	1.000	0.6073	60.73*	70-130
85 1,2,4-Trichloroben	1.000	0.6616	66.16*	70-130
98 Cyclohexane	1.000	0.7371	73.71	70-130
143 Methyl Acetate	2.000	1.969	98.47	70-130
144 Methylcyclohexane	1.000	0.6730	67.30*	70-130
71 Bromobenzene	1.000	0.7936	79.37	70-130
34 Bromochloromethane	1.000	1.028	102.80	70-130
82 n-Butylbenzene	1.000	0.7163	71.63	70-130
78 sec-Butylbenzene	1.000	0.6898	68.99*	70-130
76 tert-Butylbenzene	1.000	0.7405	74.05	70-130
73 2-Chlorotoluene	1.000	0.8026	80.26	70-130
75 4-Chlorotoluene	1.000	0.8348	83.48	70-130
45 Dibromomethane	1.000	1.049	104.95	70-130
33 2,2-Dichloropropan	1.000	0.7713	77.13	70-130
38 1,1-Dichloropropen	1.000	0.9151	91.51	70-130
86 Hexachlorobutadien	1.000	0.5671	56.71*	70-130
19 Iodomethane	1.000	0.9671	96.71	70-130
79 4-Isopropyltoluene	1.000	0.7277	72.77	70-130
87 Naphthalene	1.000	0.6287	62.87*	70-130
72 n-Propylbenzene	1.000	0.6925	69.25*	70-130
60 1,1,1,2-Tetrachlor	1.000	0.8825	88.25	70-130
88 1,2,3-Trichloroben	1.000	0.6023	60.23*	70-130
77 1,2,4-Trimethylben	1.000	0.7632	76.32	70-130
74 1,3,5-Trimethylben	1.000	0.7647	76.47	70-130
150 Vinyl Acetate-86	1.000	0.6226	62.26*	70-130
62 m + p-Xylene	2.000	1.710	85.50	70-130
64 Xylene-o	1.000	0.9208	92.08	70-130
49 4-Methyl-2-pentano	2.000	1.760	88.02	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	8.640	86.40	75-121
$ 5 1,2-Dichloroethane	10.000	7.873	78.73	63-129
$ 6 Toluene-d8	10.000	8.429	84.29	74-115
$ 7 Bromofluorobenzene	10.000	8.416	84.16	66-117

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10121A.b\UXJ5128.D
Report Date: 24-Jan-2011 09:11

TestAmerica North Canton

VOLATILE REPORT SW-846 Method 8260A/8260B

Data file : \\cansvr11\dd\chem\MSV\a3ux11.i\J10121A.b\UXJ5128.D
Lab Smp Id: QCMRL
Inj Date : 21-JAN-2011 19:34
Operator : 43582 Inst ID: a3ux11.i
Smp Info : QCMRL
Misc Info : J10121A,8260LLUX11,,43582,3
Comment :
Method : \\cansvr11\dd\chem\MSV\a3ux11.i\J10121A.b\8260LLUX11.m
Meth Date : 21-Jan-2011 10:51 a3ux11.i Quant Type: ISTD
Cal Date : 13-JAN-2011 12:51 Cal File: UXJ5010.D
Als bottle: 26 QC Sample: MRL
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-8260+IX.sub
Target Version: 4.14
Processing Host: CANPMSV30

Concentration Formula: Amt * DF * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample volume
Va	100.000	Injection Volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
* 1	Fluorobenzene	96	5.200	5.200	(1.000)	1505014	50.0000	
* 2	Chlorobenzene-d5	117	7.874	7.874	(1.000)	1108506	50.0000	
* 3	1,4-Dichlorobenzene-d4	152	10.111	10.111	(1.000)	495995	50.0000	
$ 4	Dibromofluoromethane	113	4.632	4.632	(0.891)	323832	43.2018	8.640
$ 5	1,2-Dichloroethane-d4	65	4.916	4.916	(0.945)	427694	39.3650	7.873
$ 6	Toluene-d8	98	6.561	6.561	(0.833)	1391357	42.1455	8.429
$ 7	Bromofluorobenzene	95	8.975	8.975	(1.140)	468024	42.0805	8.416
8	Dichlorodifluoromethane	85	1.603	1.603	(0.308)	23275	5.25635	1.051
9	Chloromethane	50	1.733	1.733	(0.333)	42230	4.63306	0.9266
10	Vinyl Chloride	62	1.828	1.828	(0.352)	45469	5.45204	1.090
11	Bromomethane	94	2.124	2.124	(0.408)	17066	4.30801	0.8616
12	Chloroethane	64	2.206	2.206	(0.424)	18909	4.24896	0.8498
13	Trichlorofluoromethane	101	2.419	2.419	(0.465)	35765	4.05949	0.8119
15	Acrolein	56	Compound Not Detected.					
16	Acetone	43	2.845	2.845	(0.547)	27474	9.74158	1.948
17	1,1-Dichloroethene	96	2.857	2.845	(0.549)	26435	4.01531	0.8031
18	Freon-113	151	2.857	2.857	(0.549)	13313	3.68088	0.7362
19	Iodomethane	142	2.976	2.987	(0.572)	38231	4.83544	0.9671
20	Carbon Disulfide	76	3.035	3.035	(0.584)	67166	4.06705	0.8134

21	Methylene Chloride	84	3.200	3.200 (0.615)	41114	3.36527	0.6730(R)
22	Acetonitrile	41	3.058	3.058 (0.588)	40869	48.7396	9.748
23	Acrylonitrile	53	3.390	3.390 (0.652)	25970	9.74049	1.948

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 3, 2011

SDG: A1A200401 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 2.8 °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?	✓			A4HP9-1/31/2011 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

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 3, 2011

SDG: A1A200401 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			Benzoic acid, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, bis(2-ethylhexyl)phthalate 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%?	✓				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%?	✓			1/31/11 @ 1411	LCG Table 2 >130%=J; <50%=J/R 50-70%=J/UJ;
20. Was a CCV analyzed every 12 hours?	✓			2/1/11 @ 1056	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
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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 3, 2011

SDG: A1A200401 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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%?	✓				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 hexachlorocyclopentadiene LCS recovery for batch 1020062 recovered below control limits at 26%. All hexachlorocyclopentadiene results 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%?		✓		• Both the matrix spike and matrix spike duplicate analyzed on sample FWGLNWmw-025c-1674-GW recovered below control limits for 3,3'-dichlorobenzidine at 4% and 13%, hexachlorocyclopentadiene at 30% and 31% and n-nitrosodiphenylamine at 38% and 43%. The 3,3'-dichlorobenzidine MS/MSD RPD had an RPD of 104%. • Both the matrix spike and matrix spike duplicate analyzed on sample FWGSCFmw-003-1684-GW recovered below control limits for 3,3'-dichlorobenzidine at 32% and 31% and hexachlorocyclopentadiene at 23% and 26%. The hexachloroethane MS recovered at 44%. No qualification was made for the for 3,3'-dichlorobenzidine, hexachloroethane or n-nitrosodiphenylamine outliers as the LCS recovered within limits. The hexachlorocyclopentadiene results for samples FWGLNWmw-025c-1674-GW and FWGSCFmw-003-1684-GW were qualified as estimated, "UJ"	LCG Table 2 Pj

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 3, 2011

SDG: A1A200401 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
38. Were surrogate recoveries within 50-150%?		✓		Checked by ADR. The acid surrogates for sample FWGWBGmw-006c-1676-GW recovered below control limits. 2,4,6-tribromophenol recovered at 33%, 2-fluorophenol at 44% and phenol-d5 at 47%. The targets associated with the acid fraction of sample FWGWBGmw-006c-1676-GW were qualified as estimated, "J/UJ"	LCG Table 2 >150%=J; 10% -50%=J/UJ; <10%=J/R
39. Were reported sample concentrations within calibration range?	✓				
40. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
41. Were lab comments included in report? If yes, summarize contents.	✓			The laboratory's case narrative incorrectly indicated that sample FWGCBPmw-008c-1659-GF had three acid surrogates outside control limits. Sample FWGWBGmw-006c-1676-GW should have been listed with the outliers instead of FWGCBPmw-008c-1659-GF.	

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: FWGLNWmw-025C-1674-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-001 **Work Order #...:** MDHK51AC **Matrix.....:** WG
Date Sampled...: 01/19/11 09:03 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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	**0.81 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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLNWmw-025C-1674-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-001 **Work Order #...:** MDHK51AC **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: FWGLNWmw-025C-1674-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-001 **Work Order #...:** MDHK51AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
Terphenyl-d14	67	(50 - 150)
Phenol-d5	61	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	61	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-007C-1677-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-004 **Work Order #...:** MDHK91AC **Matrix.....:** WG
Date Sampled...: 01/19/11 11:19 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
Benzo(k)fluoranthene	ND	0.20	ug/L	0.10
Benzoic acid	ND	10	ug/L	10
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
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
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
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-007C-1677-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-004 **Work Order #...:** MDHK91AC **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: FWGWBGmw-007C-1677-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-004 **Work Order #...:** MDHK91AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(50 - 150)
2-Fluorobiphenyl	57	(50 - 150)
Terphenyl-d14	64	(50 - 150)
Phenol-d5	66	(50 - 150)
2-Fluorophenol	65	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-006 **Work Order #...:** MDHLC1AC **Matrix.....:** WG
Date Sampled...: 01/19/11 13:21 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-006 **Work Order #...:** MDHLC1AC **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: FWGFBQmw-174C-1673-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-006 **Work Order #...:** MDHLC1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	59	(50 - 150)
2-Fluorobiphenyl	51	(50 - 150)
Terphenyl-d14	65	(50 - 150)
Phenol-d5	59	(50 - 150)
2-Fluorophenol	57	(50 - 150)
2,4,6-Tribromophenol	62	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1654-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-008 **Work Order #...:** MDHLE1AC **Matrix.....:** WG
Date Sampled...: 01/19/11 15:04 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 1020 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1654-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-008 **Work Order #...:** MDHLE1AC **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-1654-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-008 **Work Order #...:** MDHLE1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
2-Fluorobiphenyl	54	(50 - 150)
Terphenyl-d14	65	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	67	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GW

GC/MS Semivolatiles

Lot-Sample #...:	A1A200401-010	**Work Order #...:**	MDHLG1AC	**Matrix.....:**	WG
Date Sampled...:	01/19/11 16:29	**Date Received..:**	01/20/11		
Prep Date.....:	01/20/11	**Analysis Date..:**	01/31/11		
Prep Batch #...:	1020062				
Dilution Factor:	1	**Initial Wgt/Vol:**	1050 mL	**Final Wgt/Vol..:**	2 mL
		Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-010 **Work Order #...:** MDHLG1AC **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-196C-1653-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-010 **Work Order #...:** MDHLG1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(50 - 150)
2-Fluorobiphenyl	54	(50 - 150)
Terphenyl-d14	65	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	63	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1686-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-013 **Work Order #...:** MDHLK1AC **Matrix.....:** WG
Date Sampled...: 01/19/11 09:15 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1686-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-013 **Work Order #...:** MDHLK1AC **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: FWGSCFmw-005-1686-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-013 **Work Order #...:** MDHLK1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	60	(50 - 150)
2-Fluorobiphenyl	52	(50 - 150)
Terphenyl-d14	64	(50 - 150)
Phenol-d5	61	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	62	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1687-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-015 Work Order #...: MDHLM1AC Matrix.....: WG
Date Sampled...: 01/19/11 11:20 Date Received..: 01/20/11
Prep Date.....: 01/20/11 Analysis Date..: 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 Initial Wgt/Vol: 920 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1687-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-015 **Work Order #...:** MDHLM1AC **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	**1.2**	**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: FWGSCFmw-006-1687-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-015 **Work Order #...:** MDHLM1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	56	(50 - 150)
Terphenyl-d14	66	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	66	(50 - 150)
2,4,6-Tribromophenol	66	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1684-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-017 **Work Order #...:** MDHLP1AE **Matrix.....:** WG
Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 970 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1684-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-017 Work Order #...: MDHLP1AE 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: FWGSCFmw-003-1684-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-017 **Work Order #...:** MDHLP1AE **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(50 - 150)
2-Fluorobiphenyl	50	(50 - 150)
Terphenyl-d14	62	(50 - 150)
Phenol-d5	59	(50 - 150)
2-Fluorophenol	60	(50 - 150)
2,4,6-Tribromophenol	57	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-019 **Work Order #...:** MDHLR1AC **Matrix.....:** WG
Date Sampled...: 01/19/11 15:25 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 940 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-019 **Work Order #...:** MDHLR1AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
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
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-019 **Work Order #...:** MDHLR1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	61	(50 - 150)
2-Fluorobiphenyl	50	(50 - 150)
Terphenyl-d14	62	(50 - 150)
Phenol-d5	59	(50 - 150)
2-Fluorophenol	58	(50 - 150)
2,4,6-Tribromophenol	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-005C-1675-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-022 **Work Order #...:** MDHLW1AC **Matrix.....:** WG
Date Sampled...: 01/19/11 09:05 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-005C-1675-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-022 **Work Order #...:** MDHLW1AC **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: FWGWBGmw-005C-1675-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-022 **Work Order #...:** MDHLW1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(50 - 150)
2-Fluorobiphenyl	53	(50 - 150)
Terphenyl-d14	58	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	64	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-DUP5-1696-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-024 **Work Order #...:** MDHL11AC **Matrix.....:** WG
Date Sampled...: 01/19/11 10:05 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 950 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-DUP5-1696-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-024 **Work Order #...:** MDHL11AC **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: FWGWBGmw-DUP5-1696-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-024 **Work Order #...:** MDHL11AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(50 - 150)
2-Fluorobiphenyl	54	(50 - 150)
Terphenyl-d14	66	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	59	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-026 **Work Order #...:** MDHL31AC **Matrix.....:** WG
Date Sampled...: 01/19/11 11:15 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 970 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzo(ghi)perylene	ND	0.20	ug/L	0.10
Benzo(a)pyrene	ND	0.20	ug/L	0.10
Benzyl alcohol	**0.43 J**	**5.0**	**ug/L**	**0.38**
bis(2-Chloroethoxy) methane	ND	1.0	ug/L	0.32
bis(2-Chloroethyl)- ether	ND	1.0	ug/L	0.10
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.80
4-Bromophenyl phenyl ether	ND	2.0	ug/L	0.80
Butyl benzyl phthalate	ND	1.0	ug/L	0.80
Carbazole	ND	1.0	ug/L	0.28
4-Chloroaniline	ND	2.0	ug/L	0.80
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-026 **Work Order #...:** MDHL31AC **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: FWGWBGmw-006C-1676-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-026 **Work Order #...:** MDHL31AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	62	(50 - 150)
2-Fluorobiphenyl	50	(50 - 150)
Terphenyl-d14	58	(50 - 150)
Phenol-d5	47 *	(50 - 150)
2-Fluorophenol	44 *	(50 - 150)
2,4,6-Tribromophenol	33 *	(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: FWGWBGmw-009C-1678-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-028 **Work Order #...:** MDHL51AC **Matrix.....:** WG
Date Sampled...: 01/19/11 12:30 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 980 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-009C-1678-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-028 Work Order #...: MDHL51AC 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: FWGWBGmw-009C-1678-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-028 **Work Order #...:** MDHL51AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(50 - 150)
2-Fluorobiphenyl	52	(50 - 150)
Terphenyl-d14	62	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	63	(50 - 150)
2,4,6-Tribromophenol	59	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-030 **Work Order #...:** MDHL71AC **Matrix.....:** WQ
Date Sampled...: 01/19/11 13:30 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-030 **Work Order #...:** MDHL71AC **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-030 **Work Order #...:** MDHL71AC **Matrix.....:** WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(50 - 150)
2-Fluorobiphenyl	52	(50 - 150)
Terphenyl-d14	68	(50 - 150)
Phenol-d5	62	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-031 **Work Order #...:** MDHL81AC **Matrix.....:** WG
Date Sampled...: 01/19/11 15:00 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 920 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-031 **Work Order #...:** MDHL81AC **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-031 **Work Order #...:** MDHL81AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	61	(50 - 150)
2-Fluorobiphenyl	52	(50 - 150)
Terphenyl-d14	59	(50 - 150)
Phenol-d5	60	(50 - 150)
2-Fluorophenol	61	(50 - 150)
2,4,6-Tribromophenol	53	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-005C-1657-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-033 **Work Order #...:** MDHMA1AC **Matrix.....:** WG
Date Sampled...: 01/19/11 16:10 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 910 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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**	**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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-005C-1657-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-033 **Work Order #...:** MDHMA1AC **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: FWGCBPmw-005C-1657-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-033 **Work Order #...:** MDHMA1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(50 - 150)
2-Fluorobiphenyl	54	(50 - 150)
Terphenyl-d14	78	(50 - 150)
Phenol-d5	58	(50 - 150)
2-Fluorophenol	58	(50 - 150)
2,4,6-Tribromophenol	76	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-008C-1659-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-035 **Work Order #...:** MDHMD1AC **Matrix.....:** WG
Date Sampled...: 01/19/11 17:05 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 02/01/11
Prep Batch #...: 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 1010 mL **Final Wgt/Vol..:** 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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
4-Chloro-3-methylphenol	ND	2.0	ug/L	0.80
2-Chloronaphthalene	ND	1.0	ug/L	0.10
2-Chlorophenol	ND	1.0	ug/L	0.29
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	0.30
Chrysene	ND	0.20	ug/L	0.10
Dibenz(a,h)anthracene	ND	0.20	ug/L	0.10
Dibenzofuran	ND	1.0	ug/L	0.10
Di-n-butyl phthalate	ND	1.0	ug/L	0.67
1,2-Dichlorobenzene	ND	1.0	ug/L	0.29
1,3-Dichlorobenzene	ND	1.0	ug/L	0.80
1,4-Dichlorobenzene	ND	1.0	ug/L	0.34
3,3'-Dichlorobenzidine	ND	5.0	ug/L	0.37
2,4-Dichlorophenol	ND	2.0	ug/L	0.80
Diethyl phthalate	ND	1.0	ug/L	0.60
2,4-Dimethylphenol	ND	2.0	ug/L	0.80
Dimethyl phthalate	ND	1.0	ug/L	0.29

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-008C-1659-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-035 **Work Order #...:** MDHMD1AC **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: FWGCBPmw-008C-1659-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A200401-035 **Work Order #...:** MDHMD1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(50 - 150)
2-Fluorobiphenyl	64	(50 - 150)
Terphenyl-d14	71	(50 - 150)
Phenol-d5	65	(50 - 150)
2-Fluorophenol	67	(50 - 150)
2,4,6-Tribromophenol	79	(50 - 150)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHMH1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A200000-062

Prep Date.....: 01/20/11 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 01/31/11 **Prep Batch #...:** 1020062
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
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
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

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHMH1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrophenol	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
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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(50 - 150)
2-Fluorobiphenyl	52	(50 - 150)
Terphenyl-d14	64	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	57	(50 - 150)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHMH1AA **Matrix.....:** WATER

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 #...: A1A200401 Work Order #...: MDHMH1AC Matrix.....: WATER
LCS Lot-Sample#: A1A200000-062
Prep Date.....: 01/20/11 Analysis Date..: 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,2,4-Trichloro-benzene	55	(30 - 120)	SW846 8270C
Acenaphthene	62	(31 - 120)	SW846 8270C
2,4-Dinitrotoluene	69	(34 - 151)	SW846 8270C
Pyrene	59	(35 - 139)	SW846 8270C
N-Nitrosodi-n-propyl-amine	64	(30 - 132)	SW846 8270C
1,4-Dichlorobenzene	55	(30 - 115)	SW846 8270C
Pentachlorophenol	37	(30 - 150)	SW846 8270C
Phenol	72	(30 - 115)	SW846 8270C
2-Chlorophenol	75	(30 - 120)	SW846 8270C
4-Chloro-3-methylphenol	70	(31 - 121)	SW846 8270C
4-Nitrophenol	61	(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	72	(36 - 135)	SW846 8270C
4-Methylphenol	70	(31 - 115)	SW846 8270C
4-Nitroaniline	61	(30 - 140)	SW846 8270C
Acenaphthylene	64	(37 - 115)	SW846 8270C
Anthracene	61	(45 - 118)	SW846 8270C
Benzo(a)anthracene	58	(43 - 138)	SW846 8270C
Benzo(a)pyrene	51	(38 - 144)	SW846 8270C
Benzo(b)fluoranthene	61	(31 - 146)	SW846 8270C
Benzo(ghi)perylene	60	(35 - 129)	SW846 8270C
Benzo(k)fluoranthene	55	(40 - 127)	SW846 8270C
bis(2-Chloroethoxy) methane	69	(30 - 115)	SW846 8270C
bis(2-Chloroethyl)-ether	69	(30 - 115)	SW846 8270C
bis(2-Chloroisopropyl) ether	72	(50 - 150)	SW846 8270C
bis(2-Ethylhexyl) phthalate	60	(30 - 154)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 Work Order #...: MDHMH1AC Matrix.....: WATER
LCS Lot-Sample#: A1A200000-062

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,4,6-Trichloro-phenol	68	(39 - 115)	SW846 8270C
2,4-Dichlorophenol	70	(34 - 115)	SW846 8270C
2,4-Dimethylphenol	49	(31 - 120)	SW846 8270C
2,4-Dinitrophenol	49	(29 - 146)	SW846 8270C
2,6-Dinitrotoluene	71	(43 - 122)	SW846 8270C
2-Chloronaphthalene	65	(35 - 115)	SW846 8270C
2-Methylnaphthalene	73	(32 - 115)	SW846 8270C
2-Methylphenol	72	(30 - 116)	SW846 8270C
2-Nitroaniline	60	(36 - 140)	SW846 8270C
2-Nitrophenol	74	(33 - 115)	SW846 8270C
3,3'-Dichlorobenzidine	40	(30 - 160)	SW846 8270C
3-Nitroaniline	60	(30 - 138)	SW846 8270C
4,6-Dinitro-2-methylphenol	66	(42 - 144)	SW846 8270C
4-Bromophenyl phenyl ether	64	(43 - 118)	SW846 8270C
4-Chloroaniline	53	(30 - 133)	SW846 8270C
4-Chlorophenyl phenyl ether	65	(40 - 115)	SW846 8270C
Butyl benzyl phthalate	61	(37 - 136)	SW846 8270C
Carbazole	63	(49 - 126)	SW846 8270C
Chrysene	59	(42 - 142)	SW846 8270C
Dibenz(a,h)anthracene	60	(38 - 130)	SW846 8270C
Dibenzofuran	64	(40 - 115)	SW846 8270C
Diethyl phthalate	66	(43 - 132)	SW846 8270C
Dimethyl phthalate	66	(42 - 116)	SW846 8270C
Di-n-octyl phthalate	56	(36 - 151)	SW846 8270C
Fluoranthene	63	(47 - 132)	SW846 8270C
Fluorene	62	(41 - 115)	SW846 8270C
Hexachlorobenzene	60	(42 - 123)	SW846 8270C
Hexachlorobutadiene	45	(30 - 120)	SW846 8270C
Hexachloroethane	46	(30 - 120)	SW846 8270C
Isophorone	66	(33 - 115)	SW846 8270C
Naphthalene	61	(30 - 119)	SW846 8270C
Nitrobenzene	67	(31 - 115)	SW846 8270C
N-Nitrosodiphenylamine	57	(35 - 124)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 Work Order #...: MDHMH1AC Matrix.....: WATER
LCS Lot-Sample#: A1A200000-062

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenanthrene	61	(45 - 117)	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	60	(37 - 130)	**SW846 8270C**
Di-n-butyl phthalate	63	(46 - 123)	**SW846 8270C**
Hexachlorocyclopenta-diene	26 a	(30 - 115)	**SW846 8270C**
Benzoic acid	52	(30 - 136)	**SW846 8270C**
Benzyl alcohol	73	(29 - 115)	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	69	(50 - 150)
2-Fluorobiphenyl	63	(50 - 150)
Terphenyl-d14	70	(50 - 150)
Phenol-d5	73	(50 - 150)
2-Fluorophenol	74	(50 - 150)
2,4,6-Tribromophenol	73	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 Work Order #...: MDHK51AJ-MS Matrix.....: WG
MS Lot-Sample #: A1A200401-001 MDHK51AK-MSD
Date Sampled...: 01/19/11 09:03 Date Received..: 01/20/11
Prep Date.....: 01/20/11 Analysis Date..: 01/31/11
Prep Batch #...: 1020062
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	54	(45 - 135)			SW846 8270C
	55	(45 - 135)	2.3	(0-40)	SW846 8270C
Acenaphthene	56	(45 - 135)			SW846 8270C
	57	(45 - 135)	1.1	(0-40)	SW846 8270C
2,4-Dinitrotoluene	67	(45 - 135)			SW846 8270C
	65	(45 - 135)	2.7	(0-40)	SW846 8270C
Pyrene	56	(45 - 135)			SW846 8270C
	58	(45 - 135)	3.6	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	59	(45 - 135)			SW846 8270C
	58	(45 - 135)	1.2	(0-40)	SW846 8270C
1,4-Dichlorobenzene	58	(45 - 135)			SW846 8270C
	57	(45 - 135)	0.38	(0-40)	SW846 8270C
Pentachlorophenol	43 a	(45 - 135)			SW846 8270C
	40 a	(45 - 135)	7.0	(0-40)	SW846 8270C
Phenol	69	(45 - 135)			SW846 8270C
	68	(45 - 135)	1.8	(0-40)	SW846 8270C
2-Chlorophenol	70	(45 - 135)			SW846 8270C
	71	(45 - 135)	0.33	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	67	(45 - 135)			SW846 8270C
	66	(45 - 135)	2.1	(0-40)	SW846 8270C
4-Nitrophenol	61	(45 - 135)			SW846 8270C
	62	(45 - 135)	1.6	(0-40)	SW846 8270C
Acenaphthylene	59	(45 - 135)			SW846 8270C
	58	(45 - 135)	0.56	(0-40)	SW846 8270C
Anthracene	55	(45 - 135)			SW846 8270C
	59	(45 - 135)	5.9	(0-40)	SW846 8270C
Benzo(a)anthracene	54	(45 - 135)			SW846 8270C
	58	(45 - 135)	8.1	(0-40)	SW846 8270C
Benzo(b)fluoranthene	56	(45 - 135)			SW846 8270C
	57	(45 - 135)	2.1	(0-40)	SW846 8270C
Benzo(k)fluoranthene	51	(45 - 135)			SW846 8270C
	60	(45 - 135)	15	(0-40)	SW846 8270C
Benzo(ghi)perylene	56	(45 - 135)			SW846 8270C
	62	(45 - 135)	10	(0-40)	SW846 8270C
Benzo(a)pyrene	47	(45 - 135)			SW846 8270C
	52	(45 - 135)	10	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHK51AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200401-001 MDHK51AK-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
bis(2-Chloroethoxy) methane	67	(45 - 135)			SW846 8270C
	65	(45 - 135)	4.3	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	65	(45 - 135)			SW846 8270C
	64	(45 - 135)	1.6	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	71	(45 - 135)			SW846 8270C
	69	(45 - 135)	2.4	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	57	(45 - 135)			SW846 8270C
	59	(45 - 135)	2.9	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	60	(45 - 135)			SW846 8270C
	62	(45 - 135)	3.1	(0-40)	SW846 8270C
Butyl benzyl phthalate	59	(45 - 135)			SW846 8270C
	60	(45 - 135)	1.8	(0-40)	SW846 8270C
Carbazole	59	(45 - 135)			SW846 8270C
	60	(45 - 135)	1.9	(0-40)	SW846 8270C
4-Chloroaniline	50	(45 - 135)			SW846 8270C
	46	(45 - 135)	7.0	(0-40)	SW846 8270C
2-Chloronaphthalene	57	(45 - 135)			SW846 8270C
	58	(45 - 135)	1.2	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	59	(45 - 135)			SW846 8270C
	60	(45 - 135)	1.5	(0-40)	SW846 8270C
Chrysene	56	(45 - 135)			SW846 8270C
	57	(45 - 135)	1.5	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	57	(45 - 135)			SW846 8270C
	62	(45 - 135)	8.2	(0-40)	SW846 8270C
Dibenzofuran	58	(45 - 135)			SW846 8270C
	58	(45 - 135)	0.87	(0-40)	SW846 8270C
Di-n-butyl phthalate	60	(45 - 135)			SW846 8270C
	62	(45 - 135)	4.0	(0-40)	SW846 8270C
1,2-Dichlorobenzene	57	(45 - 135)			SW846 8270C
	58	(45 - 135)	1.6	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 Work Order #...: MDHK51AJ-MS Matrix.....: WG
MS Lot-Sample #: A1A200401-001 MDHK51AK-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,3-Dichlorobenzene	54	(45 - 135)			SW846 8270C
	55	(45 - 135)	2.2	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	4.1 a	(45 - 135)			SW846 8270C
	13 a,p	(45 - 135)	104	(0-40)	SW846 8270C
2,4-Dichlorophenol	67	(45 - 135)			SW846 8270C
	66	(45 - 135)	1.9	(0-40)	SW846 8270C
Diethyl phthalate	62	(45 - 135)			SW846 8270C
	62	(45 - 135)	0.77	(0-40)	SW846 8270C
2,4-Dimethylphenol	52	(45 - 135)			SW846 8270C
	51	(45 - 135)	0.56	(0-40)	SW846 8270C
Dimethyl phthalate	62	(45 - 135)			SW846 8270C
	61	(45 - 135)	0.91	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	65	(45 - 135)			SW846 8270C
	66	(45 - 135)	0.36	(0-40)	SW846 8270C
2,4-Dinitrophenol	48	(45 - 135)			SW846 8270C
	47	(45 - 135)	2.2	(0-40)	SW846 8270C
2,6-Dinitrotoluene	67	(45 - 135)			SW846 8270C
	65	(45 - 135)	2.7	(0-40)	SW846 8270C
Di-n-octyl phthalate	53	(45 - 135)			SW846 8270C
	57	(45 - 135)	6.6	(0-40)	SW846 8270C
Fluoranthene	58	(45 - 135)			SW846 8270C
	62	(45 - 135)	6.4	(0-40)	SW846 8270C
Fluorene	57	(45 - 135)			SW846 8270C
	57	(45 - 135)	0.46	(0-40)	SW846 8270C
Hexachlorobenzene	56	(45 - 135)			SW846 8270C
	61	(45 - 135)	8.1	(0-40)	SW846 8270C
Hexachlorobutadiene	43 a	(45 - 135)			SW846 8270C
	45	(45 - 135)	4.8	(0-40)	SW846 8270C
Hexachlorocyclopentadiene	30 a	(45 - 135)			SW846 8270C
	31 a	(45 - 135)	3.0	(0-40)	SW846 8270C
Hexachloroethane	46	(45 - 135)			SW846 8270C
	48	(45 - 135)	3.4	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	55	(45 - 135)			SW846 8270C
	60	(45 - 135)	7.8	(0-40)	SW846 8270C
Isophorone	63	(45 - 135)			SW846 8270C
	62	(45 - 135)	0.94	(0-40)	SW846 8270C
2-Methylnaphthalene	70	(45 - 135)			SW846 8270C
	70	(45 - 135)	0.17	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHK51AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200401-001 MDHK51AK-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Methylphenol	67	(45 - 135)			SW846 8270C
	66	(45 - 135)	1.1	(0-40)	SW846 8270C
4-Methylphenol	68	(45 - 135)			SW846 8270C
	65	(45 - 135)	3.4	(0-40)	SW846 8270C
Naphthalene	62	(45 - 135)			SW846 8270C
	60	(45 - 135)	3.4	(0-40)	SW846 8270C
2-Nitroaniline	57	(45 - 135)			SW846 8270C
	55	(45 - 135)	3.7	(0-40)	SW846 8270C
3-Nitroaniline	54	(45 - 135)			SW846 8270C
	54	(45 - 135)	0.13	(0-50)	SW846 8270C
4-Nitroaniline	56	(45 - 135)			SW846 8270C
	56	(45 - 135)	0.82	(0-40)	SW846 8270C
Nitrobenzene	65	(45 - 135)			SW846 8270C
	64	(45 - 135)	0.88	(0-40)	SW846 8270C
2-Nitrophenol	71	(45 - 135)			SW846 8270C
	70	(45 - 135)	0.86	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	38 a	(45 - 135)			SW846 8270C
	43 a	(45 - 135)	11	(0-40)	SW846 8270C
Phenanthrene	57	(45 - 135)			SW846 8270C
	60	(45 - 135)	5.1	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	68	(45 - 135)			SW846 8270C
	66	(45 - 135)	2.3	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	64	(45 - 135)			SW846 8270C
	63	(45 - 135)	1.9	(0-40)	SW846 8270C
Benzoic acid	53	(45 - 135)			SW846 8270C
	50	(45 - 135)	5.8	(0-40)	SW846 8270C
Benzyl alcohol	70	(45 - 135)			SW846 8270C
	70	(45 - 135)	0.45	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(50 - 150)
	64	(50 - 150)
2-Fluorobiphenyl	57	(50 - 150)
	57	(50 - 150)
Terphenyl-d14	54	(50 - 150)
	66	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHK51AJ-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200401-001 MDHK51AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	68	(50 - 150)
	67	(50 - 150)
2-Fluorophenol	69	(50 - 150)
	66	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)
	68	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 Work Order #...: MDHLP1AW-MS Matrix.....: WG
MS Lot-Sample #: A1A200401-017 MDHLP1AX-MSD
Date Sampled...: 01/19/11 12:50 Date Received..: 01/20/11
Prep Date.....: 01/20/11 Analysis Date..: 01/31/11
Prep Batch #...: 1020062
Dilution Factor: 1 Initial Wgt/Vol: 480 mL Final Wgt/Vol..: 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Butyl benzyl phthalate	59	(45 - 135)			SW846 8270C
	62	(45 - 135)	5.4	(0-40)	SW846 8270C
Naphthalene	58	(45 - 135)			SW846 8270C
	63	(45 - 135)	7.4	(0-40)	SW846 8270C
2-Nitroaniline	54	(45 - 135)			SW846 8270C
	57	(45 - 135)	6.2	(0-40)	SW846 8270C
3-Nitroaniline	53	(45 - 135)			SW846 8270C
	56	(45 - 135)	6.4	(0-50)	SW846 8270C
4-Nitroaniline	54	(45 - 135)			SW846 8270C
	57	(45 - 135)	6.0	(0-40)	SW846 8270C
Nitrobenzene	62	(45 - 135)			SW846 8270C
	68	(45 - 135)	9.1	(0-40)	SW846 8270C
2-Nitrophenol	67	(45 - 135)			SW846 8270C
	73	(45 - 135)	8.6	(0-40)	SW846 8270C
N-Nitrosodiphenylamine	52	(45 - 135)			SW846 8270C
	57	(45 - 135)	8.5	(0-40)	SW846 8270C
Phenanthrene	56	(45 - 135)			SW846 8270C
	61	(45 - 135)	9.7	(0-40)	SW846 8270C
2,4,5-Trichloro-phenol	65	(45 - 135)			SW846 8270C
	68	(45 - 135)	4.3	(0-40)	SW846 8270C
2,4,6-Trichloro-phenol	63	(45 - 135)			SW846 8270C
	67	(45 - 135)	7.5	(0-40)	SW846 8270C
Benzoic acid	48	(45 - 135)			SW846 8270C
	48	(45 - 135)	0.35	(0-40)	SW846 8270C
Benzyl alcohol	66	(45 - 135)			SW846 8270C
	72	(45 - 135)	9.1	(0-40)	SW846 8270C
Carbazole	57	(45 - 135)			SW846 8270C
	62	(45 - 135)	9.3	(0-40)	SW846 8270C
4-Chloroaniline	48	(45 - 135)			SW846 8270C
	45	(45 - 135)	6.6	(0-40)	SW846 8270C
2-Chloronaphthalene	56	(45 - 135)			SW846 8270C
	61	(45 - 135)	7.8	(0-40)	SW846 8270C
4-Chlorophenyl phenyl ether	60	(45 - 135)			SW846 8270C
	64	(45 - 135)	7.0	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 Work Order #...: MDHLP1AW-MS Matrix.....: WG
MS Lot-Sample #: A1A200401-017 MDHLP1AX-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Chrysene	54	(45 - 135)			SW846 8270C
	60	(45 - 135)	9.8	(0-40)	SW846 8270C
Dibenz(a,h)anthracene	57	(45 - 135)			SW846 8270C
	64	(45 - 135)	11	(0-40)	SW846 8270C
Dibenzofuran	58	(45 - 135)			SW846 8270C
	62	(45 - 135)	6.7	(0-40)	SW846 8270C
Di-n-butyl phthalate	59	(45 - 135)			SW846 8270C
	65	(45 - 135)	9.5	(0-40)	SW846 8270C
1,2-Dichlorobenzene	53	(45 - 135)			SW846 8270C
	60	(45 - 135)	12	(0-40)	SW846 8270C
1,3-Dichlorobenzene	53	(45 - 135)			SW846 8270C
	57	(45 - 135)	8.6	(0-40)	SW846 8270C
3,3'-Dichlorobenzidine	32 a	(45 - 135)			SW846 8270C
	31 a	(45 - 135)	2.0	(0-40)	SW846 8270C
2,4-Dichlorophenol	66	(45 - 135)			SW846 8270C
	72	(45 - 135)	8.9	(0-40)	SW846 8270C
Diethyl phthalate	60	(45 - 135)			SW846 8270C
	64	(45 - 135)	7.2	(0-40)	SW846 8270C
2,4-Dimethylphenol	47	(45 - 135)			SW846 8270C
	47	(45 - 135)	0.45	(0-40)	SW846 8270C
Dimethyl phthalate	60	(45 - 135)			SW846 8270C
	66	(45 - 135)	9.4	(0-40)	SW846 8270C
4,6-Dinitro-2-methylphenol	61	(45 - 135)			SW846 8270C
	68	(45 - 135)	10	(0-40)	SW846 8270C
2,4-Dinitrophenol	47	(45 - 135)			SW846 8270C
	50	(45 - 135)	5.7	(0-40)	SW846 8270C
2,6-Dinitrotoluene	65	(45 - 135)			SW846 8270C
	69	(45 - 135)	5.8	(0-40)	SW846 8270C
Di-n-octyl phthalate	53	(45 - 135)			SW846 8270C
	59	(45 - 135)	11	(0-40)	SW846 8270C
Fluoranthene	58	(45 - 135)			SW846 8270C
	65	(45 - 135)	10	(0-40)	SW846 8270C
Fluorene	56	(45 - 135)			SW846 8270C
	60	(45 - 135)	6.9	(0-40)	SW846 8270C
Hexachlorobenzene	58	(45 - 135)			SW846 8270C
	62	(45 - 135)	7.3	(0-40)	SW846 8270C
Hexachlorobutadiene	41 a	(45 - 135)			SW846 8270C
	48	(45 - 135)	15	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHLP1AW-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200401-017 MDHLP1AX-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Hexachlorocyclopenta-diene	23 a	(45 - 135)			SW846 8270C
	26 a	(45 - 135)	13	(0-40)	SW846 8270C
Hexachloroethane	44 a	(45 - 135)			SW846 8270C
	48	(45 - 135)	9.2	(0-40)	SW846 8270C
Indeno(1,2,3-cd)pyrene	56	(45 - 135)			SW846 8270C
	63	(45 - 135)	12	(0-40)	SW846 8270C
Isophorone	61	(45 - 135)			SW846 8270C
	66	(45 - 135)	8.0	(0-40)	SW846 8270C
2-Methylnaphthalene	68	(45 - 135)			SW846 8270C
	74	(45 - 135)	8.3	(0-40)	SW846 8270C
2-Methylphenol	64	(45 - 135)			SW846 8270C
	68	(45 - 135)	6.5	(0-40)	SW846 8270C
4-Methylphenol	62	(45 - 135)			SW846 8270C
	67	(45 - 135)	7.2	(0-40)	SW846 8270C
1,2,4-Trichloro-benzene	51	(45 - 135)			SW846 8270C
	58	(45 - 135)	12	(0-40)	SW846 8270C
Acenaphthene	55	(45 - 135)			SW846 8270C
	59	(45 - 135)	7.4	(0-40)	SW846 8270C
2,4-Dinitrotoluene	62	(45 - 135)			SW846 8270C
	69	(45 - 135)	10	(0-40)	SW846 8270C
Pyrene	56	(45 - 135)			SW846 8270C
	60	(45 - 135)	7.2	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	56	(45 - 135)			SW846 8270C
	60	(45 - 135)	8.3	(0-40)	SW846 8270C
1,4-Dichlorobenzene	54	(45 - 135)			SW846 8270C
	60	(45 - 135)	12	(0-40)	SW846 8270C
Pentachlorophenol	43 a	(45 - 135)			SW846 8270C
	44 a	(45 - 135)	2.0	(0-40)	SW846 8270C
Phenol	65	(45 - 135)			SW846 8270C
	70	(45 - 135)	7.3	(0-40)	SW846 8270C
2-Chlorophenol	65	(45 - 135)			SW846 8270C
	70	(45 - 135)	8.4	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	65	(45 - 135)			SW846 8270C
	69	(45 - 135)	5.8	(0-40)	SW846 8270C
4-Nitrophenol	57	(45 - 135)			SW846 8270C
	59	(45 - 135)	3.0	(0-40)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 Work Order #...: MDHLP1AW-MS Matrix.....: WG
MS Lot-Sample #: A1A200401-017 MDHLP1AX-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthylene	56	(45 - 135)			SW846 8270C
	60	(45 - 135)	7.9	(0-40)	SW846 8270C
Anthracene	55	(45 - 135)			SW846 8270C
	61	(45 - 135)	9.8	(0-40)	SW846 8270C
Benzo(a)anthracene	56	(45 - 135)			SW846 8270C
	60	(45 - 135)	6.2	(0-40)	SW846 8270C
Benzo(b)fluoranthene	55	(45 - 135)			SW846 8270C
	58	(45 - 135)	5.2	(0-40)	SW846 8270C
Benzo(k)fluoranthene	53	(45 - 135)			SW846 8270C
	63	(45 - 135)	17	(0-40)	SW846 8270C
Benzo(ghi)perylene	56	(45 - 135)			SW846 8270C
	64	(45 - 135)	12	(0-40)	SW846 8270C
Benzo(a)pyrene	47	(45 - 135)			SW846 8270C
	52	(45 - 135)	11	(0-40)	SW846 8270C
bis(2-Chloroethoxy) methane	63	(45 - 135)			SW846 8270C
	68	(45 - 135)	7.3	(0-40)	SW846 8270C
bis(2-Chloroethyl)-ether	61	(45 - 135)			SW846 8270C
	69	(45 - 135)	11	(0-40)	SW846 8270C
bis(2-Chloroisopropyl) ether	66	(45 - 135)			SW846 8270C
	72	(45 - 135)	8.9	(0-40)	SW846 8270C
bis(2-Ethylhexyl) phthalate	59	(45 - 135)			SW846 8270C
	63	(45 - 135)	6.3	(0-40)	SW846 8270C
4-Bromophenyl phenyl ether	60	(45 - 135)			SW846 8270C
	67	(45 - 135)	11	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	61	(50 - 150)
	68	(50 - 150)
2-Fluorobiphenyl	54	(50 - 150)
	59	(50 - 150)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHLP1AW-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200401-017 MDHLP1AX-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	65	(50 - 150)
	68	(50 - 150)
Phenol-d5	64	(50 - 150)
	68	(50 - 150)
2-Fluorophenol	63	(50 - 150)
	69	(50 - 150)
2,4,6-Tribromophenol	65	(50 - 150)
	68	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 4, 2011

SDG: A1A200401 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 2.8°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 A2HP3 1/20/11, 1/20/11 (toxaphene) Instrument A2HP9 1/31/11, 1/25/11 (toxaphene) 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 $\leq$ 20%? OR was the average %RSD $\leq$ 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 A2HP3 12/25/10 Instrument A2HP9 12/24/10	LCG Table 4 R

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 4, 2011

SDG: A1A200401 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
13. Was a MRL Verification performed at the beginning and end of the sequence or every 12 hours with results 70-130%?		✓		• On 1/25/11, the MRL at 0259(pest 3) had beta-BHC recover above control limits at 133%, heptachlor epoxide, endosulfan sulfate and alpha-chlordane at 132% and endrin aldehyde at 134%. • On 1/24/11, the MRL at 1130(pest 3r) had delta-BHC recover above control limits at 160% and 4,4'-DDD at 136%. • On 1/25/11, the MRL at 0259(pest 3r) had delta-BHC recover above control limits at 166% and 4,4'-DDD at 136%. • On 2/4/11, the MRL at 1058 (pest 3) had endrin aldehyde recover above control limits at 134% and endosulfan sulfate at 131%. • On 2/4/11, the MRL analyzed at 1702(pest3r) all analytes with the exception of alpha and delta-BHC, 4,4'-DDE, DDD and DDT and methoxychlor were above control limits. • On 2/4/11, the MRL at 1058 (pest 3r) had delta-BHC recover above control limits at 161% . • On 2/8/11, the MRL at 0308 (pest 3r) had heptachlor epoxide recover above control limits at 134% and alpha-chlordane at 136%. As all outliers were above control limits, no qualification was made for nondetect results. beta-BHC for samples FWGLL3mw-238c-1650-GW and FWGLL3mw-239c-1651-GW were the only detected results and were qualified as estimated, "J".	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 A2HP3 1/20/11 @ 1604, Tox 1/20/11 @1534 The toxaphene ICV (3r) analyzed 1/20/10 had a %D above control limits. No qualification required as there were no detected toxaphene concentrations reported. Instrument A2HP9 2/7/11 @ 1142, tox 1/25/11 @ 1729	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R
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%?	✓			• The CCV analyzed 1/24/11 @ 2049(pest3) had an average %D of 29%. All target analytes with outlier %D were above control limits. • The CCV analyzed 1/24/11 @ 2049(pest3r) had an average %D of 21%. All target analytes with outlier %D were above control limits. • The CCV analyzed 2/4/11 @ 1632(pest3) had an average %D of 34%. All target analytes with outlier %D were above control limits. • The CCV analyzed 2/4/11 @ 1632(pest 3r) had an average %D of 17.5%. All target analytes with outlier %D were above control limits and no detected concentrations were reported, so no qualifications were required. • The CCV analyzed 2/8/11 @ 0004(pest 9) had an average %D of 12.2%. The %D was above control limits for delta-BHC at 21%. • The CCV analyzed 2/8/11 @ 0245(pest 9) had an average %D of	LCG Table 4 D>30% (neg) =J/R D>30% (pos) = J

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 4, 2011

SDG: A1A200401 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
				19.4%. All target analytes with outlier %D were above control limits. • The CCV analyzed 2/8/11 @ 0245(pest 9r) had an average %D of 19.8%. All target analytes with outlier %D were above control limits. As all outliers were above control limits, no qualification was made for nondetect results. beta-BHC for samples FWGLL3mw-238c-1650-GW and FWGLL3mw-239c-1651-GW were the only detected results and were qualified as estimated, "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 FWGCBPmw-005c-1657-GW at 34%, FWGFBQmw-174c-1673-GW at 46%, FWGLL3mw-238c-1650-GW at 31%, FWGLL4mw-196c-1653-GW at 32%, FWGLL4mw-197c-1654-GW at 37%, FWGLNWmw-025c-1674-GW at 21%, FWGSCFmw-005-1686-GW at 26%, FWGWBGmw-005c-1675-GW at 32%, FWGWBGmw-006c-1676-GW at 49%, FWGWBGmw-007c-1677-GW at 43% and FWGWBGmw-DUP5-1696-GW at 38%. The results for FWGCBPmw-005c-1657-GW, FWGFBQmw-174c-1673-GW, FWGLL3mw-238c-1650-GW, FWGLL4mw-196c-1653-GW, FWGLL4mw-197c-1654-GW, FWGLNWmw-025c-1674-GW, FWGSCFmw-005-1686-GW, FWGWBGmw-005c-1675-GW, FWGWBGmw-006c-1676-GW, FWGWBGmw-	LCG Table 4 >150%=J; 10% -50%=J/UJ; <10%=J/R

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 4, 2011

SDG: A1A200401 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
				007c-1677-GW and FWGWBGmw-DUP5-1696-GW were qualified as estimated, "UJ".	
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?	✓				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.	✓			Samples FWGLNWmw-025c-1674-GW, FWGWBGmw-007c-1677-GW , FWGLL4mw-197c-1654-GW, FWGLL4mw-196c-1653-GW, FWGSCFmw-005-1686-GW, FWGWBGmw-005c-1675-GW , FWGWBGmw-DUP5-1696-GW , FWGWBGmw-006c-1676-GW and FWGCBPmw-005c-1657-GW were diluted, elevating reporting limits.	

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

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLNWmw-025C-1674-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-001 **Work Order #...:** MDHK51AD **Matrix.....:** WG
Date Sampled...: 01/19/11 09:03 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1020063
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	21 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-007C-1677-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-004 **Work Order #...:** MDHK91AD **Matrix.....:** WG
Date Sampled...: 01/19/11 11:19 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1020063
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	90	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-006 **Work Order #...:** MDHLC1AD **Matrix.....:** WG
Date Sampled...: 01/19/11 13:21 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 02/08/11
Prep Batch #...: 1020063
Dilution Factor: 10 **Initial Wgt/Vol:** 1000 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.30	ug/L	0.070
beta-BHC	ND	0.30	ug/L	0.084
delta-BHC	ND	0.30	ug/L	0.087
gamma-BHC (Lindane)	ND	0.30	ug/L	0.064
Heptachlor	ND	0.30	ug/L	0.080
Aldrin	ND	0.30	ug/L	0.082
Heptachlor epoxide	ND	0.30	ug/L	0.071
Endosulfan I	ND	0.25	ug/L	0.13
Dieldrin	ND	0.30	ug/L	0.075
4,4'-DDE	ND	0.30	ug/L	0.097
Endrin	ND	0.30	ug/L	0.11
Endosulfan II	ND	0.25	ug/L	0.12
4,4'-DDD	ND	0.30	ug/L	0.096
Endosulfan sulfate	ND	0.30	ug/L	0.11
4,4'-DDT	ND	0.30	ug/L	0.16
Methoxychlor	ND	1.0	ug/L	0.32
Endrin ketone	ND	0.30	ug/L	0.078
Endrin aldehyde	ND	0.30	ug/L	0.11
alpha-Chlordane	ND	0.30	ug/L	0.14
gamma-Chlordane	ND	0.30	ug/L	0.12
Toxaphene	ND	20	ug/L	3.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	99 DIL	(50 - 150)
Decachlorobiphenyl	46 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: FWGLL4mw-197C-1654-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-008 **Work Order #...:** MDHLE1AD **Matrix.....:** WG
Date Sampled...: 01/19/11 15:04 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1020063
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	95	(50 - 150)
Decachlorobiphenyl	37 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-010 **Work Order #...:** MDHLG1AD **Matrix.....:** WG
Date Sampled...: 01/19/11 16:29 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1020063
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	40 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1686-GW

GC Semivolatiles

Lot-Sample #...:	A1A200401-013	**Work Order #...:**	MDHLK1AD	**Matrix.....:**	WG
Date Sampled...:	01/19/11 09:15	**Date Received..:**	01/20/11		
Prep Date.....:	01/20/11	**Analysis Date..:**	01/24/11		
Prep Batch #...:	1020063				
Dilution Factor:	1	**Initial Wgt/Vol:**	1030 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	26 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1687-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-015 **Work Order #...:** MDHLM1AD **Matrix.....:** WG
Date Sampled...: 01/19/11 11:20 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1020063
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(50 - 150)
Decachlorobiphenyl	67	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1684-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-017 **Work Order #...:** MDHLP1AH **Matrix.....:** WG
Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1020063
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	96	(50 - 150)
Decachlorobiphenyl	73	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-019 **Work Order #...:** MDHLR1AD **Matrix.....:** WG
Date Sampled...: 01/19/11 15:25 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 02/08/11
Prep Batch #...: 1020063
Dilution Factor: 10 **Initial Wgt/Vol:** 1040 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.30	ug/L	0.070
beta-BHC	**0.15 J**	**0.30**	**ug/L**	**0.084**
delta-BHC	ND	0.30	ug/L	0.087
gamma-BHC (Lindane)	ND	0.30	ug/L	0.064
Heptachlor	ND	0.30	ug/L	0.080
Aldrin	ND	0.30	ug/L	0.082
Heptachlor epoxide	ND	0.30	ug/L	0.071
Endosulfan I	ND	0.25	ug/L	0.13
Dieldrin	ND	0.30	ug/L	0.075
4,4'-DDE	ND	0.30	ug/L	0.097
Endrin	ND	0.30	ug/L	0.11
Endosulfan II	ND	0.25	ug/L	0.12
4,4'-DDD	ND	0.30	ug/L	0.096
Endosulfan sulfate	ND	0.30	ug/L	0.11
4,4'-DDT	ND	0.30	ug/L	0.16
Methoxychlor	ND	1.0	ug/L	0.32
Endrin ketone	ND	0.30	ug/L	0.078
Endrin aldehyde	ND	0.30	ug/L	0.11
alpha-Chlordane	ND	0.30	ug/L	0.14
gamma-Chlordane	ND	0.30	ug/L	0.12
Toxaphene	ND	20	ug/L	3.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	99 DIL	(50 - 150)
Decachlorobiphenyl	31 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.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-005C-1675-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-022	**Work Order #...:** MDHLW1AD	**Matrix.....:** WG	
Date Sampled...: 01/19/11 09:05	**Date Received..:** 01/20/11		
Prep Date.....: 01/20/11	**Analysis Date..:** 01/24/11		
Prep Batch #...: 1020063			
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	89	(50 - 150)
Decachlorobiphenyl	32 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-DUP5-1696-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-024 **Work Order #...:** MDHL11AD **Matrix.....:** WG
Date Sampled...: 01/19/11 10:05 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1020063
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	89	(50 - 150)
Decachlorobiphenyl	38 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-026 **Work Order #...:** MDHL31AD **Matrix.....:** WG
Date Sampled...: 01/19/11 11:15 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 02/04/11
Prep Batch #...: 1020063
Dilution Factor: 2 **Initial Wgt/Vol:** 1030 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.060	ug/L	0.014
beta-BHC	ND	0.060	ug/L	0.017
delta-BHC	ND	0.060	ug/L	0.017
gamma-BHC (Lindane)	ND	0.060	ug/L	0.013
Heptachlor	ND	0.060	ug/L	0.016
Aldrin	ND	0.060	ug/L	0.016
Heptachlor epoxide	ND	0.060	ug/L	0.014
Endosulfan I	ND	0.050	ug/L	0.026
Dieldrin	ND	0.060	ug/L	0.015
4,4'-DDE	ND	0.060	ug/L	0.019
Endrin	ND	0.060	ug/L	0.022
Endosulfan II	ND	0.050	ug/L	0.024
4,4'-DDD	ND	0.060	ug/L	0.019
Endosulfan sulfate	ND	0.060	ug/L	0.022
4,4'-DDT	ND	0.060	ug/L	0.032
Methoxychlor	ND	0.20	ug/L	0.064
Endrin ketone	ND	0.060	ug/L	0.016
Endrin aldehyde	ND	0.060	ug/L	0.022
alpha-Chlordane	ND	0.060	ug/L	0.028
gamma-Chlordane	ND	0.060	ug/L	0.024
Toxaphene	ND	4.0	ug/L	0.64

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
Decachlorobiphenyl	49 *	(50 - 150)

NOTE(S):

* 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: FWGWBGmw-009C-1678-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-028 **Work Order #...:** MDHL51AD **Matrix.....:** WG
Date Sampled...: 01/19/11 12:30 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1020063
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	101	(50 - 150)
Decachlorobiphenyl	56	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-030 **Work Order #...:** MDHL71AD **Matrix.....:** WQ
Date Sampled...: 01/19/11 13:30 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1020063
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	92	(50 - 150)
Decachlorobiphenyl	79	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-031 **Work Order #...:** MDHL81AD **Matrix.....:** WG
Date Sampled...: 01/19/11 15:00 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1020063
Dilution Factor: 1 **Initial Wgt/Vol:** 960 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	**0.011 J**	**0.030**	**ug/L**	**0.0084**
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(50 - 150)
Decachlorobiphenyl	51	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-005C-1657-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-033 **Work Order #...:** MDHMA1AD **Matrix.....:** WG
Date Sampled...: 01/19/11 16:10 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/25/11
Prep Batch #...: 1020063
Dilution Factor: 1 **Initial Wgt/Vol:** 930 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
alpha-BHC	ND	0.030	ug/L	0.0070
beta-BHC	ND	0.030	ug/L	0.0084
delta-BHC	ND	0.030	ug/L	0.0087
gamma-BHC (Lindane)	ND	0.030	ug/L	0.0064
Heptachlor	ND	0.030	ug/L	0.0080
Aldrin	ND	0.030	ug/L	0.0082
Heptachlor epoxide	ND	0.030	ug/L	0.0071
Endosulfan I	ND	0.025	ug/L	0.013
Dieldrin	ND	0.030	ug/L	0.0075
4,4'-DDE	ND	0.030	ug/L	0.0097
Endrin	ND	0.030	ug/L	0.011
Endosulfan II	ND	0.025	ug/L	0.012
4,4'-DDD	ND	0.030	ug/L	0.0096
Endosulfan sulfate	ND	0.030	ug/L	0.011
4,4'-DDT	ND	0.030	ug/L	0.016
Methoxychlor	ND	0.10	ug/L	0.032
Endrin ketone	ND	0.030	ug/L	0.0078
Endrin aldehyde	ND	0.030	ug/L	0.011
alpha-Chlordane	ND	0.030	ug/L	0.014
gamma-Chlordane	ND	0.030	ug/L	0.012
Toxaphene	ND	2.0	ug/L	0.32

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(50 - 150)
Decachlorobiphenyl	34 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-008C-1659-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-035 **Work Order #...:** MDHMD1AD **Matrix.....:** WG
Date Sampled...: 01/19/11 17:05 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/25/11
Prep Batch #...: 1020063
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	96	(50 - 150)
Decachlorobiphenyl	59	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHMJ1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A200000-063

Prep Date.....: 01/20/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/24/11 **Prep Batch #...:** 1020063
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	98	(50 - 150)
Decachlorobiphenyl	77	(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 #...: A1A200401 **Work Order #...:** MDHMJ1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A200000-063
Prep Date.....: 01/20/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1020063
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
alpha-BHC	110	(44 - 137)	**SW846 8081A**
beta-BHC	103	(50 - 135)	**SW846 8081A**
delta-BHC	97	(58 - 160)	**SW846 8081A**
gamma-BHC (Lindane)	109	(58 - 127)	**SW846 8081A**
Heptachlor	106	(48 - 150)	**SW846 8081A**
Aldrin	104	(53 - 128)	**SW846 8081A**
Heptachlor epoxide	107	(50 - 127)	**SW846 8081A**
Endosulfan I	67	(50 - 160)	**SW846 8081A**
Dieldrin	113	(50 - 124)	**SW846 8081A**
4,4'-DDE	107	(50 - 130)	**SW846 8081A**
Endrin	114	(50 - 137)	**SW846 8081A**
Endosulfan II	76	(50 - 144)	**SW846 8081A**
4,4'-DDD	102	(50 - 137)	**SW846 8081A**
Endosulfan sulfate	103	(50 - 160)	**SW846 8081A**
4,4'-DDT	104	(50 - 145)	**SW846 8081A**
Methoxychlor	106	(50 - 160)	**SW846 8081A**
Endrin ketone	99	(50 - 150)	**SW846 8081A**
Endrin aldehyde	83	(30 - 160)	**SW846 8081A**
alpha-Chlordane	105	(50 - 122)	**SW846 8081A**
gamma-Chlordane	108	(50 - 130)	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(50 - 150)
Decachlorobiphenyl	88	(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 #...: A1A200401 Work Order #...: MDHK51AL-MS Matrix.....: WG
MS Lot-Sample #: A1A200401-001 MDHK51AM-MSD
Date Sampled...: 01/19/11 09:03 Date Received..: 01/20/11
Prep Date.....: 01/20/11 Analysis Date..: 01/24/11
Prep Batch #...: 1020063
Dilution Factor: 2 Initial Wgt/Vol: 525 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	102	(50 - 150)			SW846 8081A
	101	(50 - 150)	1.0	(0-50)	SW846 8081A
beta-BHC	93	(50 - 150)			SW846 8081A
	90	(50 - 150)	3.7	(0-50)	SW846 8081A
delta-BHC	89	(50 - 150)			SW846 8081A
	86	(50 - 150)	2.9	(0-50)	SW846 8081A
gamma-BHC (Lindane)	100	(50 - 150)			SW846 8081A
	100	(50 - 150)	0.78	(0-50)	SW846 8081A
Heptachlor	94	(50 - 150)			SW846 8081A
	95	(50 - 150)	1.0	(0-50)	SW846 8081A
Aldrin	94	(50 - 150)			SW846 8081A
	94	(50 - 150)	0.39	(0-50)	SW846 8081A
Heptachlor epoxide	94	(50 - 150)			SW846 8081A
	94	(50 - 150)	0.05	(0-50)	SW846 8081A
Endosulfan I	60	(50 - 150)			SW846 8081A
	60	(50 - 150)	0.70	(0-50)	SW846 8081A
Dieldrin	97	(50 - 150)			SW846 8081A
	97	(50 - 150)	0.70	(0-50)	SW846 8081A
4,4'-DDE	88	(50 - 150)			SW846 8081A
	92	(50 - 150)	4.0	(0-50)	SW846 8081A
Endrin	100	(50 - 150)			SW846 8081A
	98	(50 - 150)	1.3	(0-50)	SW846 8081A
Endosulfan II	67	(50 - 150)			SW846 8081A
	67	(50 - 150)	0.07	(0-50)	SW846 8081A
4,4'-DDD	95	(50 - 150)			SW846 8081A
	94	(50 - 150)	0.38	(0-50)	SW846 8081A
Endosulfan sulfate	89	(50 - 150)			SW846 8081A
	90	(50 - 150)	1.0	(0-50)	SW846 8081A
4,4'-DDT	82	(50 - 150)			SW846 8081A
	87	(50 - 150)	5.4	(0-50)	SW846 8081A
Methoxychlor	90	(50 - 150)			SW846 8081A
	95	(50 - 150)	4.4	(0-50)	SW846 8081A
Endrin ketone	85	(50 - 150)			SW846 8081A
	87	(50 - 150)	2.2	(0-50)	SW846 8081A
Endrin aldehyde	71	(50 - 150)			SW846 8081A
	72	(50 - 150)	0.44	(0-50)	SW846 8081A
alpha-Chlordane	93	(50 - 150)			SW846 8081A
	93	(50 - 150)	0.67	(0-50)	SW846 8081A
gamma-Chlordane	94	(50 - 150)			SW846 8081A
	96	(50 - 150)	1.6	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHK51AL-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200401-001 MDHK51AM-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
	88	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)
	56	(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 #...: A1A200401 Work Order #...: MDHLP1A0-MS Matrix.....: WG
MS Lot-Sample #: A1A200401-017 MDHLP1A1-MSD
Date Sampled...: 01/19/11 12:50 Date Received..: 01/20/11
Prep Date.....: 01/20/11 Analysis Date..: 01/24/11
Prep Batch #...: 1020063
Dilution Factor: 2 Initial Wgt/Vol: 465 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	123	(50 - 150)			SW846 8081A
	109	(50 - 150)	11	(0-50)	SW846 8081A
beta-BHC	110	(50 - 150)			SW846 8081A
	95	(50 - 150)	14	(0-50)	SW846 8081A
delta-BHC	108	(50 - 150)			SW846 8081A
	93	(50 - 150)	16	(0-50)	SW846 8081A
gamma-BHC (Lindane)	120	(50 - 150)			SW846 8081A
	106	(50 - 150)	13	(0-50)	SW846 8081A
Heptachlor	111	(50 - 150)			SW846 8081A
	98	(50 - 150)	13	(0-50)	SW846 8081A
Aldrin	114	(50 - 150)			SW846 8081A
	102	(50 - 150)	11	(0-50)	SW846 8081A
Heptachlor epoxide	116	(50 - 150)			SW846 8081A
	100	(50 - 150)	15	(0-50)	SW846 8081A
Endosulfan I	75	(50 - 150)			SW846 8081A
	64	(50 - 150)	16	(0-50)	SW846 8081A
Dieldrin	122	(50 - 150)			SW846 8081A
	102	(50 - 150)	18	(0-50)	SW846 8081A
4,4'-DDE	119	(50 - 150)			SW846 8081A
	100	(50 - 150)	17	(0-50)	SW846 8081A
Endrin	122	(50 - 150)			SW846 8081A
	102	(50 - 150)	18	(0-50)	SW846 8081A
Endosulfan II	83	(50 - 150)			SW846 8081A
	69	(50 - 150)	19	(0-50)	SW846 8081A
4,4'-DDD	115	(50 - 150)			SW846 8081A
	95	(50 - 150)	19	(0-50)	SW846 8081A
Endosulfan sulfate	113	(50 - 150)			SW846 8081A
	92	(50 - 150)	20	(0-50)	SW846 8081A
4,4'-DDT	114	(50 - 150)			SW846 8081A
	92	(50 - 150)	21	(0-50)	SW846 8081A
Methoxychlor	114	(50 - 150)			SW846 8081A
	94	(50 - 150)	19	(0-50)	SW846 8081A
Endrin ketone	108	(50 - 150)			SW846 8081A
	88	(50 - 150)	20	(0-50)	SW846 8081A
Endrin aldehyde	89	(50 - 150)			SW846 8081A
	74	(50 - 150)	18	(0-50)	SW846 8081A
alpha-Chlordane	117	(50 - 150)			SW846 8081A
	100	(50 - 150)	16	(0-50)	SW846 8081A
gamma-Chlordane	119	(50 - 150)			SW846 8081A
	101	(50 - 150)	16	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHLP1A0-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200401-017 MDHLP1A1-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	98	(50 - 150)
	90	(50 - 150)
Decachlorobiphenyl	105	(50 - 150)
	87	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

FORM 8
PESTICIDES ANALYTICAL SEQUENCE

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1A200401

GC Column: CLP PESTICIDES II ID: 0.53 (mm) Init. Calib. Date(s): 01/10/11 01/20/11

Instrument ID: A2HP3

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

				MEAN SURROGATE RT FROM INITIAL CALIBRATION			
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT	#	RT	#
01		PEM E216	01/24/11	0928				
02		AB3 E212	01/24/11	1029				
03		TOX3 F004	01/24/11	1059				
04		MRL	01/24/11	1130				
05	MDHMJCHK	MDHMJ1AC	01/24/11	1200				
06	FWGLNWMW-025	MDHK51AD	01/24/11	1230				
07	FWGLNWMW-025	MDHK51AL	01/24/11	1300				
08	FWGLNWMW-025	MDHK51AM	01/24/11	1331				
09	FWGWBGMW-007	MDHK91AD	01/24/11	1402				
10	FWGLL4MW-197	MDHLE1AD	01/24/11	1503				
11	FWGLL4MW-196	MDHLG1AD	01/24/11	1533				
12	FWGSCFMW-005	MDHLK1AD	01/24/11	1604				
13	FWGSCFMW-006	MDHLM1AD	01/24/11	1634				
14	FWGSCFMW-003	MDHLP1AH	01/24/11	1705				
15	FWGSCFMW-003	MDHLP1A0	01/24/11	1736				
16	FWGSCFMW-003	MDHLP1A1	01/24/11	1806				
17	MDHMJBLK	MDHMJ1AA	01/24/11	1948				
18		PEM E216	01/24/11	2018				
19		AB3 E212	01/24/11	2049	↑			
20	FWGWBGMW-005	MDHLW1AD	01/24/11	2119				
21	FWGWBGMW-DUP	MDHL11AD	01/24/11	2149				
22	FWGWBGMW-009	MDHL51AD	01/24/11	2249				
23	FWGEQUIPRINS	MDHL71AD	01/24/11	2318				
24	FWGLL3MW-239	MDHL81AD	01/24/11	2348				
25	FWGCPBMW-005	MDHMA1AD	01/25/11	0018				
26	FWGCPBMW-008	MDHMD1AD	01/25/11	0129				
27		TOX3 F004	01/25/11	0159				
28		AB3 E212	01/25/11	0229				
29		MRL	01/25/11	0259	↑			
30								
31								
32								

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Data File: \\cansvr11\dd\chem\GCS\a2hp3.i\110124-1.b\024F2401.D Page 1
Report Date: 03-Feb-2011 13:09

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 24-JAN-2011 20:49
Lab File ID: 024F2401.D Init. Cal. Date(s): 10-JAN-2011 20-JAN-2011
Analysis Type: Init. Cal. Times: 08:50 15:04
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110124-1.b\PEST3.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	22721513	27689560	27689560	0.000	-21.86495	15.00000	Averaged	<-
4 alpha-BHC	36768068	54765400	54765400	0.010	-48.94827	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	31887888	46003160	46003160	0.010	-44.26531	15.00000	Averaged	<-
6 beta-BHC	15569316	22522640	22522640	0.010	-44.66043	15.00000	Averaged	<-
7 delta-BHC	17712895	25404000	25404000	0.010	-43.42094	15.00000	Averaged	<-
9 Heptachlor	30208883	36554000	36554000	0.010	-21.00415	15.00000	Averaged	<-
10 Aldrin	14760555	20814640	20814640	0.010	-41.01529	15.00000	Averaged	<-
12 Heptachlor epoxide	11324613	15796160	15796160	0.010	-39.48520	15.00000	Averaged	<-
13 gamma-Chlordane	12167686	16545440	16545440	0.010	-35.97853	15.00000	Averaged	<-
14 alpha-Chlordane	13399169	18586800	18586800	0.010	-38.71606	15.00000	Averaged	<-
16 4,4'-DDE	14736563	18350000	18350000	0.010	-24.52021	15.00000	Averaged	<-
15 Endosulfan I	12580687	17184400	17184400	0.010	-36.59350	15.00000	Averaged	<-
17 Dieldrin	14579804	19772080	19772080	0.010	-35.61280	15.00000	Averaged	<-
20 Endrin	30433638	41557160	41557160	0.010	-36.55009	15.00000	Averaged	<-
22 4,4'-DDD	10702121	11451440	11451440	0.010	-7.00160	15.00000	Averaged	
23 Endosulfan II	14673513	18692400	18692400	0.010	-27.38871	15.00000	Averaged	<-
24 4,4'-DDT	11927563	12083720	12083720	0.010	-1.30921	15.00000	Averaged	
26 Endrin aldehyde	27018599	35022800	35022800	0.010	-29.62478	15.00000	Averaged	<-
27 Methoxychlor	13822208	14409440	14409440	0.010	-4.24846	15.00000	Averaged	
28 Endosulfan sulfate	31159714	39359920	39359920	0.010	-26.31669	15.00000	Averaged	<-
29 Endrin ketone	17548646	19921120	19921120	0.010	-13.51941	15.00000	Averaged	
$ 30 Decachlorobiphenyl	38627488	48961920	48961920	0.010	-26.75409	15.00000	Averaged	<-

Average %D / Drift Results.	
Calculated Average %D/Drift =	29.49085
Maximun Average %D/Drift =	15.00000
* Failed Average %D/Drift Test.	

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa00711
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110124-1.b\PEST3.m
Misc Info:

1/25/11 @ 0259

SPIKE	COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4	alpha-BHC	0.005000	0.005917	118.34	70-130
5	gamma-BHC (Lindane	0.005000	0.006147	122.94	70-130
6	beta-BHC	0.005000	0.006648	132.96*	70-130
7	delta-BHC	0.005000	0.005647	112.94	70-130
9	Heptachlor	0.005000	0.005709	114.18	70-130
10	Aldrin	0.005000	0.006226	124.52	70-130
12	Heptachlor epoxide	0.005000	0.006588	131.75*	70-130
13	gamma-Chlordane	0.005000	0.006324	126.48	70-130
14	alpha-Chlordane	0.005000	0.006580	131.60*	70-130
15	Endosulfan I	0.005000	0.006507	130.14*	70-130
16	4,4'-DDE	0.005000	0.005110	102.21	70-130
17	Dieldrin	0.005000	0.006170	123.40	70-130
20	Endrin	0.005000	0.006394	127.89	70-130
22	4,4'-DDD	0.005000	0.004621	92.42	70-130
23	Endosulfan II	0.005000	0.006385	127.69	70-130
24	4,4'-DDT	0.005000	0.004841	96.83	70-130
26	Endrin aldehyde	0.005000	0.006744	134.89*	70-130
27	Methoxychlor	0.005000	0.005095	101.91	70-130
28	Endosulfan sulfate	0.005000	0.006606	132.13*	70-130
29	Endrin ketone	0.005000	0.006214	124.27	70-130

Data File: 006F0601.D
Report Date: 03-Feb-2011 13:17

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: MRL
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: MRL.spk
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110124-1.b\PEST3.m\pest3r.m
Misc Info:

Client SDG: SDGa00711
Fraction: Pesticides

Operator: 093905
SampleType: MRL
Quant Type: ESTD

1/24/11
a
1130

SPIKE	COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4	alpha-BHC	0.005000	0.004237	84.74	70-130
5	gamma-BHC (Lindane	0.005000	0.004472	89.45	70-130
6	beta-BHC	0.005000	0.004870	97.40	70-130
7	delta-BHC	0.005000	0.008009	160.18*	70-130
8	Heptachlor	0.005000	0.004721	94.41	70-130
10	Aldrin	0.005000	0.004695	93.90	70-130
12	Heptachlor epoxide	0.005000	0.004790	95.80	70-130
13	gamma-Chlordane	0.005000	0.004701	94.02	70-130
14	alpha-Chlordane	0.005000	0.004723	94.46	70-130
15	Endosulfan I	0.005000	0.004960	99.20	70-130
16	4,4'-DDE	0.005000	0.004648	92.95	70-130
17	Dieldrin	0.005000	0.004653	93.06	70-130
20	Endrin	0.005000	0.004702	94.04	70-130
22	4,4'-DDD	0.005000	0.006789	135.79*	70-130
23	Endosulfan II	0.005000	0.004980	99.59	70-130
24	4,4'-DDT	0.005000	0.004696	93.93	70-130
25	Endrin aldehyde	0.005000	0.005264	105.28	70-130
26	Endosulfan sulfate	0.005000	0.005238	104.77	70-130
28	Methoxychlor	0.005000	0.005110	102.20	70-130
29	Endrin ketone	0.005000	0.005103	102.05	70-130

Data File: 024F2401.D
Report Date: 03-Feb-2011 13:18

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i
Lab File ID: 024F2401.D
Analysis Type:
Lab Sample ID: AB3 E212
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110124-1.b\PEST3.m\pest3r.m

Injection Date: 24-JAN-2011 20:49
Init. Cal. Date(s): 10-JAN-2011 20-JAN-2011
Init. Cal. Times: 08:50 15:04
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	97814093	115755480	115755480	0.000	-18.34233	15.00000	Averaged	<-
4 alpha-BHC	112769180	144137200	144137200	0.010	-27.81613	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	101731081	130117600	130117600	0.010	-27.90349	15.00000	Averaged	<-
6 beta-BHC	19925113	24855880	24855880	0.010	-24.74649	15.00000	Averaged	<-
7 delta-BHC	0.02500	0.02958	4727640	0.010	-18.33722	0.000e+000	Linear	
8 Heptachlor	36304750	45551560	45551560	0.010	-25.46997	15.00000	Averaged	<-
10 Aldrin	100167321	128373280	128373280	0.010	-28.15884	15.00000	Averaged	<-
12 Heptachlor epoxide	39857993	50220760	50220760	0.010	-25.99922	15.00000	Averaged	<-
13 gamma-Chlordane	40840553	50550440	50550440	0.010	-23.77511	15.00000	Averaged	<-
14 alpha-Chlordane	41327792	52080520	52080520	0.010	-26.01815	15.00000	Averaged	<-
15 Endosulfan I	78114612	98370160	98370160	0.010	-25.93055	15.00000	Averaged	<-
16 4,4'-DDE	78377130	94061360	94061360	0.010	-20.01123	15.00000	Averaged	<-
17 Dieldrin	41566492	52159200	52159200	0.010	-25.48377	15.00000	Averaged	<-
20 Endrin	38911467	47728360	47728360	0.010	-22.65886	15.00000	Averaged	<-
22 4,4'-DDD	0.02500	0.02621	5582624	0.010	-4.83960	0.000e+000	Linear	
23 Endosulfan II	40663730	49989360	49989360	0.010	-22.93353	15.00000	Averaged	<-
24 4,4'-DDT	61021513	70790960	70790960	0.010	-16.00984	15.00000	Averaged	<-
25 Endrin aldehyde	56526679	70422360	70422360	0.010	-24.58252	15.00000	Averaged	<-
26 Endosulfan sulfate	64004696	75909560	75909560	0.010	-18.59999	15.00000	Averaged	<-
28 Methoxychlor	32206227	36300720	36300720	0.010	-12.71336	15.00000	Averaged	
29 Endrin ketone	70045669	82256360	82256360	0.010	-17.43247	15.00000	Averaged	<-
$ 30 Decachlorobiphenyl	67868448	77419720	77419720	0.010	-14.07321	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 21.44709
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

Data File: 036F3601.D
Report Date: 03-Feb-2011 13:19

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: MRL
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: MRL.spk
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110124-1.b\PEST3.m\pest3r.m
Misc Info:

Client SDG: SDGa00711
Fraction: Pesticides

Operator: 093905
SampleType: MRL
Quant Type: ESTD

1/25/11 @ 0259

SPIKE	COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4	alpha-BHC	0.005000	0.004823	96.46	70-130
5	gamma-BHC (Lindane	0.005000	0.005076	101.52	70-130
6	beta-BHC	0.005000	0.005433	108.67	70-130
7	delta-BHC	0.005000	0.008326	166.53*	70-130
8	Heptachlor	0.005000	0.005439	108.77	70-130
10	Aldrin	0.005000	0.005330	106.59	70-130
12	Heptachlor epoxide	0.005000	0.005562	111.25	70-130
13	gamma-Chlordane	0.005000	0.005367	107.33	70-130
14	alpha-Chlordane	0.005000	0.005546	110.91	70-130
15	Endosulfan I	0.005000	0.005742	114.85	70-130
16	4,4'-DDE	0.005000	0.005240	104.79	70-130
17	Dieldrin	0.005000	0.005315	106.30	70-130
20	Endrin	0.005000	0.005513	110.26	70-130
22	4,4'-DDD	0.005000	0.006814	136.29*	70-130
23	Endosulfan II	0.005000	0.005933	118.66	70-130
24	4,4'-DDT	0.005000	0.005293	105.86	70-130
25	Endrin aldehyde	0.005000	0.006267	125.34	70-130
26	Endosulfan sulfate	0.005000	0.006005	120.10	70-130
28	Methoxychlor	0.005000	0.005615	112.30	70-130
29	Endrin ketone	0.005000	0.005911	118.21	70-130

FORM 8
PESTICIDES ANALYTICAL SEQUENCE

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1A200401

GC Column: CLP PESTICIDES ID: 0.53 (mm) Init. Calib. Date(s): 01/10/11 01/31/11

Instrument ID: A2HP3

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION						
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT	#	RT	#
01		PEM E216	02/04/11	0826				
02		AB3 E212	02/04/11	0958	0			
03		TOX3 F004	02/04/11	1028				
04		MRL	02/04/11	1058				
05	FWGWBGMW-006	MDHL31AD	02/04/11	1532				
06		TOX3 F004	02/04/11	1602				
07		AB3 E212	02/04/11	1632				
08		MRL	02/04/11	1702				
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Data File: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\006F0601.D Page 1
Report Date: 04-Feb-2011 12:13

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: MRL
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: MRL.spk
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m
Misc Info:

Client SDG: SDGa00711
Fraction: Pesticides

Operator: 093905
SampleType: MRL
Quant Type: ESTD

2/4/11
@ 1058

SPIKE	COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4	alpha-BHC	0.005000	0.005622	112.43	70-130
5	gamma-BHC (Lindane	0.005000	0.005820	116.39	70-130
6	beta-BHC	0.005000	0.006321	126.42	70-130
7	delta-BHC	0.005000	0.005292	105.85	70-130
9	Heptachlor	0.005000	0.006127	122.55	70-130
10	Aldrin	0.005000	0.006018	120.36	70-130
12	Heptachlor epoxide	0.005000	0.006213	124.26	70-130
13	gamma-Chlordane	0.005000	0.006050	121.00	70-130
14	alpha-Chlordane	0.005000	0.006169	123.38	70-130
15	Endosulfan I	0.005000	0.006034	120.68	70-130
16	4,4'-DDE	0.005000	0.004783	95.66	70-130
17	Dieldrin	0.005000	0.005924	118.48	70-130
20	Endrin	0.005000	0.006014	120.27	70-130
22	4,4'-DDD	0.005000	0.004668	93.36	70-130
23	Endosulfan II	0.005000	0.006262	125.24	70-130
24	4,4'-DDT	0.005000	0.005374	107.49	70-130
26	Endrin aldehyde	0.005000	0.006669	133.39*	70-130
27	Methoxychlor	0.005000	0.005723	114.45	70-130
28	Endosulfan sulfate	0.005000	0.006536	130.72*	70-130
29	Endrin ketone	0.005000	0.006396	127.93	70-130

Data File: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\017F1701.D Page 1
Report Date: 07-Feb-2011 07:35

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i Injection Date: 04-FEB-2011 16:32
Lab File ID: 017F1701.D Init. Cal. Date(s): 10-JAN-2011 31-JAN-2011
Analysis Type: Init. Cal. Times: 08:50 11:15
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	22721513	26537600	26537600	0.000	-16.79504	15.00000	Averaged	<-
4 alpha-BHC	36768068	54229400	54229400	0.010	-47.49048	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	31887888	45334480	45334480	0.010	-42.16834	15.00000	Averaged	<-
6 beta-BHC	15569316	22634320	22634320	0.010	-45.37774	15.00000	Averaged	<-
7 delta-BHC	17712895	25049080	25049080	0.010	-41.41720	15.00000	Averaged	<-
9 Heptachlor	30208883	39965280	39965280	0.010	-32.29645	15.00000	Averaged	<-
10 Aldrin	14760555	20904680	20904680	0.010	-41.62530	15.00000	Averaged	<-
12 Heptachlor epoxide	11324613	15905040	15905040	0.010	-40.44665	15.00000	Averaged	<-
13 gamma-Chlordane	12167686	17461440	17461440	0.010	-43.50666	15.00000	Averaged	<-
14 alpha-Chlordane	13399169	18563200	18563200	0.010	-38.53993	15.00000	Averaged	<-
16 4,4'-DDE	14736563	18084960	18084960	0.010	-22.72169	15.00000	Averaged	<-
15 Endosulfan I	12580687	16904400	16904400	0.010	-34.36786	15.00000	Averaged	<-
17 Dieldrin	14579804	20115320	20115320	0.010	-37.96701	15.00000	Averaged	<-
20 Endrin	30433638	42754240	42754240	0.010	-40.48350	15.00000	Averaged	<-
22 4,4'-DDD	10702121	12582520	12582520	0.010	-17.57034	15.00000	Averaged	<-
23 Endosulfan II	14673513	19655640	19655640	0.010	-33.95320	15.00000	Averaged	<-
24 4,4'-DDT	11927563	14367520	14367520	0.010	-20.45646	15.00000	Averaged	<-
26 Endrin aldehyde	27018599	36197040	36197040	0.010	-33.97082	15.00000	Averaged	<-
27 Methoxychlor	13822208	16884400	16884400	0.010	-22.15414	15.00000	Averaged	<-
28 Endosulfan sulfate	31159714	42442200	42442200	0.010	-36.20857	15.00000	Averaged	<-
29 Endrin ketone	17548646	22442280	22442280	0.010	-27.88611	15.00000	Averaged	<-
$ 30 Decachlorobiphenyl	38627488	49161200	49161200	0.010	-27.26999	15.00000	Averaged	<-

Average %D / Drift Results.
Calculated Average %D/Drift = 33.84879
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

Data File: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\018F1801.D Page 1
Report Date: 07-Feb-2011 07:35

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: MRL
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: MRL.spk
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m
Misc Info:

Client SDG: SDGa00711
Fraction: Pesticides

Operator: 093905
SampleType: MRL
Quant Type: ESTD

2/4/11
@ 1702

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.006208	124.16	70-130
5 gamma-BHC (Lindane	0.005000	0.006633	132.66*	70-130
6 beta-BHC	0.005000	0.007252	145.05*	70-130
7 delta-BHC	0.005000	0.006201	124.02	70-130
9 Heptachlor	0.005000	0.006651	133.01*	70-130
10 Aldrin	0.005000	0.006864	137.29*	70-130
12 Heptachlor epoxide	0.005000	0.007160	143.19*	70-130
13 gamma-Chlordane	0.005000	0.007695	153.90*	70-130
14 alpha-Chlordane	0.005000	0.007109	142.18*	70-130
15 Endosulfan I	0.005000	0.006990	139.81*	70-130
16 4,4'-DDE	0.005000	0.005800	116.00	70-130
17 Dieldrin	0.005000	0.006781	135.62*	70-130
20 Endrin	0.005000	0.006981	139.63*	70-130
22 4,4'-DDD	0.005000	0.006008	120.16	70-130
23 Endosulfan II	0.005000	0.007049	140.98*	70-130
24 4,4'-DDT	0.005000	0.006244	124.88	70-130
26 Endrin aldehyde	0.005000	0.007509	150.18*	70-130
27 Methoxychlor	0.005000	0.006118	122.36	70-130
28 Endosulfan sulfate	0.005000	0.007350	147.00*	70-130
29 Endrin ketone	0.005000	0.007165	143.30*	70-130

Data File: 006F0601.D
Report Date: 04-Feb-2011 12:14

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: MRL
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: MRL.spk
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m\pest3r.m
Misc Info:

Client SDG: SDGa00711
Fraction: Pesticides

Operator: 093905
SampleType: MRL
Quant Type: ESTD

2/4/11 1058

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.004655	93.11	70-130
5 gamma-BHC (Lindane	0.005000	0.004779	95.58	70-130
6 beta-BHC	0.005000	0.005098	101.97	70-130
7 delta-BHC	0.005000	0.008054	161.08*	70-130
8 Heptachlor	0.005000	0.005055	101.09	70-130
10 Aldrin	0.005000	0.005162	103.25	70-130
12 Heptachlor epoxide	0.005000	0.005035	100.71	70-130
13 gamma-Chlordane	0.005000	0.005007	100.14	70-130
14 alpha-Chlordane	0.005000	0.005120	102.40	70-130
15 Endosulfan I	0.005000	0.005177	103.54	70-130
16 4,4'-DDE	0.005000	0.004818	96.36	70-130
17 Dieldrin	0.005000	0.004919	98.38	70-130
20 Endrin	0.005000	0.004828	96.56	70-130
22 4,4'-DDD	0.005000	0.006266	125.31	70-130
23 Endosulfan II	0.005000	0.005275	105.51	70-130
24 4,4'-DDT	0.005000	0.004956	99.11	70-130
25 Endrin aldehyde	0.005000	0.005579	111.58	70-130
26 Endosulfan sulfate	0.005000	0.005446	108.93	70-130
28 Methoxychlor	0.005000	0.005546	110.93	70-130
29 Endrin ketone	0.005000	0.005325	106.51	70-130

Data File: 017F1701.D
Report Date: 07-Feb-2011 07:42

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp3.i
Lab File ID: 017F1701.D
Analysis Type:
Lab Sample ID: AB3 E212
Method: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m\pest3r.m

Injection Date: 04-FEB-2011 16:32
Init. Cal. Date(s): 10-JAN-2011 31-JAN-2011
Init. Cal. Times: 08:50 11:15
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	97814093	113482040	113482040	0.000	-16.01809	15.00000	Averaged	<-
4 alpha-BHC	112769180	137358840	137358840	0.010	-21.80530	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	101731081	120114760	120114760	0.010	-18.07086	15.00000	Averaged	<-
6 beta-BHC	19925113	23746840	23746840	0.010	-19.18045	15.00000	Averaged	<-
7 delta-BHC	0.02500	0.02869	4557300	0.010	-14.75917	0.000e+000	Linear	
8 Heptachlor	36304750	42324160	42324160	0.010	-16.58023	15.00000	Averaged	<-
10 Aldrin	100167321	126467600	126467600	0.010	-26.25635	15.00000	Averaged	<-
12 Heptachlor epoxide	39857993	48410280	48410280	0.010	-21.45689	15.00000	Averaged	<-
13 gamma-Chlordane	40840553	48762240	48762240	0.010	-19.39662	15.00000	Averaged	<-
14 alpha-Chlordane	41327792	50061560	50061560	0.010	-21.13292	15.00000	Averaged	<-
15 Endosulfan I	78114612	94599120	94599120	0.010	-21.10298	15.00000	Averaged	<-
16 4,4'-DDE	78377130	94087080	94087080	0.010	-20.04405	15.00000	Averaged	<-
17 Dieldrin	41566492	50142440	50142440	0.010	-20.63188	15.00000	Averaged	<-
20 Endrin	38911467	45692080	45692080	0.010	-17.42575	15.00000	Averaged	<-
22 4,4'-DDD	0.02500	0.02450	5170392	0.010	2.00011	0.000e+000	Linear	
23 Endosulfan II	40663730	47722440	47722440	0.010	-17.35874	15.00000	Averaged	<-
24 4,4'-DDT	61021513	69008320	69008320	0.010	-13.08851	15.00000	Averaged	
25 Endrin aldehyde	56526679	66724800	66724800	0.010	-18.04125	15.00000	Averaged	<-
26 Endosulfan sulfate	64004696	75258520	75258520	0.010	-17.58281	15.00000	Averaged	<-
28 Methoxychlor	32206227	35138960	35138960	0.010	-9.10611	15.00000	Averaged	
29 Endrin ketone	70045669	79817240	79817240	0.010	-13.95029	15.00000	Averaged	
$ 30 Decachlorobiphenyl	67868448	81465720	81465720	0.010	-20.03475	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 17.50109
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

Data File: 018F1801.D
Report Date: 07-Feb-2011 07:42

TestAmerica North Canton

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: MRL
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: MRL.spk
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp3.i\110204-1.b\PEST3.m\pest3r.m
Misc Info:

Client SDG: SDGa00711
Fraction: Pesticides

Operator: 093905
SampleType: MRL
Quant Type: ESTD

2/4/11 @1702

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.004961	99.22	70-130
5 gamma-BHC (Lindane	0.005000	0.005112	102.24	70-130
6 beta-BHC	0.005000	0.005688	113.76	70-130
7 delta-BHC	0.005000	0.008532	170.63*	70-130
8 Heptachlor	0.005000	0.005286	105.73	70-130
10 Aldrin	0.005000	0.005674	113.47	70-130
12 Heptachlor epoxide	0.005000	0.005909	118.18	70-130
13 gamma-Chlordane	0.005000	0.005570	111.39	70-130
14 alpha-Chlordane	0.005000	0.005817	116.34	70-130
15 Endosulfan I	0.005000	0.006078	121.56	70-130
16 4,4'-DDE	0.005000	0.005246	104.92	70-130
17 Dieldrin	0.005000	0.005394	107.88	70-130
20 Endrin	0.005000	0.005450	109.00	70-130
22 4,4'-DDD	0.005000	0.007205	144.10*	70-130
23 Endosulfan II	0.005000	0.005765	115.30	70-130
24 4,4'-DDT	0.005000	0.005419	108.39	70-130
25 Endrin aldehyde	0.005000	0.005911	118.23	70-130
26 Endosulfan sulfate	0.005000	0.006749	134.98*	70-130
28 Methoxychlor	0.005000	0.005612	112.24	70-130
29 Endrin ketone	0.005000	0.005793	115.85	70-130

Data File: 046F3601.D
Report Date: 08-Feb-2011 07:21

TestAmerica North Canton

2/8/11 @ 0308

RECOVERY REPORT

Client Name:
Client SDG: SDGa00713
Sample Matrix: LIQUID
Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW
Operator: 093905
Data Type: GC MULTI COMP
SampleType: MRL
SpikeList File: MRL.spk
Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp9.i\110207IC-1.b\PEST9.m\PEST9r.m
Misc Info:

SPIKE	COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4	alpha-BHC	0.005000	0.005818	116.37	70-130
5	gamma-BHC (Lindane	0.005000	0.006018	120.35	70-130
6	beta-BHC	0.005000	0.006277	125.54	70-130
7	delta-BHC	0.005000	0.005712	114.25	70-130
8	Heptachlor	0.005000	0.006260	125.21	70-130
10	Aldrin	0.005000	0.006017	120.34	70-130
12	Heptachlor epoxide	0.005000	0.006721	134.43*	70-130
13	gamma-Chlordane	0.005000	0.005863	117.26	70-130
14	alpha-Chlordane	0.005000	0.006779	135.58*	70-130
15	Endosulfan I	0.005000	0.006324	126.48	70-130
16	4,4'-DDE	0.005000	0.005592	111.84	70-130
17	Dieldrin	0.005000	0.005758	115.15	70-130
18	Endrin	0.005000	0.005894	117.88	70-130
21	4,4'-DDD	0.005000	0.005119	102.38	70-130
22	Endosulfan II	0.005000	0.005660	113.20	70-130
24	4,4'-DDT	0.005000	0.005308	106.17	70-130
25	Endrin aldehyde	0.005000	0.005426	108.51	70-130
26	Endosulfan sulfate	0.005000	0.005607	112.14	70-130
27	Methoxychlor	0.005000	0.005140	102.81	70-130
29	Endrin ketone	0.005000	0.005370	107.41	70-130

TestAmerica North Canton

PESTICIDES 8081/608

Data file : \\cansvr11\dd\chem\GCS\a2hp9.i\110207IC-1.b\110207IC-1.b\046F3601.D
Lab Smp Id: MRL
Inj Date : 08-FEB-2011 03:08
Operator : 093905 Inst ID: a2hp9.i
Smp Info : MRL
Misc Info :
Comment :
Method : \\cansvr11\dd\chem\GCS\a2hp9.i\110207IC-1.b\PEST9.m\PEST9r.m
Meth Date : 08-Feb-2011 07:21 vandorenc Quant Type: ESTD
Cal Date : 25-JAN-2011 14:47 Cal File: 008F0801.D
Als bottle: 46 QC Sample: MRL
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: mrl.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: CANPGCSV23

Concentration Formula: Amt * DF * Vt/Vo/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (uL)
Vo	1.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
4 alpha-BHC					CAS #: 319-84-6		
5.186	5.187	-0.001	660467	0.00582	0.005818		
55 DDD/Endosulfan II					CAS #: 72-54-8/332-65-		

Peaks not detected for Quant. or Qual. signal(s).

5 gamma-BHC (Lindane)					CAS #: 58-89-9		
5.815	5.816	-0.001	540908	0.00602	0.006018		
6 beta-BHC					CAS #: 319-85-7		
6.014	6.013	0.001	108226	0.00628	0.006277		
7 delta-BHC					CAS #: 319-86-8		
6.644	6.645	-0.001	538262	0.00571	0.005712		

FORM 8
PESTICIDES ANALYTICAL SEQUENCE

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1A200401

GC Column: CLP PESTICIDES II ID: 0.53 (mm) Init. Calib. Date(s): 12/15/10 02/07/11

Instrument ID: A2HP9

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION					
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		PEM E216	02/07/11	1755		
02		TOX3 F004	02/07/11	2318		
03		AB3 E212	02/08/11	0004		
04		MRL	02/08/11	0027		
05	FWGFBQMW-174	MDHLC1AD	02/08/11	0136		
06	FWGLL3MW-238	MDHLR1AD	02/08/11	0159		
07		TOX3 F004	02/08/11	0222		
08		AB3 E212	02/08/11	0245		
09		MRL	02/08/11	0308		
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Data File: \\cansvr11\dd\chem\GCS\a2hp9.i\110207IC-1.b/022F1201.D
Report Date: 02/08/2011

EVALB Degradation Report

Instrument ID: a2hp9.i Injection Date: 07-FEB-2011 17:55
Lab File ID: 022F1201.D Lab Sample ID: PEM E216
Analysis Type: NONE Method File: \\cansvr11\dd\chem\GCS\a2hp9.i\110207IC-1.b\

4,4'-DDT Degradation

RT	Area	Compound
10.222	6543716	4,4'-DDT
8.5594	91828	4,4'-DDE
9.7361	143680	4,4'-DDD

Percent Degradation of 4,4'-DDT: 3.47

Endrin Degradation

RT	Area	Compound
9.4244	4020744	Endrin
10.595	42836	Endrin aldehyde
11.687	150521	Endrin ketone

Percent Degradation of Endrin: 4.59

Data File: \\cansvr11\dd\chem\GCS\a2hp9.i\110207IC-1.b\038F2801.D Page 1
Report Date: 08-Feb-2011 06:43

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 08-FEB-2011 00:04
Lab File ID: 038F2801.D Init. Cal. Date(s): 15-DEC-2010 07-FEB-2011
Analysis Type: Init. Cal. Times: 12:37 11:19
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110207IC-1.b\PEST9.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	62239474	71034240	71034240	0.000	-14.13053	15.00000	Averaged	
4 alpha-BHC	116306356	140032520	140032520	0.010	-20.39971	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	53434823	63088520	63088520	0.010	-18.06630	15.00000	Averaged	<-
6 beta-BHC	40411625	47192120	47192120	0.010	-16.77858	15.00000	Averaged	<-
7 delta-BHC	99618635	120057080	120057080	0.010	-20.51669	15.00000	Averaged	<-
8 Heptachlor	81562179	91100920	91100920	0.010	-11.69505	15.00000	Averaged	
10 Aldrin	43862644	50682360	50682360	0.010	-15.54789	15.00000	Averaged	<-
12 Heptachlor epoxide	27857292	32681360	32681360	0.010	-17.31708	15.00000	Averaged	<-
13 gamma-Chlordane	30229883	34609080	34609080	0.010	-14.48632	15.00000	Averaged	
14 alpha-Chlordane	32117688	36551400	36551400	0.010	-13.80458	15.00000	Averaged	
15 Endosulfan I	79427750	92973360	92973360	0.010	-17.05400	15.00000	Averaged	<-
16 4,4'-DDE	103943036	117085520	117085520	0.010	-12.64393	15.00000	Averaged	
17 Dieldrin	34761925	39957200	39957200	0.010	-14.94530	15.00000	Averaged	
18 Endrin	29170775	32209160	32209160	0.010	-10.41585	15.00000	Averaged	
20 4,4'-DDD	57515087	61321640	61321640	0.010	-6.61836	15.00000	Averaged	
22 Endosulfan II	31008392	34747080	34747080	0.010	-12.05702	15.00000	Averaged	
23 4,4'-DDT	58684498	60911160	60911160	0.010	-3.79429	15.00000	Averaged	
25 Endrin aldehyde	22220751	23462360	23462360	0.010	-5.58761	15.00000	Averaged	
27 Methoxychlor	12352787	12595040	12595040	0.010	-1.96112	15.00000	Averaged	
28 Endosulfan sulfate	31682007	34743840	34743840	0.010	-9.66427	15.00000	Averaged	
29 Endrin ketone	34992482	36595520	36595520	0.010	-4.58109	15.00000	Averaged	
$ 30 Decachlorobiphenyl	39581446	42149600	42149600	0.010	-6.48828	15.00000	Averaged	

Average %D / Drift Results.
Calculated Average %D/Drift = 12.20699
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: \\cansvr11\dd\chem\GCS\a2hp9.i\110207IC-1.b\045F3501.D Page 1
Report Date: 08-Feb-2011 06:49

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 08-FEB-2011 02:45
Lab File ID: 045F3501.D Init. Cal. Date(s): 15-DEC-2010 07-FEB-2011
Analysis Type: Init. Cal. Times: 12:37 11:19
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110207IC-1.b\PEST9.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	62239474	74977160	74977160	0.000	-20.46561	15.00000	Averaged	<-
4 alpha-BHC	116306356	144793520	144793520	0.010	-24.49321	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	53434823	65880280	65880280	0.010	-23.29091	15.00000	Averaged	<-
6 beta-BHC	40411625	51933200	51933200	0.010	-28.51055	15.00000	Averaged	<-
7 delta-BHC	99618635	125358320	125358320	0.010	-25.83822	15.00000	Averaged	<-
8 Heptachlor	81562179	101063760	101063760	0.010	-23.91008	15.00000	Averaged	<-
10 Aldrin	43862644	52512440	52512440	0.010	-19.72019	15.00000	Averaged	<-
12 Heptachlor epoxide	27857292	34887880	34887880	0.010	-25.23787	15.00000	Averaged	<-
13 gamma-Chlordane	30229883	35920680	35920680	0.010	-18.82507	15.00000	Averaged	<-
14 alpha-Chlordane	32117688	38258480	38258480	0.010	-19.11966	15.00000	Averaged	<-
15 Endosulfan I	79427750	97550920	97550920	0.010	-22.81718	15.00000	Averaged	<-
16 4,4'-DDE	103943036	126833640	126833640	0.010	-22.02226	15.00000	Averaged	<-
17 Dieldrin	34761925	42047040	42047040	0.010	-20.95717	15.00000	Averaged	<-
18 Endrin	29170775	34885320	34885320	0.010	-19.58997	15.00000	Averaged	<-
20 4,4'-DDD	57515087	65356720	65356720	0.010	-13.63405	15.00000	Averaged	
22 Endosulfan II	31008392	36373560	36373560	0.010	-17.30231	15.00000	Averaged	<-
23 4,4'-DDT	58684498	67557080	67557080	0.010	-15.11912	15.00000	Averaged	<-
25 Endrin aldehyde	22220751	25811920	25811920	0.010	-16.16133	15.00000	Averaged	<-
27 Methoxychlor	12352787	13875080	13875080	0.010	-12.32348	15.00000	Averaged	
28 Endosulfan sulfate	31682007	36514320	36514320	0.010	-15.25255	15.00000	Averaged	<-
29 Endrin ketone	34992482	39252000	39252000	0.010	-12.17267	15.00000	Averaged	
$ 30 Decachlorobiphenyl	39581446	43763760	43763760	0.010	-10.56635	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 19.42408
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 08-FEB-2011 02:45
Lab File ID: 045F3501.D Init. Cal. Date(s): 15-DEC-2010 07-FEB-2011
Analysis Type: Init. Cal. Times: 12:37 11:19
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110207IC-1.b\PEST9.m\PEST9r.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	57357834	70296320	70296320	0.000	-22.55749	15.00000	Averaged	<-
4 alpha-BHC	113513431	140315480	140315480	0.010	-23.61135	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	89889045	110931880	110931880	0.010	-23.40979	15.00000	Averaged	<-
6 beta-BHC	17241082	20976320	20976320	0.010	-21.66476	15.00000	Averaged	<-
7 delta-BHC	94228018	116509200	116509200	0.010	-23.64603	15.00000	Averaged	<-
8 Heptachlor	78290780	95404760	95404760	0.010	-21.85951	15.00000	Averaged	<-
10 Aldrin	111453520	134222360	134222360	0.010	-20.42900	15.00000	Averaged	<-
12 Heptachlor epoxide	30257554	38326440	38326440	0.010	-26.66734	15.00000	Averaged	<-
13 gamma-Chlordane	32168558	38318400	38318400	0.010	-19.11756	15.00000	Averaged	<-
14 alpha-Chlordane	82258763	101981880	101981880	0.010	-23.97692	15.00000	Averaged	<-
15 Endosulfan I	28064934	34793560	34793560	0.010	-23.97521	15.00000	Averaged	<-
16 4,4'-DDE	33388733	38933240	38933240	0.010	-16.60592	15.00000	Averaged	<-
17 Dieldrin	80383443	96224000	96224000	0.010	-19.70624	15.00000	Averaged	<-
18 Endrin	27569953	32831200	32831200	0.010	-19.08327	15.00000	Averaged	<-
21 4,4'-DDD	22162433	25609280	25609280	0.010	-15.55265	15.00000	Averaged	<-
22 Endosulfan II	31004641	36848400	36848400	0.010	-18.84801	15.00000	Averaged	<-
24 4,4'-DDT	20329307	23922360	23922360	0.010	-17.67425	15.00000	Averaged	<-
25 Endrin aldehyde	20054458	23798800	23798800	0.010	-18.67087	15.00000	Averaged	<-
26 Endosulfan sulfate	28018093	32494080	32494080	0.010	-15.97534	15.00000	Averaged	<-
27 Methoxychlor	24082688	28801520	28801520	0.010	-19.59429	15.00000	Averaged	<-
29 Endrin ketone	29577241	33550280	33550280	0.010	-13.43276	15.00000	Averaged	
$ 30 Decachlorobiphenyl	33092092	36517320	36517320	0.010	-10.35059	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 19.83678
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 4, 2011

SDG: A1A200401 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 2.8°C.	QAPP Table 4-2
3. Were holding times met?		✓		Due to surrogate outliers, sample FWGSCFmw-005-1686-GW was re-extracted. The re-extraction was completed outside of 2x hold. The sample was qualified as unusable, "R".	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 1/19/11 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?	✓			No data provided for evaluation.	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			1/19/11@ 2317	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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 4, 2011

SDG: A1A200401 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%?	✓			The CCV analyzed on 1/26/11 at 1748 recovered above limits for aroclor1260 at 17%. No qualification was made as there were no detected results reported for aroclor 1260.	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?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 4, 2011

SDG: A1A200401 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
25. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits for FWGCBPmw-005c-1657-GW at 42%, FWGLL3mw-238c-1650-GW at 37%, FWGLL4mw-196c-1653-GW at 43%, FWGLL4mw-197c-1654-GW at 41%, FWGLNWmw-025c-1674-GW at 23%, FWGSCFmw-005-1686-GW at 47%, FWGWBGmw-005c-1675-GW at 35% and FWGWBGmw-006c-1676-GW at 45%. The results for FWGCBPmw-005c-1657-GW, FWGLL3mw-238c-1650-GW, FWGLL4mw-196c-1653-GW, FWGLL4mw-197c-1654-GW, FWGLNWmw-025c-1674-GW, FWGSCFmw-005-1686-GW, FWGWBGmw-005c-1675-GW and FWGWBGmw-006c-1676-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
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.		✓		FWGSCFmw-005-1686-GW was re-extracted out of hold due to surrogate outliers in the initial analysis; the result for the reextract sample was reported.	

References:

Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 3 and Attachment A "Data Validation Guidelines:

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLNWmw-025C-1674-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-001 **Work Order #...:** MDHK51AF **Matrix.....:** WG
Date Sampled...: 01/19/11 09:03 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1020064
Dilution Factor: 1 **Initial Wgt/Vol:** 1050 mL **Final Wgt/Vol..:** 5 mL
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	23 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-007C-1677-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-004 **Work Order #...:** MDHK91AF **Matrix.....:** WG
Date Sampled...: 01/19/11 11:19 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1020064
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	52	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-006 **Work Order #...:** MDHLC1AF **Matrix.....:** WG
Date Sampled...: 01/19/11 13:21 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1020064
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	93	(50 - 150)
Decachlorobiphenyl	53	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1654-GW

GC Semivolatiles

Lot-Sample #...:	A1A200401-008	**Work Order #...:**	MDHLE1AF	**Matrix.....:**	WG
Date Sampled...:	01/19/11 15:04	**Date Received..:**	01/20/11		
Prep Date.....:	01/20/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1020064				
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	93	(50 - 150)
Decachlorobiphenyl	41 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GW

GC Semivolatiles

Lot-Sample #...:	A1A200401-010	**Work Order #...:**	MDHLG1AF	**Matrix.....:**	WG
Date Sampled...:	01/19/11 16:29	**Date Received..:**	01/20/11		
Prep Date.....:	01/20/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1020064				
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	43 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1686-GW

GC Semivolatiles

Lot-Sample #...:	A1A200401-013	**Work Order #...:**	MDHLK2AF	**Matrix.....:**	WG
Date Sampled...:	01/19/11 09:15	**Date Received..:**	01/20/11		
Prep Date.....:	02/05/11	**Analysis Date..:**	02/08/11		
Prep Batch #...:	1035268				
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	77	(50 - 150)
Decachlorobiphenyl	47 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1687-GW

GC Semivolatiles

Lot-Sample #...:	A1A200401-015	**Work Order #...:**	MDHLM1AF	**Matrix.....:**	WG
Date Sampled...:	01/19/11 11:20	**Date Received..:**	01/20/11		
Prep Date.....:	01/20/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1020064				
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	91	(50 - 150)
Decachlorobiphenyl	76	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1684-GW

GC Semivolatiles

Lot-Sample #...:	A1A200401-017	**Work Order #...:**	MDHLP1AP	**Matrix.....:**	WG
Date Sampled...:	01/19/11 12:50	**Date Received..:**	01/20/11		
Prep Date.....:	01/20/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1020064				
Dilution Factor:	1	**Initial Wgt/Vol:**	980 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
Decachlorobiphenyl	80	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GW

GC Semivolatiles

Lot-Sample #...:	A1A200401-019	**Work Order #...:**	MDHLR1AF	**Matrix.....:**	WG
Date Sampled...:	01/19/11 15:25	**Date Received..:**	01/20/11		
Prep Date.....:	01/20/11	**Analysis Date..:**	01/26/11		
Prep Batch #...:	1020064				
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	97	(50 - 150)
Decachlorobiphenyl	37 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-005C-1675-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-022 **Work Order #...:** MDHLW1AF **Matrix.....:** WG
Date Sampled...: 01/19/11 09:05 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1020064
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	94	(50 - 150)
Decachlorobiphenyl	35 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-DUP5-1696-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-024 **Work Order #...:** MDHL11AF **Matrix.....:** WG
Date Sampled...: 01/19/11 10:05 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1020064
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	98	(50 - 150)
Decachlorobiphenyl	50	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GW

GC Semivolatiles

Lot-Sample #...:	A1A200401-026	**Work Order #...:**	MDHL31AF	**Matrix.....:**	WG
Date Sampled...:	01/19/11 11:15	**Date Received..:**	01/20/11		
Prep Date.....:	01/20/11	**Analysis Date..:**	01/27/11		
Prep Batch #...:	1020064				
Dilution Factor:	1	**Initial Wgt/Vol:**	1030 mL	**Final Wgt/Vol..:**	5 mL
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.50	ug/L	0.17
Aroclor 1221	ND	0.50	ug/L	0.13
Aroclor 1232	ND	0.50	ug/L	0.16
Aroclor 1242	ND	0.50	ug/L	0.22
Aroclor 1248	ND	0.50	ug/L	0.10
Aroclor 1254	ND	0.50	ug/L	0.16
Aroclor 1260	ND	0.50	ug/L	0.17

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92	(50 - 150)
Decachlorobiphenyl	45 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-009C-1678-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-028 **Work Order #...:** MDHL51AF **Matrix.....:** WG
Date Sampled...: 01/19/11 12:30 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/27/11
Prep Batch #...: 1020064
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	91	(50 - 150)
Decachlorobiphenyl	63	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-030 **Work Order #...:** MDHL71AF **Matrix.....:** WQ
Date Sampled...: 01/19/11 13:30 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/27/11
Prep Batch #...: 1020064
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	93	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-031 **Work Order #...:** MDHL81AF **Matrix.....:** WG
Date Sampled...: 01/19/11 15:00 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/27/11
Prep Batch #...: 1020064
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	88	(50 - 150)
Decachlorobiphenyl	60	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-005C-1657-GW

GC Semivolatiles

Lot-Sample #...:	A1A200401-033	**Work Order #...:**	MDHMA1AF	**Matrix.....:**	WG
Date Sampled...:	01/19/11 16:10	**Date Received..:**	01/20/11		
Prep Date.....:	01/20/11	**Analysis Date..:**	01/27/11		
Prep Batch #...:	1020064				
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	86	(50 - 150)
Decachlorobiphenyl	42 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-008C-1659-GW

GC Semivolatiles

Lot-Sample #...: A1A200401-035 **Work Order #...:** MDHMD1AF **Matrix.....:** WG
Date Sampled...: 01/19/11 17:05 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/27/11
Prep Batch #...: 1020064
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	98	(50 - 150)
Decachlorobiphenyl	66	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MDHMK1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A200000-064

Prep Date.....: 01/20/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 01/27/11 **Prep Batch #...:** 1020064
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	87	(50 - 150)
Decachlorobiphenyl	79	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MD35C1AA **Matrix.....:** WATER
MB Lot-Sample #: A1B040000-268

Prep Date.....: 02/05/11 **Final Wgt/Vol..:** 5 mL
Analysis Date..: 02/08/11 **Prep Batch #...:** 1035268
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	77	(50 - 150)
Decachlorobiphenyl	53	(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 #...: A1A200401 **Work Order #...:** MDHMK1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A200000-064
Prep Date.....: 01/20/11 **Analysis Date..:** 01/27/11
Prep Batch #...: 1020064
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	90	(71 - 143)	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1A200401 **Work Order #...:** MD35C1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A1B040000-268 MD35C1AD-LCSD
Prep Date.....: 02/05/11 **Analysis Date..:** 02/08/11
Prep Batch #...: 1035268
Dilution Factor: 2 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**88**	**(58 - 141)**			**SW846 8082**
	87	**(58 - 141)**	**1.7**	**(0-50)**	**SW846 8082**
Aroclor 1260	**95**	**(71 - 143)**			**SW846 8082**
	91	**(71 - 143)**	**4.8**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	92	(50 - 150)
	92	(50 - 150)
Decachlorobiphenyl	50	(50 - 150)
	38 *	(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 #...: A1A200401 **Work Order #...:** MDHK51AQ-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200401-001 MDHK51AR-MSD
Date Sampled...: 01/19/11 09:03 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1020064
Dilution Factor: 2 **Initial Wgt/Vol:** 525 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**85**	**(50 - 150)**			**SW846 8082**
	88	**(50 - 150)**	**3.6**	**(0-50)**	**SW846 8082**
Aroclor 1260	**84**	**(50 - 150)**			**SW846 8082**
	93	**(50 - 150)**	**10**	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(50 - 150)
	88	(50 - 150)
Decachlorobiphenyl	54	(50 - 150)
	66	(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 #...: A1A200401 **Work Order #...:** MDHLP1A2-MS **Matrix.....:** WG
MS Lot-Sample #: A1A200401-017 MDHLP1A3-MSD
Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11
Prep Date.....: 01/20/11 **Analysis Date..:** 01/26/11
Prep Batch #...: 1020064
Dilution Factor: 2 **Initial Wgt/Vol:** 490 mL **Final Wgt/Vol..:** 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**89**	**(50 - 150)**			**SW846 8082**
	91	**(50 - 150)**	3.2	**(0-50)**	**SW846 8082**
Aroclor 1260	**100**	**(50 - 150)**			**SW846 8082**
	103	**(50 - 150)**	3.2	**(0-50)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(50 - 150)
	95	(50 - 150)
Decachlorobiphenyl	94	(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

Data File: \\CANSVR11\dd\chem\GCS\a2hp13.i\110126-1.b\039F3201.D
Report Date: 26-Jan-2011 18:01

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp13.i Injection Date: 26-JAN-2011 17:48
Lab File ID: 039F3201.D Init. Cal. Date(s): 19-JAN-2011 19-JAN-2011
Analysis Type: Init. Cal. Times: 11:44 23:00
Lab Sample ID: E248 Quant Type: ESTD
Method: \\CANSVR11\dd\chem\GCS\a2hp13.i\110126-1.b\PCB13.m

COMPOUND	RRF / AMOUNT	RF0.500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 TCMX	232002475	253061680	0.010	-9.07715	15.00000	Averaged	
3 AROCLOR-1016 (1)	3622270	3655190	0.010	-0.90881	15.00000	Averaged	
(2)	5787533	6021112	0.010	-4.03590	15.00000	Averaged	
(3)	10912907	11852218	0.010	-8.60734	15.00000	Averaged	
(4)	4136089	4357296	0.010	-5.34822	15.00000	Averaged	
(5)	4408839	4666276	0.010	-5.83912	15.00000	Averaged	
8 AROCLOR-1260 (1)	6776979	7565014	0.010	-11.62812	15.00000	Averaged	
(2)	10112767	11739710	0.010	-16.08801	15.00000	Averaged	<-
(3)	9478786	11445654	0.010	-20.75021	15.00000	Averaged	<-
(4)	16532449	19863074	0.010	-20.14599	15.00000	Averaged	<-
(5)	8326966	9899564	0.010	-18.88561	15.00000	Averaged	<-
$ 9 DCB	142967902	179785360	0.010	-25.75225	15.00000	Averaged	<-

FORM 8
SEMIVOLATILE ANALYTICAL SEQUENCE

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1A200401

GC Column: RESTEK PEST CLPI ID: 0.53 (mm) Init. Calib. Date(s): 01/19/11 01/19/11

Instrument ID: A2HP13

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION					
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		MRL	01/26/11	0720		
02		E248	01/26/11	1748		
03	FWGLNWMW-025	MDHK51AF	01/26/11	1854		
04	FWGLNWMW-025	MDHK51AQ	01/26/11	1910		
05	FWGLNWMW-025	MDHK51AR	01/26/11	1927		
06	FWGWBGMW-007	MDHK91AF	01/26/11	1943		
07	FWGFBQMW-174	MDHLC1AF	01/26/11	2000		
08		E248	01/26/11	2049		
09	FWGLL4MW-197	MDHLE1AF	01/26/11	2106		
10	FWGLL4MW-196	MDHLG1AF	01/26/11	2122		
11	FWGSCFMW-006	MDHLM1AF	01/26/11	2155		
12	FWGSCFMW-003	MDHLP1AP	01/26/11	2212		
13	FWGLL3MW-238	MDHLR1AF	01/26/11	2228		
14	FWGWBGMW-005	MDHLW1AF	01/26/11	2245		
15	FWGWBGMW-DUP	MDHL11AF	01/26/11	2301		
16	FWGSCFMW-003	MDHLP1A2	01/26/11	2318		
17	FWGSCFMW-003	MDHLP1A3	01/26/11	2334		
18		E248	01/26/11	2351		
19	FWGWBGMW-006	MDHL31AF	01/27/11	0007		
20	FWGWBGMW-009	MDHL51AF	01/27/11	0024		
21	FWGEQUIPRINS	MDHL71AF	01/27/11	0040		
22	FWGLL3MW-239	MDHL81AF	01/27/11	0057		
23	FWGCPBMW-005	MDHMA1AF	01/27/11	0113		
24	FWGCPBMW-008	MDHMD1AF	01/27/11	0130		
25	MDHMKBLK	MDHMK1AA	01/27/11	0146		
26	MDHMKCHK	MDHMK1AC	01/27/11	0203		
27		E248	01/27/11	0219		
28		MRL	01/27/11	0236		
29						
30						
31						
32						

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE ANALYTICAL SEQUENCE

Lab Name: NORTH CANTON Contract:

Lab Code: TACAN Case No.: SAS No.: SDG No.: A1A200401

GC Column: RESTEK PEST CLPI ID: 0.53 (mm) Init. Calib. Date(s): 01/19/11 01/19/11

Instrument ID: A2HP13

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.57 S2 : 7.80

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
01		F002	02/08/11	1104	1.57		7.80	
02		MDL	02/08/11	1121				
03	MD35CCHK	MD35C1AC	02/08/11	1210	1.57		7.80	
04	MD35CKDUP	MD35C1AD	02/08/11	1227	1.57		7.80	
05		F002	02/08/11	1243	1.57		7.80	
06		MRL	02/08/11	1326				
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

QC LIMITS

S1 = TCMX (+/- 0.10 MINUTES)
S2 = DCB (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 7, 2011

SDG: A1A200401 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 2.8°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?	✓			ICP- 11/11/10 ICPMS-11/5/10 Hg-11/2/10	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 1/25/11 had thallium detected at 0.18ug/L. The thallium result for samples FWGLNWmw-025c-1674-GF, FWGWBGmw-007c-1677-GF and FWGLL3mw-239c-1650-GF were <5x the ICB contamination and was qualified, "U". No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 7, 2011

SDG: A1A200401 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 1/25/11 had detected thallium from 0.17ug/L to 0.27ug/L and sodium at 18.5ug/L to 24ug/L. The thallium result for samples FWGLNWmw-025c-1674-GF, FWGWBGmw-007c-1677-GF and FWGLL3mw-239c-1650-GF were <5x the CCB contamination and was qualified, "U". No sodium qualifications were made as the detected sodium concentrations were >5 x 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; The method blank had sodium detected at 43ug/L and zinc at 3.7ug/L. The following sample results were qualified, "B", due to sample results <5x blank contamination; • Zinc results for samples FWGEQUIPRinse3-1700-GW, FWGFBQmw-174C-1673-GF, FWGLL3mw-238C-1650-GF, FWGLL3mw-239C-1651-GF and FWGWBGmw-009C-1678-GF. • Sodium result for sample FWGEQUIPRinse3-1700-GW.	LCG Table 7 <5x = B
23. Was a field blank collected and analyzed?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006 **SDG**: A1A200401 R0
Sample Event: January 2011 **Analysis**: SW846 6010B/6020
Data Reviewer/Date: Angye Dragotta/ March 7, 2011

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
24. Were target analytes reported in the field blank analyses >1/2 the MRL?		✓		ADR checked section; FWGEQUIPRinse3-1700-GW had sodium detected at 16.1ug/L, iron at 26.8ug/L and zinc at 3.1ug/L. The following sample results were qualified, "B", due to sample results <5x blank contamination; • Zinc results for samples FWGFBQmw-174C-1673-GF, FWGLL3mw-238C-1650-GF, FWGLL3mw-239C-1651-GF and FWGWBGmw-009C-1678-GF. • Iron results for samples FWGSCFmw-003-1684-GF and FWGSCFmw-006-1687-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%?	✓				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%?		✓		The field duplicate RPD for samples FWGWBGmw-005c-1675-GF and FWGWBGmw-DUP5-1696-GF was above control limits for nickel at 45%. The aluminum result for samples FWGWBGmw-005c-1675-GF and FWGWBGmw-DUP5-1696-GF were qualified as estimated, "J".	QAPP Table 3-2 >30% = J
35. Were sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 7, 2011

SDG: A1A200401 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
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 7, 2011

SDG: A1A200401 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 2.8°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?	✓				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:** A1A200401 R0
Sample Event: January 2010 **Analysis:** SW846 7470A
Data Reviewer/Date: Angye Dragotta/ March 7, 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?	✓			The CCB analyzed 1/28/11 at 1518 had mercury detected at 0.2ug/L. No qualification was required as this CCB did not bracket any field samples with detected mercury concentrations. 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. The matrix spike analyzed on sample FWGSCFmw-003-1684-GF recovered above limits at 126%. The mercury results for samples FWGLNWmw-025c-1674-GF, FWGSCFmw-005-1686-GF, FWGSCFmw-003-1684-GF, FWGLL3mw-239c-1651-GF and FWGCBPmw-008c-1659-GF were qualified as estimated, "J". No qualifications were made for nondetect results.	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?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 7, 2011

SDG: A1A200401 R0
Analysis: SW846 7470A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
28. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
29. Were lab comments included in report? If yes, summarize contents.		✓			

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: FWGLNWmw-025C-1674-GF

TOTAL Metals

Lot-Sample #...: A1A200401-002 **Matrix.....:** WG
Date Sampled...: 01/19/11 09:03 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHK71CE
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	70.0	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHK71AA
		Dilution Factor: 1		Analysis Time..: 21:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	3.7 B	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHK71A4
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	32.6	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHK71CH
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHK71AE
		Dilution Factor: 1		Analysis Time..: 21:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	39700	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHK71CL
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHK71AH
		Dilution Factor: 1		Analysis Time..: 21:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	2.1 B	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHK71CP
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHK71CT
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHK71CW
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLNWmw-025C-1674-GF

TOTAL Metals

Lot-Sample #...: A1A200401-002 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**1810**	**50.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHK71AL**
		Dilution Factor: 1		Analysis Time..: 21:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHK71DH
		Dilution Factor: 1		Analysis Time..: 15:44	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**935 B**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHK71C1**
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**11700**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHK71C4**
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**731**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHK71C7**
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**6470 J**	**1000**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHK71A1**
		Dilution Factor: 1		Analysis Time..: 21:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHK71DA
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHK71A7
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHK71AP
		Dilution Factor: 1		Analysis Time..: 21:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHK71CA
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLNWmw-025C-1674-GF

TOTAL Metals

Lot-Sample #...: A1A200401-002 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.20 B**	**1.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHK71AW**
		Dilution Factor: 1		Analysis Time..: 21:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHK71DE
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHK71AT
		Dilution Factor: 1		Analysis Time..: 21:30	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: FWGWBGmw-007C-1677-GF

TOTAL Metals

Lot-Sample #...: A1A200401-005 **Matrix.....:** WG
Date Sampled...: 01/19/11 11:19 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLA1AR
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	21.9 B	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLA1AE
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLA1AC
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	33.8	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLA1AT
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLA1AF
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	60900	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHLA1AU
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHLA1AG
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLA1AV
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLA1AW
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLA1AX
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-007C-1677-GF

TOTAL Metals

Lot-Sample #...: A1A200401-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLA1AH
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	**0.23**	0.20	**ug/L**	SW846 7470A	01/24-01/28/11	MDHLA1A2
		Dilution Factor: 1		Analysis Time..: 12:58	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**1100**	1000	**ug/L**	SW846 6010B	01/24-01/25/11	MDHLA1AM
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**15700**	1000	**ug/L**	SW846 6010B	01/24-01/25/11	MDHLA1AN
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**100**	10.0	**ug/L**	SW846 6010B	01/24-01/25/11	MDHLA1AP
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**4230 J**	1000	**ug/L**	SW846 6020	01/24-01/25/11	MDHLA1AA
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLA1A0
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLA1AD
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHLA1AJ
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLA1AQ
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-007C-1677-GF

TOTAL Metals

Lot-Sample #...: A1A200401-005 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.15 B**	**1.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHLA1AL**
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLA1A1
		Dilution Factor: 1		Analysis Time..: 14:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHLA1AK
		Dilution Factor: 1		Analysis Time..: 21:58	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GF

TOTAL Metals

Lot-Sample #...: A1A200401-007 **Matrix.....:** WG
Date Sampled...: 01/19/11 13:21 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLD1AR
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLD1AE
		Dilution Factor: 1		Analysis Time..: 22:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLD1AC
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**15.9**	10.0	**ug/L**	SW846 6010B	01/24-01/25/11	MDHLD1AT
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLD1AF
		Dilution Factor: 1		Analysis Time..: 22:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**6870**	1000	**ug/L**	SW846 6010B	01/24-01/25/11	MDHLD1AU
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHLD1AG
		Dilution Factor: 1		Analysis Time..: 22:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLD1AV
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLD1AW
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLD1AX
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GF

TOTAL Metals

Lot-Sample #...: A1A200401-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLD1AH
		Dilution Factor: 1		Analysis Time..: 22:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHLD1A2
		Dilution Factor: 1		Analysis Time..: 13:00	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**946 B**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLD1AM**
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**2120**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLD1AN**
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**3.0 B**	10.0	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLD1AP**
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**867 B,J**	1000	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHLD1AA**
		Dilution Factor: 1		Analysis Time..: 22:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLD1A0
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLD1AD
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHLD1AJ
		Dilution Factor: 1		Analysis Time..: 22:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLD1AQ
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GF

TOTAL Metals

Lot-Sample #...: A1A200401-007 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLD1AL
		Dilution Factor: 1		Analysis Time..: 22:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLD1A1
		Dilution Factor: 1		Analysis Time..: 14:54	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	3.6 B,J	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHLD1AK
		Dilution Factor: 1		Analysis Time..: 22:15	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1654-GF

TOTAL Metals

Lot-Sample #...: A1A200401-009 **Matrix.....:** WG
Date Sampled...: 01/19/11 15:04 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLF1AR
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**26.8 B**	**50.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHLF1AE**
		Dilution Factor: 1		Analysis Time..: 22:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLF1AC
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**20.8**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLF1AT**
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLF1AF
		Dilution Factor: 1		Analysis Time..: 22:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**109000**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLF1AU**
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHLF1AG
		Dilution Factor: 1		Analysis Time..: 22:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLF1AV
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLF1AW
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLF1AX
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1654-GF

TOTAL Metals

Lot-Sample #...: A1A200401-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLF1AH
		Dilution Factor: 1		Analysis Time..: 22:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHLF1A2
		Dilution Factor: 1		Analysis Time..: 12:55	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**1060**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLF1AM**
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**17200**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLF1AN**
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**5.0 B**	10.0	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLF1AP**
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1270 J**	1000	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHLF1AA**
		Dilution Factor: 1		Analysis Time..: 22:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLF1A0
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLF1AD
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHLF1AJ
		Dilution Factor: 1		Analysis Time..: 22:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLF1AQ
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1654-GF

TOTAL Metals

Lot-Sample #...: A1A200401-009 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLF1AL
		Dilution Factor: 1		Analysis Time..: 22:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLF1A1
		Dilution Factor: 1		Analysis Time..: 14:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHLF1AK
		Dilution Factor: 1		Analysis Time..: 22:20	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GF

TOTAL Metals

Lot-Sample #...: A1A200401-011 **Matrix.....:** WG
Date Sampled...: 01/19/11 16:29 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1AR
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**19.9 B**	**50.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHLH1AE**
		Dilution Factor: 1		Analysis Time..: 22:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1AC
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**43.4**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLH1AT**
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLH1AF
		Dilution Factor: 1		Analysis Time..: 22:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**60300**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLH1AU**
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHLH1AG
		Dilution Factor: 1		Analysis Time..: 22:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1AV
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1AW
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1AX
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GF

TOTAL Metals

Lot-Sample #...: A1A200401-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLH1AH
		Dilution Factor: 1		Analysis Time..: 22:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHLH1A2
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**703 B**	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1AM
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**17500**	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1AN
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**41.9**	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1AP
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**1920 J**	1000	ug/L	SW846 6020	01/24-01/25/11	MDHLH1AA
		Dilution Factor: 1		Analysis Time..: 22:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1A0
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1AD
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHLH1AJ
		Dilution Factor: 1		Analysis Time..: 22:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1AQ
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GF

TOTAL Metals

Lot-Sample #...: A1A200401-011 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLH1AL
		Dilution Factor: 1		Analysis Time..: 22:25	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLH1A1
		Dilution Factor: 1		Analysis Time..: 15:05	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHLH1AK
		Dilution Factor: 1		Analysis Time..: 22:25	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-005-1686-GF

TOTAL Metals

Lot-Sample #...: A1A200401-014 **Matrix.....:** WG
Date Sampled...: 01/19/11 09:15 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLL1AR
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLL1AE
		Dilution Factor: 1		Analysis Time..: 22:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLL1AC
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**18.8**	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLL1AT
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLL1AF
		Dilution Factor: 1		Analysis Time..: 22:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**83100**	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHLL1AU
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHLL1AG
		Dilution Factor: 1		Analysis Time..: 22:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLL1AV
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLL1AW
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLL1AX
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1686-GF

TOTAL Metals

Lot-Sample #...: A1A200401-014 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**5090**	**50.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHLL1AH**
		Dilution Factor: 1		Analysis Time..: 22:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHLL1A2
		Dilution Factor: 1		Analysis Time..: 15:53	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**2300**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLL1AM**
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**39900**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLL1AN**
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1870**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLL1AP**
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**6950 J**	**1000**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHLL1AA**
		Dilution Factor: 1		Analysis Time..: 22:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLL1A0
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLL1AD
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHLL1AJ
		Dilution Factor: 1		Analysis Time..: 22:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLL1AQ
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1686-GF

TOTAL Metals

Lot-Sample #...: A1A200401-014 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLL1AL
		Dilution Factor: 1		Analysis Time..: 22:30	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLL1A1
		Dilution Factor: 1		Analysis Time..: 15:11	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHLL1AK
		Dilution Factor: 1		Analysis Time..: 22:30	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-006-1687-GF

TOTAL Metals

Lot-Sample #...: A1A200401-016 **Matrix.....:** WG
Date Sampled...: 01/19/11 11:20 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLN1AR
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLN1AE
		Dilution Factor: 1		Analysis Time..: 22:34	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**9.3**	**5.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLN1AC**
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**118**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLN1AT**
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLN1AF
		Dilution Factor: 1		Analysis Time..: 22:34	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**57200**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLN1AU**
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHLN1AG
		Dilution Factor: 1		Analysis Time..: 22:34	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLN1AV
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLN1AW
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLN1AX
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1687-GF

TOTAL Metals

Lot-Sample #...: A1A200401-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	84.0	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLN1AH
		Dilution Factor: 1		Analysis Time..: 22:34	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	0.22	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHLN1A2
		Dilution Factor: 1		Analysis Time..: 12:48	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	7100	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHLN1AM
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	15500	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHLN1AN
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	164	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLN1AP
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	10900 J	1000	ug/L	SW846 6020	01/24-01/25/11	MDHLN1AA
		Dilution Factor: 1		Analysis Time..: 22:34	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLN1A0
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLN1AD
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHLN1AJ
		Dilution Factor: 1		Analysis Time..: 22:34	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLN1AQ
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1687-GF

TOTAL Metals

Lot-Sample #...: A1A200401-016 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLN1AL
		Dilution Factor: 1		Analysis Time..: 22:34	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLN1A1
		Dilution Factor: 1		Analysis Time..: 15:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHLN1AK
		Dilution Factor: 1		Analysis Time..: 22:34	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-003-1684-GF

TOTAL Metals

Lot-Sample #...: A1A200401-018 **Matrix.....:** WG
Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLQ1CP
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLQ1AL
		Dilution Factor: 1		Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLQ1AE
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**76.2**	**10.0**	**ug/L**	SW846 6010B	01/24-01/25/11	MDHLQ1CT
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLQ1AP
		Dilution Factor: 1		Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**66700**	**1000**	**ug/L**	SW846 6010B	01/24-01/25/11	MDHLQ1CW
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHLQ1AT
		Dilution Factor: 1		Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLQ1C1
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLQ1C4
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLQ1C7
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1684-GF

TOTAL Metals

Lot-Sample #...: A1A200401-018 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**80.9**	**50.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHLQ1AW**
		Dilution Factor: 1		Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHLQ1DH
		Dilution Factor: 1		Analysis Time..: 15:38	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**1410**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLQ1CA**
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**26500**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLQ1CE**
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**239**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLQ1CH**
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**6170 J**	**1000**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHLQ1AA**
		Dilution Factor: 1		Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLQ1DA
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLQ1AH
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHLQ1A1
		Dilution Factor: 1		Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLQ1CL
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1684-GF

TOTAL Metals

Lot-Sample #...: A1A200401-018 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLQ1A7
		Dilution Factor: 1		Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLQ1DE
		Dilution Factor: 1		Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHLQ1A4
		Dilution Factor: 1		Analysis Time..: 22:39	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: FWGLL3mw-238C-1650-GF

TOTAL Metals

Lot-Sample #...: A1A200401-020 **Matrix.....:** WG
Date Sampled...: 01/19/11 15:25 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1AR
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLT1AE
		Dilution Factor: 1		Analysis Time..: 22:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1AC
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**8.9 B**	10.0	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLT1AT**
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHLT1AF
		Dilution Factor: 1		Analysis Time..: 22:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**54200**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHLT1AU**
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHLT1AG
		Dilution Factor: 1		Analysis Time..: 22:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1AV
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1AW
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1AX
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GF

TOTAL Metals

Lot-Sample #...: A1A200401-020 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHLT1AH
		Dilution Factor: 1		Analysis Time..: 22:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	**0.26**	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHLT1A2
		Dilution Factor: 1		Analysis Time..: 13:34	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**2210**	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1AM
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**5950**	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1AN
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1AP
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**4870 J**	1000	ug/L	SW846 6020	01/24-01/25/11	MDHLT1AA
		Dilution Factor: 1		Analysis Time..: 22:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1A0
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1AD
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHLT1AJ
		Dilution Factor: 1		Analysis Time..: 22:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	**5.8**	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1AQ
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GF

TOTAL Metals

Lot-Sample #...: A1A200401-020 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.19 B**	**1.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHLT1AL**
		Dilution Factor: 1		Analysis Time..: 22:56	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHLT1A1
		Dilution Factor: 1		Analysis Time..: 15:52	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	2.8 B,J	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHLT1AK
		Dilution Factor: 1		Analysis Time..: 22:56	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: FWGWBGmw-005C-1675-GF

TOTAL Metals

Lot-Sample #...: A1A200401-023 **Matrix.....:** WG
Date Sampled...: 01/19/11 09:05 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AR
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHL01AE
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**10.5**	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AC
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**58.0**	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AT
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL01AF
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**46600**	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AU
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHL01AG
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**5.0**	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AV
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AW
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AX
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-005C-1675-GF

TOTAL Metals

Lot-Sample #...: A1A200401-023 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**8760**	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHL01AH
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHL01A2
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**789 B**	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AM
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	15200	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AN
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	1310	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AP
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	10800 J	1000	ug/L	SW846 6020	01/24-01/25/11	MDHL01AA
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	2.6 B	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL01A0
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AD
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHL01AJ
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL01AQ
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-005C-1675-GF

TOTAL Metals

Lot-Sample #...: A1A200401-023 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL01AL
		Dilution Factor: 1		Analysis Time..: 23:00	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL01A1
		Dilution Factor: 1		Analysis Time..: 15:58	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHL01AK
		Dilution Factor: 1		Analysis Time..: 23:00	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: FWGWBGmw-DUP5-1696-GF

TOTAL Metals

Lot-Sample #...: A1A200401-025 **Matrix.....:** WG
Date Sampled...: 01/19/11 10:05 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL21AR
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHL21AE
		Dilution Factor: 1		Analysis Time..: 23:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**9.5**	**5.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL21AC**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**59.8**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL21AT**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL21AF
		Dilution Factor: 1		Analysis Time..: 23:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**44300**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL21AU**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHL21AG
		Dilution Factor: 1		Analysis Time..: 23:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**4.9 B**	**5.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL21AV**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL21AW
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL21AX
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-DUP5-1696-GF

TOTAL Metals

Lot-Sample #...: A1A200401-025 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**8510**	50.0	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL21AH**
		Dilution Factor: 1		Analysis Time..: 23:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHL21A2
		Dilution Factor: 1		Analysis Time..: 12:53	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**822 B**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL21AM**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**14300**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL21AN**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**1290**	10.0	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL21AP**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**10900 J**	1000	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL21AA**
		Dilution Factor: 1		Analysis Time..: 23:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**4.1 B**	10.0	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL21A0**
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL21AD
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHL21AJ
		Dilution Factor: 1		Analysis Time..: 23:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL21AQ
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-DUP5-1696-GF

TOTAL Metals

Lot-Sample #...: A1A200401-025 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL21AL
		Dilution Factor: 1		Analysis Time..: 23:17	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL21A1
		Dilution Factor: 1		Analysis Time..: 16:04	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHL21AK
		Dilution Factor: 1		Analysis Time..: 23:17	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: FWGWBGmw-006C-1676-GF

TOTAL Metals

Lot-Sample #...: A1A200401-027 **Matrix.....:** WG
Date Sampled...: 01/19/11 11:15 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL41AR
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHL41AE
		Dilution Factor: 1		Analysis Time..: 23:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL41AC
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**20.0**	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL41AT
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL41AF
		Dilution Factor: 1		Analysis Time..: 23:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**65600**	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHL41AU
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHL41AG
		Dilution Factor: 1		Analysis Time..: 23:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL41AV
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL41AW
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL41AX
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GF

TOTAL Metals

Lot-Sample #...: A1A200401-027 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHL41AH
		Dilution Factor: 1		Analysis Time..: 23:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHL41A2
		Dilution Factor: 1		Analysis Time..: 12:50	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**753 B**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL41AM**
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**21900**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL41AN**
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**46.8**	10.0	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL41AP**
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**5660 J**	1000	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL41AA**
		Dilution Factor: 1		Analysis Time..: 23:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL41A0
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL41AD
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHL41AJ
		Dilution Factor: 1		Analysis Time..: 23:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL41AQ
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GF

TOTAL Metals

Lot-Sample #...: A1A200401-027 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL41AL
		Dilution Factor: 1		Analysis Time..: 23:22	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL41A1
		Dilution Factor: 1		Analysis Time..: 16:09	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHL41AK
		Dilution Factor: 1		Analysis Time..: 23:22	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: FWGWBGmw-009C-1678-GF

TOTAL Metals

Lot-Sample #...: A1A200401-029 **Matrix.....:** WG
Date Sampled...: 01/19/11 12:30 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL61AR
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHL61AE
		Dilution Factor: 1		Analysis Time..: 23:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL61AC
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**11.5**	10.0	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL61AT**
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL61AF
		Dilution Factor: 1		Analysis Time..: 23:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**51800**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL61AU**
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHL61AG
		Dilution Factor: 1		Analysis Time..: 23:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL61AV
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL61AW
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL61AX
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-009C-1678-GF

TOTAL Metals

Lot-Sample #...: A1A200401-029 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHL61AH
		Dilution Factor: 1		Analysis Time..: 23:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHL61A2
		Dilution Factor: 1		Analysis Time..: 13:30	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**651 B**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL61AM**
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**15800**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL61AN**
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**82.4**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL61AP**
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**3880 J**	**1000**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL61AA**
		Dilution Factor: 1		Analysis Time..: 23:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL61A0
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL61AD
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHL61AJ
		Dilution Factor: 1		Analysis Time..: 23:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL61AQ
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-009C-1678-GF

TOTAL Metals

Lot-Sample #...: A1A200401-029 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL61AL
		Dilution Factor: 1		Analysis Time..: 23:27	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL61A1
		Dilution Factor: 1		Analysis Time..: 16:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**2.4 B,J**	**10.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL61AK**
		Dilution Factor: 1		Analysis Time..: 23:27	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: FWGEQUIPRINSE3-1700-GW

TOTAL Metals

Lot-Sample #...: A1A200401-030 **Matrix.....:** WQ
Date Sampled...: 01/19/11 13:30 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL71AU
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHL71AG
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL71AQ
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL71AV
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL71AH
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHL71AW
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHL71AJ
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL71AX
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL71A0
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL71A1
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

TOTAL Metals

Lot-Sample #...: A1A200401-030 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**26.8 B**	**50.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL71AK**
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHL71A7
		Dilution Factor: 1		Analysis Time..: 13:29	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHL71A2
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDHL71A3
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL71A4
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**16.1 B,J**	**1000**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL71AP**
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL71A5
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL71AR
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHL71AL
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL71AT
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

TOTAL Metals

Lot-Sample #...: A1A200401-030 **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL71AN
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL71A6
		Dilution Factor: 1		Analysis Time..: 16:21	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**3.1 B,J**	**10.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL71AM**
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 2.3		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GF

TOTAL Metals

Lot-Sample #...: A1A200401-032 **Matrix.....:** WG
Date Sampled...: 01/19/11 15:00 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL91AR
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**394**	**50.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL91AE**
		Dilution Factor: 1		Analysis Time..: 23:37	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL91AC
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**19.2**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL91AT**
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL91AF
		Dilution Factor: 1		Analysis Time..: 23:37	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**8790**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL91AU**
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHL91AG
		Dilution Factor: 1		Analysis Time..: 23:37	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**2.5 B**	**5.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL91AV**
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL91AW
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL91AX
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GF

TOTAL Metals

Lot-Sample #...: A1A200401-032 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**818**	**50.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL91AH**
		Dilution Factor: 1		Analysis Time..: 23:37	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHL91A2
		Dilution Factor: 1		Analysis Time..: 15:49	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**1250**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL91AM**
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**4520**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL91AN**
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**182**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL91AP**
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**17000 J**	**1000**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL91AA**
		Dilution Factor: 1		Analysis Time..: 23:37	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	**7.3 B**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHL91A0**
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL91AD
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHL91AJ
		Dilution Factor: 1		Analysis Time..: 23:37	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL91AQ
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GF

TOTAL Metals

Lot-Sample #...: A1A200401-032 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHL91AL
		Dilution Factor: 1		Analysis Time..: 23:37	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHL91A1
		Dilution Factor: 1		Analysis Time..: 16:27	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	**8.0 B,J**	**10.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHL91AK**
		Dilution Factor: 1		Analysis Time..: 23:37	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: FWGCBPmw-005C-1657-GF

TOTAL Metals

Lot-Sample #...: A1A200401-034 **Matrix.....:** WG
Date Sampled...: 01/19/11 16:10 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHMC1AR
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	**19.7 B**	**50.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHMC1AE**
		Dilution Factor: 1		Analysis Time..: 23:42	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**22.3**	**5.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHMC1AC**
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**45.3**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHMC1AT**
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHMC1AF
		Dilution Factor: 1		Analysis Time..: 23:42	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**72700**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHMC1AU**
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHMC1AG
		Dilution Factor: 1		Analysis Time..: 23:42	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHMC1AV
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHMC1AW
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHMC1AX
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-005C-1657-GF

TOTAL Metals

Lot-Sample #...: A1A200401-034 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	**580**	**50.0**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHMC1AH**
		Dilution Factor: 1		Analysis Time..: 23:42	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHMC1A2
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**3600**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHMC1AM**
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**34600**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHMC1AN**
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**54.1**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHMC1AP**
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**25000 J**	**1000**	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHMC1AA**
		Dilution Factor: 1		Analysis Time..: 23:42	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHMC1A0
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHMC1AD
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHMC1AJ
		Dilution Factor: 1		Analysis Time..: 23:42	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHMC1AQ
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-005C-1657-GF

TOTAL Metals

Lot-Sample #...: A1A200401-034 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHMC1AL
		Dilution Factor: 1		Analysis Time..: 23:42	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHMC1A1
		Dilution Factor: 1		Analysis Time..: 16:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHMC1AK
		Dilution Factor: 1		Analysis Time..: 23:42	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: FWGCBPmw-008C-1659-GF

TOTAL Metals

Lot-Sample #...: A1A200401-036 **Matrix.....:** WG
Date Sampled...: 01/19/11 17:05 **Date Received..:** 01/20/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024022						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHME1AR
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHME1AE
		Dilution Factor: 1		Analysis Time..: 23:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	**5.8**	**5.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHME1AC**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	**10.2**	**10.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHME1AT**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHME1AF
		Dilution Factor: 1		Analysis Time..: 23:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	**204000**	**1000**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHME1AU**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDHME1AG
		Dilution Factor: 1		Analysis Time..: 23:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	**1.6 B**	**5.0**	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHME1AV**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHME1AW
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHME1AX
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-008C-1659-GF

TOTAL Metals

Lot-Sample #...: A1A200401-036 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDHME1AH
		Dilution Factor: 1		Analysis Time..: 23:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDHME1A2
		Dilution Factor: 1		Analysis Time..: 15:51	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	**4510**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHME1AM**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	**91600**	1000	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHME1AN**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	**232**	10.0	**ug/L**	**SW846 6010B**	**01/24-01/25/11**	**MDHME1AP**
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	**85900 J**	1000	**ug/L**	**SW846 6020**	**01/24-01/25/11**	**MDHME1AA**
		Dilution Factor: 1		Analysis Time..: 23:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHME1A0
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDHME1AD
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDHME1AJ
		Dilution Factor: 1		Analysis Time..: 23:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDHME1AQ
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-008C-1659-GF

TOTAL Metals

Lot-Sample #...: A1A200401-036 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDHME1AL
		Dilution Factor: 1		Analysis Time..: 23:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDHME1A1
		Dilution Factor: 1		Analysis Time..: 16:39	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDHME1AK
		Dilution Factor: 1		Analysis Time..: 23:47	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.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1A200401 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1A240000-022 **Prep Batch #...:** 1024022						
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDL4A1AA
		Dilution Factor: 1				
		Analysis Time..: 21:18		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDL4A1AF
		Dilution Factor: 1				
		Analysis Time..: 21:18		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AK
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AP
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDL4A1AC
		Dilution Factor: 1				
		Analysis Time..: 21:18		Analyst ID.....: 000079	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDL4A1AD
		Dilution Factor: 1				
		Analysis Time..: 21:18		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AQ
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AT
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AR
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AU
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDL4A1AE
		Dilution Factor: 1				
		Analysis Time..: 21:18		Analyst ID.....: 000079	Instrument ID..: I8	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1A200401 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AL
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AW
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AX
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDL4A1A2
		Dilution Factor: 1				
		Analysis Time..: 12:44		Analyst ID.....: 002260	Instrument ID..: H4	
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1A0
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AV
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AM
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1AN
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Sodium	**43.0 B**	1000	**ug/L**	SW846 6020	**01/24-01/25/11**	MDL4A1AJ
		Dilution Factor: 1				
		Analysis Time..: 21:18		Analyst ID.....: 000079	Instrument ID..: I8	
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDL4A1AH
		Dilution Factor: 1				
		Analysis Time..: 21:18		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDL4A1A1
		Dilution Factor: 1				
		Analysis Time..: 14:01		Analyst ID.....: 001637	Instrument ID..: I5	
Zinc	**3.7 B**	10.0	**ug/L**	SW846 6020	**01/24-01/25/11**	MDL4A1AG
		Dilution Factor: 1				
		Analysis Time..: 21:18		Analyst ID.....: 000079	Instrument ID..: I8	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1A200401 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 #...: A1A200401 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A1A240000-022 **Prep Batch #...:** 1024022					
Aluminum	94	(80 - 120)	SW846 6020	01/24-01/25/11	MDL4A1A3
		Dilution Factor: 1	Analysis Time..: 21:23	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	95	(80 - 120)	SW846 6020	01/24-01/25/11	MDL4A1A4
		Dilution Factor: 1	Analysis Time..: 21:23	Analyst ID.....: 000079	
		Instrument ID..: I8			
Cadmium	98	(80 - 120)	SW846 6020	01/24-01/25/11	MDL4A1A5
		Dilution Factor: 1	Analysis Time..: 21:23	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	97	(80 - 120)	SW846 6020	01/24-01/25/11	MDL4A1A6
		Dilution Factor: 1	Analysis Time..: 21:23	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	96	(80 - 120)	SW846 6020	01/24-01/25/11	MDL4A1A7
		Dilution Factor: 1	Analysis Time..: 21:23	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	102	(80 - 120)	SW846 6020	01/24-01/25/11	MDL4A1A8
		Dilution Factor: 1	Analysis Time..: 21:23	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	85	(80 - 120)	SW846 6020	01/24-01/25/11	MDL4A1A9
		Dilution Factor: 1	Analysis Time..: 21:23	Analyst ID.....: 000079	
		Instrument ID..: I8			
Sodium	95	(80 - 120)	SW846 6020	01/24-01/25/11	MDL4A1CA
		Dilution Factor: 1	Analysis Time..: 21:23	Analyst ID.....: 000079	
		Instrument ID..: I8			
Arsenic	95	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CC
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637	
		Instrument ID..: I5			
Lead	89	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CD
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637	
		Instrument ID..: I5			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A200401 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	96	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CE
	Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637		
	Instrument ID..: I5				
Silver	93	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CF
	Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637		
	Instrument ID..: I5				
Barium	101	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CG
	Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637		
	Instrument ID..: I5				
Calcium	90	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CH
	Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637		
	Instrument ID..: I5				
Cobalt	93	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CJ
	Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637		
	Instrument ID..: I5				
Chromium	94	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CK
	Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637		
	Instrument ID..: I5				
Copper	100	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CL
	Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637		
	Instrument ID..: I5				
Potassium	98	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CM
	Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637		
	Instrument ID..: I5				
Magnesium	90	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CN
	Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637		
	Instrument ID..: I5				
Manganese	100	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CP
	Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637		
	Instrument ID..: I5				
Nickel	97	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CQ
	Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637		
	Instrument ID..: I5				

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A200401 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	96	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL4A1CR
		Dilution Factor: 1	Analysis Time..: 14:07	Analyst ID.....: 001637	
		Instrument ID..: I5			
Mercury	113	(80 - 120)	SW846 7470A	01/24-01/28/11	MDL4A1CT
		Dilution Factor: 1	Analysis Time..: 12:46	Analyst ID.....: 002260	
		Instrument ID..: H4			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A200401 **Matrix.....:** WG
Date Sampled...: 01/19/11 09:03 **Date Received..:** 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1A200401-002 **Prep Batch #...:** 1024022					
Aluminum	98	(75 - 125)	SW846 6020	01/24-01/25/11	MDHK71AC
		Dilution Factor: 1	Analysis Time..: 21:30	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	103	(75 - 125)	SW846 6020	01/24-01/25/11	MDHK71AQ
		Dilution Factor: 1	Analysis Time..: 21:30	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	102	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71A5
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Barium	108	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71CJ
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Beryllium	99	(75 - 125)	SW846 6020	01/24-01/25/11	MDHK71AF
		Dilution Factor: 1	Analysis Time..: 21:30	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	102	(75 - 125)	SW846 6020	01/24-01/25/11	MDHK71AJ
		Dilution Factor: 1	Analysis Time..: 21:30	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	94	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71CM
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Chromium	100	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71CU
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Cobalt	99	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71CQ
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Copper	105	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71CX
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A200401 **Matrix.....:** WG
Date Sampled...: 01/19/11 09:03 **Date Received..:** 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	100	(75 - 125)	SW846 6020	01/24-01/25/11	MDHK71AM
		Dilution Factor: 1	Analysis Time..: 21:30	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	94	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71A8
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Magnesium	96	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71C5
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Manganese	104	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71C8
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Mercury	100	(80 - 120)	SW846 7470A	01/24-01/28/11	MDHK71DJ
		Dilution Factor: 1	Analysis Time..: 15:44	Instrument ID..: H4	
		Analyst ID.....: 002260			
Nickel	102	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71DC
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Potassium	105	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71C2
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Selenium	101	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71CC
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Silver	99	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71CF
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Sodium	92	(75 - 125)	SW846 6020	01/24-01/25/11	MDHK71A2
		Dilution Factor: 1	Analysis Time..: 21:30	Instrument ID..: I8	
		Analyst ID.....: 000079			
Thallium	92	(75 - 125)	SW846 6020	01/24-01/25/11	MDHK71AX
		Dilution Factor: 1	Analysis Time..: 21:30	Instrument ID..: I8	
		Analyst ID.....: 000079			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A200401 **Matrix.....:** WG
Date Sampled...: 01/19/11 09:03 **Date Received..:** 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	102	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHK71DF
		Dilution Factor: 1	Analysis Time..: 14:13	Instrument ID..: I5	
		Analyst ID.....: 001637			
Zinc	103	(75 - 125)	SW846 6020	01/24-01/25/11	MDHK71AU
		Dilution Factor: 1	Analysis Time..: 21:30	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 #...: A1A200401 **Matrix.....:** WG
Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1A200401-018 **Prep Batch #...:** 1024022					
Aluminum	101	(75 - 125)	SW846 6020	01/24-01/25/11	MDHLQ1AM
		Dilution Factor: 1	Analysis Time..: 22:39	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	105	(75 - 125)	SW846 6020	01/24-01/25/11	MDHLQ1A2
		Dilution Factor: 1	Analysis Time..: 22:39	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	100	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1AF
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Barium	106	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1CU
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Beryllium	103	(75 - 125)	SW846 6020	01/24-01/25/11	MDHLQ1AQ
		Dilution Factor: 1	Analysis Time..: 22:39	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	104	(75 - 125)	SW846 6020	01/24-01/25/11	MDHLQ1AU
		Dilution Factor: 1	Analysis Time..: 22:39	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	87	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1CX
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Chromium	98	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1C5
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Cobalt	97	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1C2
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Copper	104	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1C8
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A200401 **Matrix.....:** WG
Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	105	(75 - 125)	SW846 6020	01/24-01/25/11	MDHLQ1AX
		Dilution Factor: 1	Analysis Time..: 22:39	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	92	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1AJ
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Magnesium	93	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1CF
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Manganese	102	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1CJ
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Mercury	126 N	(80 - 120)	SW846 7470A	01/24-01/28/11	MDHLQ1DJ
		Dilution Factor: 1	Analysis Time..: 15:38	Instrument ID..: H4	
		Analyst ID.....: 002260			
Nickel	101	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1DC
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Potassium	104	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1CC
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Selenium	100	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1CM
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Silver	97	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1CQ
		Dilution Factor: 1	Analysis Time..: 15:23	Instrument ID..: I5	
		Analyst ID.....: 001637			
Sodium	98	(75 - 125)	SW846 6020	01/24-01/25/11	MDHLQ1AC
		Dilution Factor: 1	Analysis Time..: 22:39	Instrument ID..: I8	
		Analyst ID.....: 000079			
Thallium	96	(75 - 125)	SW846 6020	01/24-01/25/11	MDHLQ1A8
		Dilution Factor: 1	Analysis Time..: 22:39	Instrument ID..: I8	
		Analyst ID.....: 000079			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A200401 **Matrix.....:** WG
Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	101	(75 - 125)	SW846 6010B	01/24-01/25/11	MDHLQ1DF
		Dilution Factor: 1	Analysis Time..: 15:23		Instrument ID..: I5
		Analyst ID.....: 001637			
Zinc	106	(75 - 125)	SW846 6020	01/24-01/25/11	MDHLQ1A5
		Dilution Factor: 1	Analysis Time..: 22:39		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 #...: A1A200401 **Work Order #...:** MDHK7-SMP MDHK7-DUP **Matrix.....:** WG

Date Sampled...: 01/19/11 09:03 **Date Received..:** 01/20/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A1A200401-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 14:13	Analyst ID.....: 001637	
			Instrument ID..: I5					
Aluminum						SD Lot-Sample #: A1A200401-002		
	70.0	68.3	ug/L	2.5	(0-20)	SW846 6020	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 21:30	Analyst ID.....: 000079	
			Instrument ID..: I8					
Arsenic						SD Lot-Sample #: A1A200401-002		
	3.7 B	4.3 B	ug/L	15	(0-20)	SW846 6010B	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 14:13	Analyst ID.....: 001637	
			Instrument ID..: I5					
Barium						SD Lot-Sample #: A1A200401-002		
	32.6	32.9	ug/L	0.96	(0-20)	SW846 6010B	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 14:13	Analyst ID.....: 001637	
			Instrument ID..: I5					
Beryllium						SD Lot-Sample #: A1A200401-002		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 21:30	Analyst ID.....: 000079	
			Instrument ID..: I8					
Calcium						SD Lot-Sample #: A1A200401-002		
	39700	40000	ug/L	0.80	(0-20)	SW846 6010B	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 14:13	Analyst ID.....: 001637	
			Instrument ID..: I5					
Cadmium						SD Lot-Sample #: A1A200401-002		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 21:30	Analyst ID.....: 000079	
			Instrument ID..: I8					
Cobalt						SD Lot-Sample #: A1A200401-002		
	2.1 B	1.7 B	ug/L	21	(0-20)	SW846 6010B	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 14:13	Analyst ID.....: 001637	
			Instrument ID..: I5					
Chromium						SD Lot-Sample #: A1A200401-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 14:13	Analyst ID.....: 001637	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1A200401-000 **Work Order #...:** MDHK7-SMP MDHK7-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A1A200401-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A1A200401-002		
	1810	1780	ug/L	1.9	(0-20)	SW846 6020	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 21:30	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A1A200401-002		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	01/24-01/28/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:44	Analyst ID.....: 002260	
		Instrument ID..: H4						
Potassium						SD Lot-Sample #: A1A200401-002		
	935 B	933 B	ug/L	0.23	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A1A200401-002		
	11700	11800	ug/L	0.87	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A1A200401-002		
	731	738	ug/L	0.86	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A1A200401-002		
	6470 J	6400	ug/L	1.0	(0-20)	SW846 6020	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 21:30	Analyst ID.....: 000079	
		Instrument ID..: I8						
Nickel						SD Lot-Sample #: A1A200401-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A1A200401-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 14:13	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1A200401-000 **Work Order #...:** MDHK7-SMP MDHK7-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A1A200401-002		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 21:30	Analyst ID.....: 000079	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #: A1A200401-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 14:13	Analyst ID.....: 001637	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #: A1A200401-002		
	0.20 B	ND	ug/L	200	(0-20)	SW846 6020	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 21:30	Analyst ID.....: 000079	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #: A1A200401-002		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 14:13	Analyst ID.....: 001637	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #: A1A200401-002		
	ND	2.6 B	ug/L	200	(0-20)	SW846 6020	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 21:30	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 #...: A1A200401 **Work Order #...:** MDHLQ-SMP MDHLQ-DUP **Matrix.....:** WG

Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						
Aluminum						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8						
Arsenic						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						
Barium						SD Lot-Sample #: A1A200401-018		
	76.2	78.3	ug/L	2.7	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						
Beryllium						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8						
Calcium						SD Lot-Sample #: A1A200401-018		
	66700	65400	ug/L	1.9	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						
Cadmium						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8						
Cobalt						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						
Chromium						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1A200401-000 **Work Order #...:** MDHLQ-SMP MDHLQ-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Copper						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						
Iron						SD Lot-Sample #: A1A200401-018		
	80.9	73.6	ug/L	9.4	(0-20)	SW846 6020	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8						
Mercury						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	01/24-01/28/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:38	Analyst ID.....: 002260	
		Instrument ID..: H4						
Potassium						SD Lot-Sample #: A1A200401-018		
	1410	1490	ug/L	5.8	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						
Magnesium						SD Lot-Sample #: A1A200401-018		
	26500	26100	ug/L	1.8	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						
Manganese						SD Lot-Sample #: A1A200401-018		
	239	235	ug/L	1.8	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						
Sodium						SD Lot-Sample #: A1A200401-018		
	6170 J	6070	ug/L	1.6	(0-20)	SW846 6020	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 22:39	Analyst ID.....: 000079	
		Instrument ID..: I8						
Nickel						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						
Lead						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
		Dilution Factor: 1				Analysis Time..: 15:23	Analyst ID.....: 001637	
		Instrument ID..: I5						

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1A200401-000 **Work Order #...:** MDHLQ-SMP MDHLQ-DUP **Matrix.....:** WG

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 22:39	Analyst ID.....: 000079	
			Instrument ID..: I8					
Selenium						SD Lot-Sample #: A1A200401-018		
	ND	4.4 B	ug/L	200	(0-20)	SW846 6010B	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 15:23	Analyst ID.....: 001637	
			Instrument ID..: I5					
Thallium						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 22:39	Analyst ID.....: 000079	
			Instrument ID..: I8					
Vanadium						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 15:23	Analyst ID.....: 001637	
			Instrument ID..: I5					
Zinc						SD Lot-Sample #: A1A200401-018		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024022
			Dilution Factor: 1			Analysis Time..: 22:39	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: I80125B.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 1/25/2011 2:37 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	6.9	U								
Thallium	205	1	**0.18**	**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 North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80125B.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 1/25/2011 3:06 PM Found	Q	CCB 6 1/25/2011 9:03 PM Found	Q	CCB 7 1/25/2011 10:10 PM Found	Q	CCB 8 1/25/2011 11:12 PM Found	Q	CCB 9 1/25/2011 11:59 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	6.9	U	**18.5**	**B**	**20.9**	**B**	**21.5**	**B**	**24**	**B**
Thallium	205	1	**0.25**	**B**	**0.18**	**B**	**0.27**	**B**	**0.22**	**B**	**0.17**	**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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 7, 2011

SDG: A1A200401 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 2.8°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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 7, 2011

SDG: A1A200401 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 MS analyzed on sample FWGSCFmw-003-1684-GW recovered below control limits at 67%. The MS and MSD analyzed on sample FWGLNWmw-025c-1674-GW recovered below control limits at 63% and 79%, with and RPD of 22%. All cyanide results were qualified as estimated, "UJ".	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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 7, 2011

SDG: A1A200401 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
1. Did Chain-of-Custody information agree with laboratory report?	X				
2. Were samples preserved properly and received in good condition?	X			The coolers were received between 1.1– 2.8 °C.	QAPP Table 4-2
3. Were holding times met?	X				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	X				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	X				QAPP Table 3-9
6. Were all QAPP-specified target analytes reported?	X				QAPP Table 3-9
7. Was the Linear Calibration Range verified using 3 standards and 1 blank? Was the ICV within 10% of the initial values?	X				Method EPA 353.2 Section 9.2.2 J
8. Were the calibration standards verified by preparation and analysis of a Quality Control Sample? Were results within 10% of the stated values?	X				Method EPA 353.2 Section 9.2.3 Pj
9. Was an Instrument Performance Check Solution (CCV) analyzed immediately following daily calibration, after every 10th sample, and at the end of the analytical sequence?	X				Method EPA 353.2 Section 9.3.4
10. Was the CCV a mid-level standard from the initial calibration curve?	X				Method EPA 353.2 Section 9.3.4
11. Were the CCVs 90-110%?	X				Method EPA 353.2 Section 9.3.4 >110%=J; <85%=J/R 85-90%=J/UJ;
12. Was a method blank and a calibration blank prepared and analyzed with each batch?	X				Method EPA 353.2 Section 9.3.1, 9.3.4
13. Were target analytes detected in the method blank or calibration blank >1/2 the MRL?		X		*ADR checked section;*	LCG Attachment A Section 11 <5x = B
14. Was a field blank (trip or equipment) collected and analyzed?	X				
15. Were target analytes reported in the field blank analyses (trip or equipment) >1/2 the MRL?		X		*ADR checked section;*	*<5x=U*

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 7, 2011

SDG: A1A200401 Rev 0
Analysis: EPA 353.2

Review Questions:	Yes	No	N/A	Comments	Qual/Crtieria
16. Was a field duplicate analyzed? Were the RPDs acceptable?	X				
17. Was an LCS prepared and analyzed with each batch? Was the LCS recovery within 90-110%?	X				Method EPA 353.2 Section 9.3.3 J/UJ; <50%= R
18. Was a MS/MSD pair prepared with each batch?	X				*Method EPA 353.2 Section 9.4.1*
19. Was the MS/MSD parent sample a Ravenna sample?	X				
20. Were MS/MSD recoveries and RPD within acceptance criteria?	X			ADR checked section;	*Method EPA 353.2 Section 9.4.2* *Pj*
21. Were sample concentrations within calibration range?	X				
22. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		X			
23. Were lab comments included in report? If yes, summarize contents.	X				

References: Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5

Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLNWmw-025C-1674-GW

General Chemistry

Lot-Sample #...: A1A200401-001 **Work Order #...:** MDHK5 **Matrix.....:** WG
Date Sampled...: 01/19/11 09:03 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-007C-1677-GW

General Chemistry

Lot-Sample #...: A1A200401-004 Work Order #...: MDHK9 Matrix.....: WG
Date Sampled...: 01/19/11 11:19 Date Received..: 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGFBQmw-174C-1673-GW

General Chemistry

Lot-Sample #...: A1A200401-006 **Work Order #...:** MDHLC **Matrix.....:** WG
Date Sampled...: 01/19/11 13:21 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-197C-1654-GW

General Chemistry

Lot-Sample #...: A1A200401-008 **Work Order #...:** MDHLE **Matrix.....:** WG
Date Sampled...: 01/19/11 15:04 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL4mw-196C-1653-GW

General Chemistry

Lot-Sample #...: A1A200401-010 **Work Order #...:** MDHLG **Matrix.....:** WG
Date Sampled...: 01/19/11 16:29 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-005-1686-GW

General Chemistry

Lot-Sample #...: A1A200401-013 **Work Order #...:** MDHLK **Matrix.....:** WG
Date Sampled...: 01/19/11 09:15 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320
	Dilution Factor: 1			MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	01/20/11	1020127
	Dilution Factor: 1			MDL.....: 0.05		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-006-1687-GW

General Chemistry

Lot-Sample #...: A1A200401-015 **Work Order #...:** MDHLM **Matrix.....:** WG
Date Sampled...: 01/19/11 11:20 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	01/20/11	1020127
		Dilution Factor: 1		MDL.....: 0.05		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGSCFmw-003-1684-GW

General Chemistry

Lot-Sample #...: A1A200401-017 **Work Order #...:** MDHLP **Matrix.....:** WG
Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320
		Dilution Factor: 1		MDL.....: 0.0050		
Nitrate-Nitrite	ND	0.1	mg/L	MCAWW 353.2	01/20/11	1020127
		Dilution Factor: 1		MDL.....: 0.05		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-238C-1650-GW

General Chemistry

Lot-Sample #...: A1A200401-019 **Work Order #...:** MDHLR **Matrix.....:** WG
Date Sampled...: 01/19/11 15:25 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320
	Dilution Factor: 1			MDL.....: 0.0050		

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-005C-1675-GW

General Chemistry

Lot-Sample #...: A1A200401-022 **Work Order #...:** MDHLW **Matrix.....:** WG
Date Sampled...: 01/19/11 09:05 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-DUP5-1696-GW

General Chemistry

Lot-Sample #...: A1A200401-024 **Work Order #...:** MDHL1 **Matrix.....:** WG
Date Sampled...: 01/19/11 10:05 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-006C-1676-GW

General Chemistry

Lot-Sample #...: A1A200401-026 **Work Order #...:** MDHL3 **Matrix.....:** WG
Date Sampled...: 01/19/11 11:15 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGWBGmw-009C-1678-GW

General Chemistry

Lot-Sample #...: A1A200401-028 **Work Order #...:** MDHL5 **Matrix.....:** WG
Date Sampled...: 01/19/11 12:30 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE3-1700-GW

General Chemistry

Lot-Sample #...: A1A200401-030 **Work Order #...:** MDHL7 **Matrix.....:** WQ
Date Sampled...: 01/19/11 13:30 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGLL3mw-239C-1651-GW

General Chemistry

Lot-Sample #...: A1A200401-031 **Work Order #...:** MDHL8 **Matrix.....:** WG
Date Sampled...: 01/19/11 15:00 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-005C-1657-GW

General Chemistry

Lot-Sample #...: A1A200401-033 **Work Order #...:** MDHMA **Matrix.....:** WG
Date Sampled...: 01/19/11 16:10 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGCBPmw-008C-1659-GW

General Chemistry

Lot-Sample #...: A1A200401-035 **Work Order #...:** MDHMD **Matrix.....:** WG
Date Sampled...: 01/19/11 17:05 **Date Received..:** 01/20/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320

Dilution Factor: 1 MDL.....: 0.0050

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1A200401 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MDM431AA		MB Lot-Sample #:	A1A240000-320	
	ND	0.010	mg/L	SW846 9012A	01/24/11	1024320
		Dilution Factor: 1				
Nitrate-Nitrite		Work Order #: MDH0N1AA		MB Lot-Sample #:	A1A200000-127	
	ND	0.1	mg/L	MCAWW 353.2	01/20/11	1020127
		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 #...: A1A200401 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MDM431AC	LCS Lot-Sample#: A1A240000-320		
	83	(80 - 120)	SW846 9012A	01/24/11	1024320
		Dilution Factor: 1			
Nitrate-Nitrite		Work Order #: MDH0N1AC	LCS Lot-Sample#: A1A200000-127		
	98	(90 - 110)	MCAWW 353.2	01/20/11	1020127
		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 #...: A1A200401 **Matrix.....:** WG
Date Sampled...: 01/19/11 12:50 **Date Received..:** 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: MDHK51AN-MS/MDHK51AP-MSD				MS Lot-Sample #: A1A200401-001	
	63 N	(80 - 120)			SW846 9012A	01/24/11	1024320
	79 N,*	(80 - 120)	22	(0-20)	SW846 9012A	01/24/11	1024320
		Dilution Factor: 1					
Cyanide, Total		WO#: MDHLP1AM-MS/MDHLP1AN-MSD				MS Lot-Sample #: A1A200401-017	
	67 N	(80 - 120)			SW846 9012A	01/24/11	1024320
	82	(80 - 120)	20	(0-20)	SW846 9012A	01/24/11	1024320
		Dilution Factor: 1					
Nitrate-Nitrite		WO#: MDHLP1AU-MS/MDHLP1AV-MSD				MS Lot-Sample #: A1A200401-017	
	104	(90 - 110)			MCAWW 353.2	01/20/11	1020127
	103	(90 - 110)	0.29	(0-20)	MCAWW 353.2	01/20/11	1020127
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

Appendix 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: A1A200401										
6010B	FWGCBPmw-008C-1659-GF	AQ	N							
				Cobalt	5.0	1.6B		J	ug/L	L
6010B	FWGFBQmw-174C-1673-GF	AQ	N							
				Manganese	10.0	3.0B		J	ug/L	L
				Potassium	1000	946B		J	ug/L	L
6010B	FWGLL3mw-238C-1650-GF	AQ	N							
				Barium	10.0	8.9B		J	ug/L	L
6010B	FWGLL3mw-239C-1651-GF	AQ	N							
				Cobalt	5.0	2.5B		J	ug/L	L
				Nickel	10.0	7.3B		J	ug/L	L
6010B	FWGLL4mw-196C-1653-GF	AQ	N							
				Potassium	1000	703B		J	ug/L	L
6010B	FWGLL4mw-197C-1654-GF	AQ	N							
				Manganese	10.0	5.0B		J	ug/L	L
6010B	FWGLNWmw-025C-1674-GF	AQ	N							
				Arsenic	5.0	3.7B		J	ug/L	L
				Cobalt	5.0	2.1B		J	ug/L	L
				Potassium	1000	935B		J	ug/L	L
6010B	FWGWBGmw-005C-1675-GF	AQ	N							
				Nickel	10.0	2.6B		J	ug/L	Pj,P,L
				Potassium	1000	789B		J	ug/L	L
6010B	FWGWBGmw-006C-1676-GF	AQ	N							
				Potassium	1000	753B		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A200401										
6010B	FWGWBGmw-009C-1678-GF	AQ	N							
				Potassium	1000	651B		J	ug/L	L
6010B	FWGWBGmw-DUP5-1696-GF	AQ	FD							
				Cobalt	5.0	4.9B		J	ug/L	L
				Nickel	10.0	4.1B		J	ug/L	Pj,L
				Potassium	1000	822B		J	ug/L	L
6020	FWGCBPmw-005C-1657-GF	AQ	N							
				Aluminum	50.0	19.7B		J	ug/L	L
6020	FWGEQUIPRINSE3-1700-GW	AQ	EB							
				Iron	50.0	26.8B		J	ug/L	L
				Sodium	1000	16.1B J		JB	ug/L	L,F
				Zinc	10.0	3.1B J		JB	ug/L	L,F
6020	FWGFBQmw-174C-1673-GF	AQ	N							
				Sodium	1000	867B J		J	ug/L	L
				Zinc	10.0	3.6B J		JB	ug/L	L,N,F
6020	FWGLL3mw-238C-1650-GF	AQ	N							
				Thallium	1.0	0.19B		UJ	ug/L	Cb,L
				Zinc	10.0	2.8B J		JB	ug/L	L,N,F
6020	FWGLL3mw-239C-1651-GF	AQ	N							
				Zinc	10.0	8.0B J		JB	ug/L	L,N,F
6020	FWGLL4mw-196C-1653-GF	AQ	N							
				Aluminum	50.0	19.9B		J	ug/L	L
6020	FWGLL4mw-197C-1654-GF	AQ	N							
				Aluminum	50.0	26.8B		J	ug/L	L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A200401										
6020	FWGLNWmw-025C-1674-GF	AQ	N							
				Thallium	1.0	0.20B		UJ	ug/L	Cb,L
6020	FWGSCFmw-003-1684-GF	AQ	N							
				Iron	50.0	80.9		B	ug/L	N
6020	FWGSCFmw-006-1687-GF	AQ	N							
				Iron	50.0	84.0		B	ug/L	N
6020	FWGWBGmw-007C-1677-GF	AQ	N							
				Aluminum	50.0	21.9B		J	ug/L	L
				Thallium	1.0	0.15B		UJ	ug/L	Cb,L
6020	FWGWBGmw-009C-1678-GF	AQ	N							
				Zinc	10.0	2.4B J		JB	ug/L	L,N,F
7470A	FWGLL3mw-238C-1650-GF	AQ	N							
				Mercury	0.20	0.26		J	ug/L	H
7470A	FWGSCFmw-006-1687-GF	AQ	N							
				Mercury	0.20	0.22		J	ug/L	H
7470A	FWGWBGmw-007C-1677-GF	AQ	N							
				Mercury	0.20	0.23		J	ug/L	H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A200401										
8081A	FWGCBPmw-005C-1657-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: A1A200401										
8081A	FWGFBQmw-174C-1673-GW	AQ	N							
				4,4'-DDD	0.30	0.30U		UJ	ug/L	G
				4,4'-DDE	0.30	0.30U		UJ	ug/L	G
				4,4'-DDT	0.30	0.30U		UJ	ug/L	G
				Aldrin	0.30	0.30U		UJ	ug/L	G
				alpha-BHC	0.30	0.30U		UJ	ug/L	G
				alpha-Chordane	0.30	0.30U		UJ	ug/L	G
				beta-BHC	0.30	0.30U		UJ	ug/L	G
				delta-BHC	0.30	0.30U		UJ	ug/L	G
				Dieldrin	0.30	0.30U		UJ	ug/L	G
				Endosulfan I	0.25	0.25U		UJ	ug/L	G
				Endosulfan II	0.25	0.25U		UJ	ug/L	G
				Endosulfan sulfate	0.30	0.30U		UJ	ug/L	G
				Endrin	0.30	0.30U		UJ	ug/L	G
				Endrin aldehyde	0.30	0.30U		UJ	ug/L	G
				Endrin ketone	0.30	0.30U		UJ	ug/L	G
				gamma-BHC	0.30	0.30U		UJ	ug/L	G
				gamma-Chlordane	0.30	0.30U		UJ	ug/L	G
				Heptachlor	0.30	0.30U		UJ	ug/L	G
				Heptachlor epoxide	0.30	0.30U		UJ	ug/L	G
				Methoxychlor	1.0	1.0U		UJ	ug/L	G
				Toxaphene	20	20U		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: A1A200401										
8081A	FWGLL3mw-238C-1650-GW	AQ	N							
				4,4'-DDD	0.30	0.30U		UJ	ug/L	G
				4,4'-DDE	0.30	0.30U		UJ	ug/L	G
				4,4'-DDT	0.30	0.30U		UJ	ug/L	G
				Aldrin	0.30	0.30U		UJ	ug/L	G
				alpha-BHC	0.30	0.30U		UJ	ug/L	G
				alpha-Chordane	0.30	0.30U		UJ	ug/L	G
				beta-BHC	0.30	0.15J		J	ug/L	Pj,L,G
				delta-BHC	0.30	0.30U		UJ	ug/L	G
				Dieldrin	0.30	0.30U		UJ	ug/L	G
				Endosulfan I	0.25	0.25U		UJ	ug/L	G
				Endosulfan II	0.25	0.25U		UJ	ug/L	G
				Endosulfan sulfate	0.30	0.30U		UJ	ug/L	G
				Endrin	0.30	0.30U		UJ	ug/L	G
				Endrin aldehyde	0.30	0.30U		UJ	ug/L	G
				Endrin ketone	0.30	0.30U		UJ	ug/L	G
				gamma-BHC	0.30	0.30U		UJ	ug/L	G
				gamma-Chlordane	0.30	0.30U		UJ	ug/L	G
				Heptachlor	0.30	0.30U		UJ	ug/L	G
				Heptachlor epoxide	0.30	0.30U		UJ	ug/L	G
				Methoxychlor	1.0	1.0U		UJ	ug/L	G
				Toxaphene	20	20U		UJ	ug/L	G
8081A	FWGLL3mw-239C-1651-GW	AQ	N							
				beta-BHC	0.030	0.011J		J	ug/L	Pj,L

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A200401										
8081A	FWGLL4mw-196C-1653-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: A1A200401										
8081A	FWGLL4mw-197C-1654-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: A1A200401										
8081A	FWGLNWmw-025C-1674-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: A1A200401										
8081A	FWGSCFmw-005-1686-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: A1A200401										
8081A	FWGWBGmw-005C-1675-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: A1A200401										
8081A	FWGWBGmw-006C-1676-GW	AQ	N							
				4,4'-DDD	0.060	0.060U		UJ	ug/L	G
				4,4'-DDE	0.060	0.060U		UJ	ug/L	G
				4,4'-DDT	0.060	0.060U		UJ	ug/L	G
				Aldrin	0.060	0.060U		UJ	ug/L	G
				alpha-BHC	0.060	0.060U		UJ	ug/L	G
				alpha-Chordane	0.060	0.060U		UJ	ug/L	G
				beta-BHC	0.060	0.060U		UJ	ug/L	G
				delta-BHC	0.060	0.060U		UJ	ug/L	G
				Dieldrin	0.060	0.060U		UJ	ug/L	G
				Endosulfan I	0.050	0.050U		UJ	ug/L	G
				Endosulfan II	0.050	0.050U		UJ	ug/L	G
				Endosulfan sulfate	0.060	0.060U		UJ	ug/L	G
				Endrin	0.060	0.060U		UJ	ug/L	G
				Endrin aldehyde	0.060	0.060U		UJ	ug/L	G
				Endrin ketone	0.060	0.060U		UJ	ug/L	G
				gamma-BHC	0.060	0.060U		UJ	ug/L	G
				gamma-Chlordane	0.060	0.060U		UJ	ug/L	G
				Heptachlor	0.060	0.060U		UJ	ug/L	G
				Heptachlor epoxide	0.060	0.060U		UJ	ug/L	G
				Methoxychlor	0.20	0.20U		UJ	ug/L	G
				Toxaphene	4.0	4.0U		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: A1A200401										
8081A	FWGWBGmw-007C-1677-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: A1A200401										
8081A	FWGWBGmw-DUP5-1696-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	FWGCBPmw-005C-1657-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A200401										
8082	FWGLL3mw-238C-1650-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-196C-1653-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-197C-1654-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A200401										
8082	FWGLNWmw-025C-1674-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G
8082	FWGSCFmw-005-1686-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		R	ug/L	G,D
				Aroclor 1221	0.50	0.50U		R	ug/L	G,D
				Aroclor 1232	0.50	0.50U		R	ug/L	G,D
				Aroclor 1242	0.50	0.50U		R	ug/L	G,D
				Aroclor 1248	0.50	0.50U		R	ug/L	G,D
				Aroclor 1254	0.50	0.50U		R	ug/L	G,D
				Aroclor 1260	0.50	0.50U		R	ug/L	G,D
8082	FWGWBGmw-005C-1675-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A200401										
8082	FWGWBGmw-006C-1676-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	FWGCBPmw-005C-1657-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGCBPmw-008C-1659-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGEQUIPRINSE3-1700-GW	AQ	EB							
				2-Butanone	10	3.3J		JB	ug/L	O,L
				Acetone	10	8.1J		JB	ug/L	O,L
				Chloroform	1.0	0.61J		J	ug/L	L
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGFBQmw-174C-1673-GW	AQ	N							
				Acetone	10	3.1J		JB	ug/L	O,N,L
8260B	FWGLL3mw-238C-1650-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGLL3mw-239C-1651-GW	AQ	N							
				Carbon tetrachloride	1.0	0.27J		J	ug/L	L
				Chloroform	1.0	0.41J		JB	ug/L	L,N
				Methylene chloride	2.0	2.0U		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: A1A200401										
8260B	FWGLNWmw-025C-1674-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGSCFmw-003-1684-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGSCFmw-005-1686-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGSCFmw-006-1687-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGTEAM1-TRIP	AQ	TB							
				2-Butanone	10	0.59J		J	ug/L	L
				4-Methyl-2-pentanone	10	0.32J		J	ug/L	L
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGTEAM2-TRIP	AQ	TB							
				2-Butanone	10	0.62J		J	ug/L	L
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGTEAM3-TRIP	AQ	TB							
				2-Butanone	10	0.59J		J	ug/L	L
				4-Methyl-2-pentanone	10	0.34J		J	ug/L	L
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGWBGmw-005C-1675-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGWBGmw-006C-1676-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGWBGmw-009C-1678-GW	AQ	N							
				Methylene chloride	2.0	2.0U		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: A1A200401										
8260B	FWGWBGmw-DUP5-1696-GW	AQ	FD							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8270C	FWGCBPmw-005C-1657-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	1.3J		J	ug/L	L
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGCBPmw-008C-1659-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGEQUIPRINSE3-1700-GW	AQ	EB							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGFBQmw-174C-1673-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGLL3mw-238C-1650-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGLL3mw-239C-1651-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGLL4mw-196C-1653-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGLL4mw-197C-1654-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGLNWmw-025C-1674-GW	AQ	N							
				bis(2-Ethylhexyl) phthalate	10	0.81J		J	ug/L	L
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	H,J

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: A1A200401										
8270C	FWGSCFmw-003-1684-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	H,J
8270C	FWGSCFmw-005-1686-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGSCFmw-006-1687-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGWBGmw-005C-1675-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGWBGmw-006C-1676-GW	AQ	N							
				2,4,5-Trichlorophenol	5.0	5.0U		UJ	ug/L	G
				2,4,6-Trichlorophenol	5.0	5.0U		UJ	ug/L	G
				2,4-Dichlorophenol	2.0	2.0U		UJ	ug/L	G
				2,4-Dimethylphenol	2.0	2.0U		UJ	ug/L	G
				2,4-Dinitrophenol	5.0	5.0U		UJ	ug/L	G
				2-Chlorophenol	1.0	1.0U		UJ	ug/L	G
				2-Methylphenol	1.0	1.0U		UJ	ug/L	G
				2-Nitrophenol	2.0	2.0U		UJ	ug/L	G
				4,6-Dinitro-2-methylphenol	5.0	5.0U		UJ	ug/L	G
				4-Chloro-3-methylphenol	2.0	2.0U		UJ	ug/L	G
				4-Methylphenol	1.0	1.0U		UJ	ug/L	G
				4-Nitrophenol	5.0	5.0U		UJ	ug/L	G
				Benzoic acid	10	10U		UJ	ug/L	G
				Benzyl alcohol	5.0	0.43J		J	ug/L	G,L
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
				Pentachlorophenol	5.0	5.0U		UJ	ug/L	G
				Phenol	1.0	1.0U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A200401										
8270C	FWGWBGmw-007C-1677-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGWBGmw-009C-1678-GW	AQ	N							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
8270C	FWGWBGmw-DUP5-1696-GW	AQ	FD							
				Hexachlorocyclopentadiene	10	10U		UJ	ug/L	J
9012A	FWGCBPmw-005C-1657-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGCBPmw-008C-1659-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGEQUIPRINSE3-1700-GW	AQ	EB							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGFBQmw-174C-1673-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL3mw-238C-1650-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL3mw-239C-1651-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL4mw-196C-1653-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGLL4mw-197C-1654-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A200401										
9012A	FWGLNWmw-025C-1674-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGSCFmw-003-1684-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGSCFmw-005-1686-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGSCFmw-006-1687-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGWBGmw-005C-1675-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGWBGmw-006C-1676-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGWBGmw-007C-1677-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGWBGmw-009C-1678-GW	AQ	N	Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGWBGmw-DUP5-1696-GW	AQ	FD	Cyanide	0.010	0.010U		UJ	mg/L	I,H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGCBPmw-005C-1657-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401034

Reviewed By / Date : asd 3/7/2011 **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**														
Aluminum	19.7		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 : FWGCBPmw-005C-1657-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401033

Reviewed By / Date : asd 3/7/2011 **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 : FWGCBPmw-005C-1657-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401033

Reviewed By / Date : asd 3/7/2011 **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**															
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	1.3		ug/L	J	YES	J								J							L
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGCBPmw-008C-1659-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401036

Reviewed By / Date : asd 3/7/2011 **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	1.6		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 : FWGCBPmw-008C-1659-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401035

Reviewed By / Date : asd 3/7/2011 **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**															
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE3-1700-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401030

Reviewed By / Date : asd 3/7/2011 **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	3.3		ug/L	J	YES	UJ JB								J		UB					O,L
Acetone	8.1		ug/L	J	YES	UJ JB								J		UB					O,L
Chloroform	0.61		ug/L	J	YES	J								J							L
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE3-1700-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401030

Reviewed By / Date : asd 3/7/2011 **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**															
Iron	26.8		ug/L	B	YES	J								J							L
Sodium	16.1		ug/L	B J	YES	~~UJ~~ JB			~~J~~ B					J							L,F
Zinc	3.1		ug/L	B J	YES	UJ JB			~~J~~ B					J							L,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGFBQmw-174C-1673-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401007

Reviewed By / Date : asd 3/7/2011 **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	3.0		ug/L	B	YES	J								J							L
Potassium	946		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Sodium	867		ug/L	B J	YES	J								J							L
Zinc	3.6		ug/L	B J	YES	UJ			UB					J		UB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGFBQmw-174C-1673-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A200401006

Reviewed By / Date : asd 3/7/2011 **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: 10**															
4,4'-DDD	0.30		ug/L	U	YES	UJ							UJ								G
4,4'-DDE	0.30		ug/L	U	YES	UJ							UJ								G
4,4'-DDT	0.30		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.30		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.30		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.30		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.30		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.30		ug/L	UJ	YES	**UJ**							UJ								G
Dieldrin	0.30		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.25		ug/L	U	YES	UJ							UJ								G
Endosulfan II	0.25		ug/L	U	YES	UJ							UJ								G
Endosulfan sulfate	0.30		ug/L	U	YES	UJ							UJ								G
Endrin	0.30		ug/L	U	YES	UJ							UJ								G
Endrin aldehyde	0.30		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.30		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.30		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.30		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.30		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.30		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	1.0		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	20		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 : FWGFBQmw-174C-1673-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401006

Reviewed By / Date : asd 3/7/2011 **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	3.1		ug/L	J	YES	UJ								J		UB					O,N,L
Analysis Method : 8270C							**Dilution: 1**														
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A							**Dilution: 1**														
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-238C-1650-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401020

Reviewed By / Date : asd 3/7/2011 **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	8.9		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Thallium	0.19		ug/L	B	YES	UJ								J							Cb,L
Zinc	2.8		ug/L	B J	YES	~~UJ~~ J B			~~U~~ B					J		~~U~~ B					L,N,F
Analysis Method : 7470A						**Dilution: 1**															
Mercury	0.26		ug/L		YES	J					J										H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-238C-1650-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A200401019

Reviewed By / Date : asd 3/7/2011 **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: 10**															
4,4'-DDD	0.30		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.30		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.30		ug/L	U	YES	UJ							UJ								G
Aldrin	0.30		ug/L	U	YES	UJ							UJ								G
alpha-BHC	0.30		ug/L	U	YES	UJ							UJ								G
alpha-Chordane	0.30		ug/L	U	YES	UJ							UJ								G
beta-BHC	0.15		ug/L	J	YES	J							J	J							Pj,L,G
delta-BHC	0.30		ug/L	U	YES	UJ							UJ								G
Dieldrin	0.30		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.25		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.25		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.30		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.30		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.30		ug/L	U	YES	UJ							UJ								G
Endrin ketone	0.30		ug/L	U	YES	UJ							UJ								G
gamma-BHC	0.30		ug/L	U	YES	UJ							UJ								G
gamma-Chlordane	0.30		ug/L	U	YES	UJ							UJ								G
Heptachlor	0.30		ug/L	U	YES	UJ							UJ								G
Heptachlor epoxide	0.30		ug/L	U	YES	UJ							UJ								G
Methoxychlor	1.0		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	20		ug/L	U	YES	**UJ**							UJ								G

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-238C-1650-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401019

Reviewed By / Date : asd 3/7/2011 **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 : 8260B						**Dilution: 1**															
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-239C-1651-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401032

Reviewed By / Date : asd 3/7/2011 **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	2.5		ug/L	B	YES	J								J							L
Nickel	7.3		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	8.0		ug/L	B J	YES	J JSB			JB					J		JB					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL3mw-239C-1651-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401031

Reviewed By / Date : asd 3/7/2011 **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**															
beta-BHC	0.011		ug/L	J	YES	J								J							Pj,L
Analysis Method : 8260B						**Dilution: 1**															
Carbon tetrachloride	0.27		ug/L	J	YES	J								J							L
Chloroform	0.41		ug/L	J	YES	~~UJ~~ JB								J		~~UJ~~ B					L,N
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL4mw-196C-1653-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401011

Reviewed By / Date : asd 3/7/2011 **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	703		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Aluminum	19.9		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL4mw-196C-1653-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401010

Reviewed By / Date : asd 3/7/2011 **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-1653-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401010

Reviewed By / Date : asd 3/7/2011 **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**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	**UJ**				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL4mw-197C-1654-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401009

Reviewed By / Date : asd 3/7/2011 **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	5.0		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Aluminum	26.8		ug/L	B	YES	J								J							L

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLL4mw-197C-1654-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401008

Reviewed By / Date : asd 3/7/2011 **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-197C-1654-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401008

Reviewed By / Date : asd 3/7/2011 **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**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	**UJ**				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGLNWmw-025C-1674-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401002

Reviewed By / Date : asd 3/7/2011 **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	3.7		ug/L	B	YES	J								J							L
Cobalt	2.1		ug/L	B	YES	J								J							L
Potassium	935		ug/L	B	YES	J								J							L
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 : FWGLNWmw-025C-1674-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401001

Reviewed By / Date : asd 3/7/2011 **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 : FWGLNWmw-025C-1674-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401001

Reviewed By / Date : asd 3/7/2011 **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**															
Methylene chloride	2.0		ug/L	U	YES	**UJ**															Pj
Analysis Method : 8270C						**Dilution: 1**															
bis(2-Ethylhexyl) phthalate	0.81		ug/L	J	YES	J								J							L
Hexachlorocyclopentadiene	10		ug/L	U	YES	**UJ**				UJ	UJ										H,J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-003-1684-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401018

Reviewed By / Date : asd 3/7/2011 **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**															
Iron	80.9		ug/L		YES	UB										UB					N

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-003-1684-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401017

Reviewed By / Date : asd 3/7/2011 **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**															
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				LJ	UJ										H,J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-005-1686-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RE** **Sample Matrix :** AQ

Lab Sample ID: A1A200401013

Reviewed By / Date : asd 3/7/2011 **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	R		R					UJ								G,D
Aroclor 1221	0.50		ug/L	U	YES	R		R					UJ								G,D
Aroclor 1232	0.50		ug/L	U	YES	R		R					UJ								G,D
Aroclor 1242	0.50		ug/L	U	YES	R		R					UJ								G,D
Aroclor 1248	0.50		ug/L	U	YES	R		R					UJ								G,D
Aroclor 1254	0.50		ug/L	U	YES	R		R					UJ								G,D
Aroclor 1260	0.50		ug/L	U	YES	R		R					UJ								G,D

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-005-1686-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401013

Reviewed By / Date : asd 3/7/2011 **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 : 8260B						**Dilution: 1**															
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-006-1687-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type:** RES/TOT **Sample Matrix :** AQ

Lab Sample ID: A1A200401016

Reviewed By / Date : asd 3/7/2011 **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**															
Iron	84.0		ug/L		YES	B										B					N
Analysis Method : 7470A						**Dilution: 1**															
Mercury	0.22		ug/L		YES	J					J										H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGSCFmw-006-1687-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401015

Reviewed By / Date : asd 3/7/2011 **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**															
Methylene chloride	2.0		ug/L	U	YES	**UJ**															Pj
Analysis Method : 8270C						**Dilution: 1**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	**UJ**				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	**UJ**					UJ										I,H

* Overall result quelifier 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 :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401003

Reviewed By / Date : asd 3/7/2011 **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	0.59		ug/L	J	YES	J								J							L
4-Methyl-2-pentanone	0.32		ug/L	J	YES	J								J							L
Methylene chloride	2.0		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 : FWGTEAM2-TRIP **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401012

Reviewed By / Date : asd 3/7/2011 **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	0.62		ug/L	J	YES	J								J							L
Methylene chloride	2.0		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 : FWGTEAM3-TRIP **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401021

Reviewed By / Date : asd 3/7/2011 **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	0.59		ug/L	J	YES	J								J							L
4-Methyl-2-pentanone	0.34		ug/L	J	YES	J								J							L
Methylene chloride	2.0		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 : FWGWBGmw-005C-1675-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401023

Reviewed By / Date : asd 3/7/2011 **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	2.6		ug/L	B	YES	J								J							Pj,P,L
Potassium	789		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 : FWGWBGmw-005C-1675-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401022

Reviewed By / Date : asd 3/7/2011 **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 : FWGWBGmw-005C-1675-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401022

Reviewed By / Date : asd 3/7/2011 **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**															
Methylene chloride	2.0		ug/L	U	YES	UJ															PJ
Analysis Method : 8270C						**Dilution: 1**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGWBGmw-006C-1676-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401027

Reviewed By / Date : asd 3/7/2011 **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	753		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 : FWGWBGmw-006C-1676-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: DL** **Sample Matrix :** AQ

Lab Sample ID: A1A200401026

Reviewed By / Date : asd 3/7/2011 **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: 2**															
4,4'-DDD	0.060		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDE	0.060		ug/L	U	YES	**UJ**							UJ								G
4,4'-DDT	0.060		ug/L	U	YES	**UJ**							UJ								G
Aldrin	0.060		ug/L	U	YES	**UJ**							UJ								G
alpha-BHC	0.060		ug/L	U	YES	**UJ**							UJ								G
alpha-Chordane	0.060		ug/L	U	YES	**UJ**							UJ								G
beta-BHC	0.060		ug/L	U	YES	**UJ**							UJ								G
delta-BHC	0.060		ug/L	U	YES	**UJ**							UJ								G
Dieldrin	0.060		ug/L	U	YES	**UJ**							UJ								G
Endosulfan I	0.050		ug/L	U	YES	**UJ**							UJ								G
Endosulfan II	0.050		ug/L	U	YES	**UJ**							UJ								G
Endosulfan sulfate	0.060		ug/L	U	YES	**UJ**							UJ								G
Endrin	0.060		ug/L	U	YES	**UJ**							UJ								G
Endrin aldehyde	0.060		ug/L	U	YES	**UJ**							UJ								G
Endrin ketone	0.060		ug/L	U	YES	**UJ**							UJ								G
gamma-BHC	0.060		ug/L	U	YES	**UJ**							UJ								G
gamma-Chlordane	0.060		ug/L	U	YES	**UJ**							UJ								G
Heptachlor	0.060		ug/L	U	YES	**UJ**							UJ								G
Heptachlor epoxide	0.060		ug/L	U	YES	**UJ**							UJ								G
Methoxychlor	0.20		ug/L	U	YES	**UJ**							UJ								G
Toxaphene	4.0		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 : FWGWBGmw-006C-1676-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401026

Reviewed By / Date : asd 3/7/2011 **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 : 8260B						**Dilution: 1**															
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
2,4,5-Trichlorophenol	5.0		ug/L	U	YES	UJ							UJ								G
2,4,6-Trichlorophenol	5.0		ug/L	U	YES	UJ							UJ								G
2,4-Dichlorophenol	2.0		ug/L	U	YES	UJ							UJ								G
2,4-Dimethylphenol	2.0		ug/L	U	YES	UJ							UJ								G
2,4-Dinitrophenol	5.0		ug/L	U	YES	UJ							UJ								G
2-Chlorophenol	1.0		ug/L	U	YES	UJ							UJ								G
2-Methylphenol	1.0		ug/L	U	YES	UJ							UJ								G
2-Nitrophenol	2.0		ug/L	U	YES	UJ							UJ								G
4,6-Dinitro-2-methylphenol	5.0		ug/L	U	YES	UJ							UJ								G
4-Chloro-3-methylphenol	2.0		ug/L	U	YES	UJ							UJ								G
4-Methylphenol	1.0		ug/L	U	YES	UJ							UJ								G
4-Nitrophenol	5.0		ug/L	U	YES	UJ							UJ								G
Benzoic acid	10		ug/L	U	YES	UJ							UJ								G
Benzyl alcohol	0.43		ug/L	J	YES	J							J	J							G,L
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Pentachlorophenol	5.0		ug/L	U	YES	UJ							UJ								G
Phenol	1.0		ug/L	U	YES	UJ							UJ								G
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGWBGmw-007C-1677-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401005

Reviewed By / Date : asd 3/7/2011 **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**															
Aluminum	21.9		ug/L	B	YES	**J**								J							L
Thallium	0.15		ug/L	B	YES	**UJ**								J							Cb,L
Analysis Method : 7470A						**Dilution: 1**															
Mercury	0.23		ug/L		YES	**J**					J										H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGWBGmw-007C-1677-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401004

Reviewed By / Date : asd 3/7/2011 **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**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGWBGmw-009C-1678-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401029

Reviewed By / Date : asd 3/7/2011 **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	651		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	2.4		ug/L	B J	YES	~~UJ~~ JB			~~UB~~					J		~~UB~~					L,N,F

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGWBGmw-009C-1678-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401028

Reviewed By / Date : asd 3/7/2011 **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**															
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGWBGmw-DUP5-1696-GF **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A200401025

Reviewed By / Date : asd 3/7/2011 **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
Nickel	4.1		ug/L	B	YES	J								J							Pj,L
Potassium	822		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 : FWGWBGmw-DUP5-1696-GW **Lab Report Batch :** A1A200401 **Lab ID :** TALCAN

Sample Date : 01/19/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A200401024

Reviewed By / Date : asd 3/7/2011 **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 : 8260B						**Dilution: 1**															
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Hexachlorocyclopentadiene	10		ug/L	U	YES	UJ				UJ											J
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

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: A1A200401 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE3-1700	A1A200401030	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Potassium	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: A1A200401 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGCBPmw-005C-1657-	A1A200401034	6020	AQ	Aluminum	B	19.7	50.0	ug/L
FWGCBPmw-005C-1657-	A1A200401033	8270C		bis(2-Ethylhexyl) phthalate	J	1.3	10	ug/L
FWGCBPmw-008C-1659-	A1A200401036	6010B		Cobalt	B	1.6	5.0	ug/L
FWGEQUIPRINSE3-1700	A1A200401030	6020		Iron	B	26.8	50.0	ug/L
				Sodium	B J	16.1	1000	ug/L
				Zinc	B J	3.1	10.0	ug/L
		8260B		2-Butanone	J	3.3	10	ug/L
				Acetone	J	8.1	10	ug/L
				Chloroform	J	0.61	1.0	ug/L
FWGFBQmw-174C-1673-	A1A200401007	6010B		Manganese	B	3.0	10.0	ug/L
				Potassium	B	946	1000	ug/L
		6020		Sodium	B J	867	1000	ug/L
				Zinc	B J	3.6	10.0	ug/L
FWGFBQmw-174C-1673-	A1A200401006	8260B		Acetone	J	3.1	10	ug/L
FWGLL3mw-238C-1650-G	A1A200401020	6010B		Barium	B	8.9	10.0	ug/L
		6020		Thallium	B	0.19	1.0	ug/L
				Zinc	B J	2.8	10.0	ug/L
FWGLL3mw-238C-1650-G	A1A200401019	8081A		beta-BHC	J	0.15	0.30	ug/L
FWGLL3mw-239C-1651-G	A1A200401032	6010B		Cobalt	B	2.5	5.0	ug/L
				Nickel	B	7.3	10.0	ug/L
		6020		Zinc	B J	8.0	10.0	ug/L
FWGLL3mw-239C-1651-G	A1A200401031	8081A		beta-BHC	J	0.011	0.030	ug/L
		8260B		Carbon tetrachloride	J	0.27	1.0	ug/L
				Chloroform	J	0.41	1.0	ug/L
FWGLL4mw-196C-1653-G	A1A200401011	6010B		Potassium	B	703	1000	ug/L
		6020		Aluminum	B	19.9	50.0	ug/L
FWGLL4mw-197C-1654-G	A1A200401009	6010B		Manganese	B	5.0	10.0	ug/L
		6020		Aluminum	B	26.8	50.0	ug/L
FWGLNWmw-025C-1674-	A1A200401002	6010B		Arsenic	B	3.7	5.0	ug/L
				Cobalt	B	2.1	5.0	ug/L
				Potassium	B	935	1000	ug/L
		6020		Thallium	B	0.20	1.0	ug/L
FWGLNWmw-025C-1674-	A1A200401001	8270C		bis(2-Ethylhexyl) phthalate	J	0.81	10	ug/L
FWGTEAM1-TRIP	A1A200401003	8260B		2-Butanone	J	0.59	10	ug/L
				4-Methyl-2-pentanone	J	0.32	10	ug/L
FWGTEAM2-TRIP	A1A200401012			2-Butanone	J	0.62	10	ug/L

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: A1A200401 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGTEAM3-TRIP	A1A200401021	8260B	AQ	2-Butanone	J	0.59	10	ug/L
				4-Methyl-2-pentanone	J	0.34	10	ug/L
FWGWBGmw-005C-1675-	A1A200401023	6010B		Nickel	B	2.6	10.0	ug/L
				Potassium	B	789	1000	ug/L
FWGWBGmw-006C-1676-	A1A200401027			Potassium	B	753	1000	ug/L
FWGWBGmw-006C-1676-	A1A200401026	8270C		Benzyl alcohol	J	0.43	5.0	ug/L
FWGWBGmw-007C-1677-	A1A200401005	6020		Aluminum	B	21.9	50.0	ug/L
				Thallium	B	0.15	1.0	ug/L
FWGWBGmw-009C-1678-	A1A200401029	6010B		Potassium	B	651	1000	ug/L
		6020		Zinc	B J	2.4	10.0	ug/L
FWGWBGmw-DUP5-1696	A1A200401025	6010B		Cobalt	B	4.9	5.0	ug/L
				Nickel	B	4.1	10.0	ug/L
				Potassium	B	822	1000	ug/L

QC Outlier Report: Trip Blank

Lab Reporting Batch : A1A200401
Method/Preparation Batch : 1021112 / 1021112
Client Sample ID : FWGTEAM1-TRIP
Lab Sample ID : A1A200401003

Lab ID: TALCAN
Analysis Date : 01/21/2011
Preparation Date : 01/21/2011
Preparation Type : 5030B

Analysis Method : 8260B

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	0.59	10	ug/L	J	Common Contaminant

2-Butanone contamination found in the trip blank did not qualify any samples.

4-Methyl-2-pentanone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	0.32	10	ug/L	J	

4-Methyl-2-pentanone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	13	10	ug/L		Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGFBQmw-174C-1673-G	A1A200401006	1	3.1	J	ug/L

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	0.62	10	ug/L	J	Common Contaminant

2-Butanone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	13	10	ug/L		Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	0.59	10	ug/L	J	Common Contaminant

2-Butanone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGEQUIPRINSE3-1700-G	A1A200401030	1	3.3	J	ug/L

4-Methyl-2-pentanone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	0.34	10	ug/L	J	

QC Outlier Report: Trip Blank

Lab Reporting Batch : A1A200401
Method/Preparation Batch : 1021112 / 1021112
Client Sample ID : FWGTEAM3-TRIP
Lab Sample ID : A1A200401021

Lab ID: TALCAN
Analysis Date : 01/21/2011
Preparation Date : 01/21/2011
Preparation Type : 5030B

Analysis Method : 8260B

4-Methyl-2-pentanone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	12	10	ug/L		Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGEQUIPRINSE3-1700-G	A1A200401030	1	8.1	J	ug/L

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 1021112 **Analysis Method :** 8260B **Analysis Date :** 01/21/2011

Preparation Batch : 1021112 **Preparation Type :** 5030B **Preparation Date :** 01/21/2011

Lab Reporting Batch : A1A200401 **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
FWGSCFmw-003-1684-	A1A200401017S	AQ	Bromomethane	62		0.00	70.00	130.00	30.00
FWGSCFmw-003-1684-	A1A200401017D		Bromomethane	59		0.00	70.00	130.00	30.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLNWmw-025C-1674-GW	A1A200401001
FWGSCFmw-003-1684-GW	A1A200401017

* 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 : 1020062 **Analysis Method :** 8270C **Analysis Date :** 01/31/2011

Preparation Batch : 1020062 **Preparation Type :** 3520C **Preparation Date :** 01/20/2011

Lab Reporting Batch : A1A200401 **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
A1A200000062C	AQ	Hexachlorocyclopentadiene	26		10.00	30.00	115.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGCBPmw-005C-1657-GW	A1A200401033
FWGCBPmw-008C-1659-GW	A1A200401035
FWGEQUIPRINSE3-1700-GW	A1A200401030
FWGFBQmw-174C-1673-GW	A1A200401006
FWGLL3mw-238C-1650-GW	A1A200401019
FWGLL3mw-239C-1651-GW	A1A200401031
FWGLL4mw-196C-1653-GW	A1A200401010
FWGLL4mw-197C-1654-GW	A1A200401008
FWGLNWmw-025C-1674-GW	A1A200401001
FWGSCFmw-003-1684-GW	A1A200401017
FWGSCFmw-005-1686-GW	A1A200401013
FWGSCFmw-006-1687-GW	A1A200401015
FWGWBGmw-005C-1675-GW	A1A200401022
FWGWBGmw-006C-1676-GW	A1A200401026
FWGWBGmw-007C-1677-GW	A1A200401004
FWGWBGmw-009C-1678-GW	A1A200401028
FWGWBGmw-DUP5-1696-GW	A1A200401024

Scope of Data Qualification: The outlier in the LCS qualifies that analyte in all samples with the same Preparation Batch ID as the LCS

Project Number and Name: 030240.0006 - RVAAP (OH)

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 1020062 **Analysis Method :** 8270C **Analysis Date :** 01/31/2011

Preparation Batch : 1020062 **Preparation Type :** 3520C **Preparation Date :** 01/20/2011

Lab Reporting Batch : A1A200401 **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
FWGLNWmw-025C-1674	A1A200401001S	AQ	3,3'-Dichlorobenzidine	4.1		0.00	45.00	135.00	40.00
			Hexachlorocyclopentadiene	30		0.00	45.00	135.00	40.00
			N-Nitrosodiphenylamine	38		0.00	45.00	135.00	40.00
FWGLNWmw-025C-1674	A1A200401001D		3,3'-Dichlorobenzidine	13	104	0.00	45.00	135.00	40.00
			Hexachlorocyclopentadiene	31		0.00	45.00	135.00	40.00
			N-Nitrosodiphenylamine	43		0.00	45.00	135.00	40.00
FWGSCFmw-003-1684-	A1A200401017S		3,3'-Dichlorobenzidine	32		0.00	45.00	135.00	40.00
			Hexachlorocyclopentadiene	23		0.00	45.00	135.00	40.00
			Hexachloroethane	44		0.00	45.00	135.00	40.00
FWGSCFmw-003-1684-	A1A200401017D		3,3'-Dichlorobenzidine	31		0.00	45.00	135.00	40.00
			Hexachlorocyclopentadiene	26		0.00	45.00	135.00	40.00

Associated Samples: Parent sample only

Client Sample ID	Lab Sample ID
FWGLNWmw-025C-1674-GW	A1A200401001
FWGSCFmw-003-1684-GW	A1A200401017

* 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)

Surrogate Recovery Outlier Report

Lab Report Batch: A1A200401 **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
FWGCBPmw-005C-1657-GW	A1A200401033	8081A	1	AQ	Decachlorobiphenyl	34	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	42	50.0	150.0	10.0	All Target
FWGFBQmw-174C-1673-GW	A1A200401006	8081A	10	AQ	Decachlorobiphenyl	46	50.0	150.0	10.0	All Target
FWGLL3mw-238C-1650-GW	A1A200401019	8081A	10	AQ	Decachlorobiphenyl	31	50.0	150.0	10.0	All Target
		8082	1		Decachlorobiphenyl	37	50.0	150.0	10.0	All Target
FWGLL4mw-196C-1653-GW	A1A200401010	8081A	1	AQ	Decachlorobiphenyl	40	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	43	50.0	150.0	10.0	All Target
FWGLL4mw-197C-1654-GW	A1A200401008	8081A	1	AQ	Decachlorobiphenyl	37	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	41	50.0	150.0	10.0	All Target
FWGLNWmw-025C-1674-GW	A1A200401001	8081A	1	AQ	Decachlorobiphenyl	21	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	23	50.0	150.0	10.0	All Target
FWGLNWmw-025C-1674-GWMS	A1A200401001S	8081A	2	AQ	Decachlorobiphenyl	43	50.0	150.0	10.0	All Target
FWGSCFmw-005-1686-GW	A1A200401013	8081A	1	AQ	Decachlorobiphenyl	26	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	47	50.0	150.0	10.0	All Target
FWGWBGmw-005C-1675-GW	A1A200401022	8081A	1	AQ	Decachlorobiphenyl	32	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	35	50.0	150.0	10.0	All Target

Surrogate Recovery Outlier Report

Lab Report Batch: A1A200401 **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
FWGWBGmw-006C-1676-GW	A1A200401026	8081A	2	AQ	Decachlorobiphenyl	49	50.0	150.0	10.0	All Target
		8082	1		Decachlorobiphenyl	45	50.0	150.0	10.0	All Target
		8270C			2,4,6-Tribromophenol	33	50.0	150.0	10.0	Acid
					2-Fluorophenol	44	50.0	150.0	10.0	Acid
					Phenol-d5	47	50.0	150.0	10.0	Acid
FWGWBGmw-007C-1677-GW	A1A200401004	8081A	1	AQ	Decachlorobiphenyl	43	50.0	150.0	10.0	All Target
FWGWBGmw-DUP5-1696-GW	A1A200401024	8081A	1	AQ	Decachlorobiphenyl	38	50.0	150.0	10.0	All Target

QC Outlier Report: Holding Times

Lab Report Batch: A1A200401 **Lab ID:** TALCAN

					Actual Holding Time			Criteria				Reported Dates (and Times)		
Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Prep Method	Coll To Prep	Prep To Ana	Coll To Ana	Coll To Prep	Prep To Ana	Coll To Ana	Unit of Meas	Collection Date	Preparation Date	Analysis Date
FWGSCFmw-005-16	A1A200401013	8082	AQ	3520C	17.0	3.0		7	40		Days	01/19/2011	02/05/2011	02/08/2011

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A1A200401
Lab ID: TALCAN
Method/Preparation Batch : 1024022 / 1024022
Analysis Date : 01/25/2011
Client Sample ID : FWGEQUIPRINSE3-1700-GW
Preparation Date : 01/24/2011
Lab Sample ID : A1A200401030
Preparation Type : 3005A

Analysis Method : 6020

Iron	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	26.8	50.0	ug/L	B	

Iron was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGSCFmw-003-1684-GF	A1A200401018	1	80.9		ug/L
FWGSCFmw-006-1687-GF	A1A200401016	1	84.0		ug/L

Sodium	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	16.1	1000	ug/L	B J	

Sodium contamination found in the equipment blank did not qualify any samples.

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	3.1	10.0	ug/L	B J	

Zinc was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGFBQmw-174C-1673-GF	A1A200401007	1	3.6	B J	ug/L
FWGLL3mw-238C-1650-GF	A1A200401020	1	2.8	B J	ug/L
FWGLL3mw-239C-1651-GF	A1A200401032	1	8.0	B J	ug/L
FWGWBGmw-009C-1678-G	A1A200401029	1	2.4	B J	ug/L

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	3.3	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:	8.1	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
FWGFBQmw-174C-1673-G	A1A200401006	1	3.1	J	ug/L

Chloroform	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	0.61	1.0	ug/L	J	

QC Outlier Report: Equipment Blank

Lab Reporting Batch : A1A200401
Lab ID: TALCAN
Method/Preparation Batch : 1021112 / 1021112
Analysis Date : 01/21/2011
Client Sample ID : FWGEQUIPRINSE3-1700-GW
Preparation Date : 01/21/2011
Lab Sample ID : A1A200401030
Preparation Type : 5030B

Analysis Method : 8260B

Chloroform was qualified due to equipment blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGLL3mw-239C-1651-GW	A1A200401031	1	0.41	J	ug/L

Method Blank Outlier Report

Lab Reporting Batch : A1A200401
Lab ID: TALCAN
Analysis Method : 6020
Analysis Date : 01/25/2011
Preparation Type : 3005A
Preparation Date : 01/24/2011
Method Blank Lab Sample ID : A1A240000022B
Preparation Batch : 1024022

Sodium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	43.0	1000	ug/L	B	

Sodium was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE3-1700-G	A1A200401030	1	16.1	B J	ug/L

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	3.7	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
FWGEQUIPRINSE3-1700-G	A1A200401030	1	3.1	B J	ug/L
FWGFBQmw-174C-1673-GF	A1A200401007	1	3.6	B J	ug/L
FWGLL3mw-238C-1650-GF	A1A200401020	1	2.8	B J	ug/L
FWGLL3mw-239C-1651-GF	A1A200401032	1	8.0	B J	ug/L
FWGWBGmw-009C-1678-G	A1A200401029	1	2.4	B J	ug/L

QC Outlier Report: Field Duplicates (Non-qualified Outliers)

Lab Report Batch: A1A200401 **Lab ID:** TALCAN

			Field Sample				Field Sample Duplicate						
Analysis Method	Matrix	Analyte Name	Client Sample ID	Ana Type	Result	Lab Qualifier	Client Sample Duplicate ID	Ana Type	Result	Lab Qualifier	RPD Dup* (%)	RPD Criteria (%)	Result Units
6010B	AQ	Nickel	FWGWBGmw-00	ES/TO	2.6	B	FWGWBGmw-DU	ES/TO	4.1	B	44.8	30	ug/L

Note: Outlier report also includes analytes detected in one sample but not in the related sample, i.e., analyte was detected in the field sample but not in the field duplicate sample, or vice versa. In this case, RPD value assigned to the field duplicate sample is 200.

Project Number and Name: ***030240.0006 - RVAAP (OH)***

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 1024022 **Analysis Method :** 7470A **Analysis Date :** 01/28/2011

Preparation Batch : 1024022 **Preparation Type :** 7470A **Preparation Date :** 01/24/2011

Lab Reporting Batch : A1A200401 **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
FWGSCFmw-003-1684-	A1A200401018S	AQ	Mercury	126		30.00	80.00	120.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
FWGCBPmw-005C-1657-GF	A1A200401034
FWGCBPmw-008C-1659-GF	A1A200401036
FWGEQUIPRINSE3-1700-GW	A1A200401030
FWGFBQmw-174C-1673-GF	A1A200401007
FWGLL3mw-238C-1650-GF	A1A200401020
FWGLL3mw-239C-1651-GF	A1A200401032
FWGLL4mw-196C-1653-GF	A1A200401011
FWGLL4mw-197C-1654-GF	A1A200401009
FWGLNWmw-025C-1674-GF	A1A200401002
FWGSCFmw-003-1684-GF	A1A200401018
FWGSCFmw-005-1686-GF	A1A200401014
FWGSCFmw-006-1687-GF	A1A200401016
FWGWBGmw-005C-1675-GF	A1A200401023
FWGWBGmw-006C-1676-GF	A1A200401027
FWGWBGmw-007C-1677-GF	A1A200401005
FWGWBGmw-009C-1678-GF	A1A200401029
FWGWBGmw-DUP5-1696-GF	A1A200401025

* 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 : 1024320 **Analysis Method :** 9012A **Analysis Date :** 01/24/2011

Preparation Batch : 1024320 **Preparation Type :** Gen Prep **Preparation Date :** 01/24/2011

Lab Reporting Batch : A1A200401 **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
FWGLNWmw-025C-1674	A1A200401001S	AQ	Cyanide	63		40.00	80.00	120.00	20.00
FWGLNWmw-025C-1674	A1A200401001D		Cyanide	79	22	40.00	80.00	120.00	20.00
FWGSCFmw-003-1684-	A1A200401017S		Cyanide	67		40.00	80.00	120.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
FWGCBPmw-005C-1657-GW	A1A200401033
FWGCBPmw-008C-1659-GW	A1A200401035
FWGEQUIPRINSE3-1700-GW	A1A200401030
FWGFBQmw-174C-1673-GW	A1A200401006
FWGLL3mw-238C-1650-GW	A1A200401019
FWGLL3mw-239C-1651-GW	A1A200401031
FWGLL4mw-196C-1653-GW	A1A200401010
FWGLL4mw-197C-1654-GW	A1A200401008
FWGLNWmw-025C-1674-GW	A1A200401001
FWGSCFmw-003-1684-GW	A1A200401017
FWGSCFmw-005-1686-GW	A1A200401013
FWGSCFmw-006-1687-GW	A1A200401015
FWGWBGmw-005C-1675-GW	A1A200401022
FWGWBGmw-006C-1676-GW	A1A200401026
FWGWBGmw-007C-1677-GW	A1A200401004
FWGWBGmw-009C-1678-GW	A1A200401028
FWGWBGmw-DUP5-1696-GW	A1A200401024

* 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)

Data Verification Summary

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011
Sample Delivery Group: A1A210536

Date: March 8, 2011
Revision: 0

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

QA/QC Summary

On Jan. 21, 2011 the following samples were collected from groundwater-monitoring wells at Ravenna Army Ammunition Plant and analyzed as part of SDG A1A210536.

Field Sample ID	Analytes	Method
FWGDA2mw-106c-1663-GW	VOCs SVOCs Pesticides PCBs Cyanide	SW846 8260B SW846 8270C SW846 8081A SW846 8082 SW846 9012A
FWGDA2mw-106c-1663-GW		
FWGDA2mw-106c-1663-GW		
FWGEQUIPRinse5-1702-GW		
FWGEQUIPRinse5-1702-GW	TAL23 Metals	SW846 6010B/6020/7470A
FWGDA2mw-106c-1663-GF	TAL23 Metals (Filtered)	SW846 6010B/6020/7470A
FWGDA2mw-106c-1663-GF		
FWGDA2mw-106c-1663-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 1.2°C – 2.3°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>VOAs - 8260B</u>
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

<u>MRL Recovery</u>
The opening and closing MRL check analyzed 1/26/2011 recovered outside control limits of 70-130% at 69% in the opening MRL and 134% in the closing MRL. All methylene chloride results were qualified as estimated, "UJ".

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** March 8, 2011
Sample Delivery Group: A1A210536 **Revision:** 0

Blanks

- FWGTEAM1-Trip had acetone detected at 11ug/L.
- FWGTEAM3-Trip had acetone detected at 12ug/L.
- FWGTEAM2-Trip had acetone detected at 11ug/L and 2-butanone at 0.572ug/L.
- 2-butanone was detected in FWGEQUIPRinse5-1702-GW at 1.9ug/L, acetone at 7.0ug/L and chloroform at 0.76ug/L.

The acetone result for sample FWGEQUIPRinse5-1702-GW was qualified, "B". No additional qualifications were made, as there were no detected contaminant concentrations <5x contamination reported for the associated field samples.

Matrix Spike Recovery Criteria

The matrix spike and duplicate analyzed on sampleFWGDA2mw-110c-1665-GW recovered below control limits for bromomethane at 64% and 66%, respectively. No qualification was made as there were no other bromomethane QC outliers.

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

LCS Recovery

The benzoic acid LCS and LCD recoveries for batch 1024039 recovered below control limits at 18% and 13%. All benzoic acid results were qualified as estimated, "UJ".

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

MRL Recovery

- On 2/9/11, the MRL at 0951(pest 9) had beta-BHC recover above control limits at 132% and alpha BHC at 225%.
- On 2/9/11, the MRL at 1922(pest 9) had alpha BHC recover above control limits at 213%.

No qualifications were made as there were no detected concentrations reported for the bracketed field samples and all MRL outliers were above control limits.

Site: Ravenna Army Ammunition Plant
Sampling Event: Jan 2011 **Date:** March 8, 2011
Sample Delivery Group: A1A210536 **Revision:** 0

CCV
- The CCV analyzed 2/4/11 @ 0904(pest 9) had an average %D of 17.1%. All target analytes with outlier %D were above control limits.
- The CCV analyzed 2/4/11 @ 1859(pest 9) had an average %D of 17.6%. All target analytes with outlier %D were above control limits. Alpha BHC was above control limits with a %D of 31% and delta BHC at 36%.
- The CCV analyzed 2/4/11 @ 1859(pest 9r) had an average %D of 15.6%. All target analytes with outlier %D were above control limits.

No qualifications were made as there were no detected concentrations reported for the bracketed field samples and all CCV outliers were above control limits.

Surrogate Recovery
The surrogate, DCB, recovered below control limits for FWGDA2mw-106c-1663-GW at 35% and FWGDA2mw-110c-1665-GW at 43%. The results for FWGDA2mw-106c-1663-GW and FWGDA2mw-110c-1665-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
The surrogate, DCB, recovered below control limits for FWGDA2mw-106c-1663-GW at 29% and FWGDA2mw-110c-1665-GW at 36%. The results for FWGDA2mw-106c-1663-GW and FWGDA2mw-110c-1665-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 method blank had vanadium detected at 2.4ug/L and chromium at 2.0ug/L. No qualifications were made as there were no detected chromium or vanadium results reported in 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 1/25/11 had thallium detected at 0.18ug/L. There were no detected thallium concentrations reported for the associated field samples, so no qualifications were made.
- The CCBs analyzed 1/25/11 had detected thallium from 0.14ug/L to 0.25ug/L and sodium at 11.8ug/L to 20.9ug/L. There were no detected thallium concentrations reported for the associated field samples, so no qualifications were made. The sodium result for sample FWGEQUIPRinse5-1702-GW was qualified "B".
- The method blank had sodium detected at 57.9ug/L and zinc at 3.8ug/L. The zinc results for samples FWGDA2mw-106C-1663-GF and FWGDA2mw-107C-1664-GF and the sodium result for sample FWGEQUIPRinse5-1702-GW were qualified, "B", due to sample results <5x blank contamination;.
- FWGEQUIPRinse5-1702-GW had sodium detected at 21.5ug/L. No qualifications were made as detected sodium concentrations in the field samples were >5x blank contamination.

No qualifications were made for ICPMS results due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.

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.

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

Matrix Spike Recovery

The matrix spike recovery was below control limits at 68% on the spike analysis performed on sample FWGEBGmw-126c-1668-GW. Another matrix spike analysis was performed on sample FWGCPmw-005c-1661-GW, where the MSD recovered below control limits at 74% with an MS/MSD RPD of 41%. The cyanide results for this SDG were qualified as estimated, "UJ".

SAMPLE SUMMARY

A1A210536

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDK0M	001	FWGTEAM1-TRIP	01/21/11	08:00
MDK0Q	002	FWGDA2mw-106C-1663-GW	01/21/11	09:17
MDK0R	003	FWGDA2mw-106C-1663-GF	01/21/11	09:17
MDK0V	004	FWGTEAM2-TRIP	01/21/11	08:00
MDK0X	005	FWGDA2mw-107C-1664-GW	01/21/11	09:15
MDK01	006	FWGDA2mw-107C-1664-GF	01/21/11	09:15
MDK02	007	FWGTEAM3-TRIP	01/21/11	08:00
MDK05	008	FWGDA2mw-110C-1665-GW	01/21/11	09:15
MDK07	009	FWGDA2mw-110C-1665-GF	01/21/11	09:15
MDK08	010	FWGEQUIPRINSE5-1702-GW	01/21/11	10:05

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 19
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: North Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: EQM	Client Project Manager: John Miller	Site Contact: Erik Corbin	Lab Contact: Mark Loeb	COC No: Team1-1/21/11
Address: 1800 Carillon Blvd	Telephone:	Telephone:	Telephone:	1 of 1 COCs
City/State/Zip: Cincinnati OH 45240	Email: ecorbin@eqm.com			
Phone: 513-825-7500		TAT if different from below Full Sow	Analyses	
Project Name: RVAAP(OH)	Method of Shipment/Carrier: Lab Courier	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 030240.0006	Shipping/Tracking No: NA			
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	Zn Ac/ NaOH	Unpres	Other:	Field Filtered	Lab Perform MS/MSD	VOCs 8260	SVOCs 8270	Nitrate 8081	PCB 8082	Explosives 8330	Propellants	Cyanide 9012	Metals 6010B/7470			Sample Specific Notes / Special Instructions:
FWGTeam1-Trip	1/21/11	08:00		X						2					N	G	X										L943
FWGDA2mw-106C-1663-GW	1/21/11	09:17		X						3	1		9		N	G	X	X	X	X	X	X	X				L943
FWGDA2mw-106C-1663-GF	1/21/11	09:17		X					1						Y	G								X			L943

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
metals are field filtered. Temperatures may not meet requirements if collection time is close to lab pick-up time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Steph Hunsperger	EQM	1-21-11 1300	RC	TAL-NC	1/21/11 1300
RC Corbin	TAL-NC	1/21/11 1353			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Terry Burns	TA	1/21/11 135

All VOCs in cooler L943

©2008, TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

North Canton

Chain of Custody Record

TestAmerica 20
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Canton

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: EQM	J Miller	E Corbin	M Loeb	EQTeam2-1
Address: 1800 CARILLON BLVD	Telephone: 513 825 7500	Telephone:	Telephone: 330	1 of 1 COCs
City/State/Zip: CINCINNATI OH 45240	Email: 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:			
PO# 16726				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	Total # of containers	Field Filtered	Analyses: VOC 8260	SVOC 8270	RSK 8031	PCB 8082	Explo 8330	Propellants	Cyanide 9012	Metals 6010 6020			Sample Specific Notes / Special Instructions:
FWG Team 2 - Trip	1-21-11	0500		X											2		X										A638
FWGDAZMW-10C-1664-GW		0915		X						3	1		9		13	G	X	X	X	X	X	X	X				A638
FWGDAZMW-10C-1664-GF				X					1						1	G								X			A638

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:

GF Metals were field filtered

ALL VOAs in A638.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Stephen Stenger	EQM	1-21-11 1300	RC Fobian	TAL-NC	1/21/11 1306
RC Fobian	TAL-NC	1/21/11 1353			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Gary Burns	TA	1/21/11 1353

©2008 TestAmerica Laboratories, Inc. All rights reserved.
TestAmerica & Design ™ are trademarks of TestAmerica Laboratories, Inc.

TAL-0018 (1008)

North Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EQ	John Miller	1/21/11	000462
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 1
800 Carillon Blvd	513 825 7500 (fax 7495)	330-497-9396	
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Cincinnati / OH / 45240	Erik Corbin	M. Lock	
Project Name and Location (State)	**Carrier/Waybill Number**		
RVAAP (OH)	Lab Pick Up		
Contract/Purchase Order/Quote No.			
PW# 030240.0006 PO# 167216			

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	NWO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 8260 VOC	8082 PCB	8270 Base+	8015 DRO	8330 Explo	6010 Explosives	7470 Cyanide	6010 Metals Dissolved	Special Instructions/ Conditions of Receipt
FWGTrip3-Trip	1/21/11	0800		X						2			X								6 COOLER ID:
FWGDA2MW-110C-1105-GW	↓	0915		X			9			3	1		X	X	X	X	X	X	X		L468
FWGDA2MW-110C-1105-GF	↓	0915		X					1											X	L468
FWGEQUIPRINSE5-1702-GW	1/21/11	1005		X			9		1	3	1		X	X	X	X	X	X	X	X	K592

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)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Stephen Klinger	1-21-11	1360		1/21/11	1350
2.		1/21/11	1353		1/21/11	1353
3.		Date	Time		Date	Time

Comments
Metals field filtered ALL VOAS IN COOLER

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

Temps may not meet requirements if lab pick up is close to collection time.

North Canton

21

TestAmerica Cooler Receipt Form/Narrative **Lot Number: A1A210536**
North Canton Facility

Client EQM Project RVAAP (OH) By: Jerry Burner (Signature)
Cooler Received on 1/21/11 Opened on 1/21/11
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 1 each 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
1663-GW	≥12	1/21/11	TB
GF	≤2		
1664-GW	≥12		
GF	≤2		
1665-GW	≥12		
GF	≤2		
Rinse5-1702-GW	≤2, ≥12	—	—

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
L943	1.3°C	IR	wet ice
A638	2.3°C	"	"
L468	1.2°C	"	"
K592	2.2°C	"	"

Discrepancies Cont'd:

CASE NARRATIVE

A1A210536

The following report contains the analytical results for seven water samples and three quality control samples submitted to TestAmerica North Canton by Environmental Quality Mgt., Inc. from the RVAAP (OH) Site, project number 030240.0006. The samples were received January 21, 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. 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 1.2, 1.3, 2.2 and 2.3°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.

The matrix spike/matrix spike duplicate(s) for FWGDA2mw-110C-1665-GW had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GC/MS SEMIVOLATILES

The LCS associated with the QC batch 1024039 had Benzoic acid recoveries below acceptable criteria. As per the client, no corrective action was needed.

PESTICIDES-8081

For samples FWGDA2mw-106C-1663-GW and FWGDA2mw-110C-1665-GW the recovery for one surrogate compound is outside acceptance criteria. Since LCG criterion is that one of two surrogate compounds must meet acceptance, no corrective action was required. (Surrogate was below acceptance limit but above 10%)

The opening MRL passed average but failed B-BHC biased high for samples FWGDA2mw-106C-1663-GW, FWGDA2mw-107C-1664-GW, FWGDA2mw-110C-1665-GW, and FWGEQUIPRINSE5-1702-GW. Since the samples were non-detect or J-flag hits for B-BHC, no corrective action was needed.

The closing CCV failed criteria biased high for samples FWGDA2mw-106C-1663-GW, FWGDA2mw-107C-1664-GW, FWGDA2mw-110C-1665-GW and FWGEQUIPRINSE5-1702-GW. Since the samples were non-detect or J-flag hits, no corrective action was needed.

CASE NARRATIVE (continued)

PESTICIDES-8081 (cont)

The opening CCV passed average but failed Alpha- BHC, Beta-BHC, Delta-BHC, Aldin, Alpha-Chlordane, DDE and Dieldrin biased high for samples FWGDA2mw-106C-1663-GW, FWGDA2mw-107C-1664-GW, FWGDA2mw-110C-1665-GW, and FWGEQUIPRINSE5-1702-GW. Since the samples were non-detect or J-flag hits, no corrective action was needed.

POLYCHLORINATED BIPHENYLS-8082

Surrogate recoveries were outside criteria for sample(s) FWGDA2mw-106C-1663-GW and FWGDA2mw-110C-1665-GW. Since the method criterion is that one of two surrogate compounds must meet acceptance criteria, no corrective action was required.

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).

No ICP Trace or ICP MS Form IX provided for batch(es) 1024019. The serial dilution was performed on a different sample from the same QC batch(es).

GENERAL CHEMISTRY

The matrix spike/matrix spike duplicate(s) for batch(es) 1027316 had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The CCB associated with samples FWGEQUIPRINSE5-1702-GW, FWGDA2mw-106C-1663-GW, FWGDA2mw-107C-1664-GW and FWGDA2mw-110C-1665-GW for Cyanide analysis was analyzed first instead of the CCV as required by the SOP. Samples were 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.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit

MANUAL INTEGRATION SUMMARY

Lot A1A210536

Client ID: FWGDA2mw-107C-1664-
Compound Name: Decachlorobiphenyl
Instrument ID: a2hp9.i
File Name: 023F2301.D
Inj. Date and Time: 04-FEB-2011 16:28
Manual Integration Reason: Baseline Event

Client ID:
Compound Name: Trichlorofluoromethane
Instrument ID: a3ux11.i
File Name: UXJ5197.D
Inj. Date and Time: 26-JAN-2011 15:32
Manual Integration Reason: Split Peak

Client ID:
Compound Name: Trichlorofluoromethane
Instrument ID: a3ux11.i
File Name: UXJ5196.D
Inj. Date and Time: 26-JAN-2011 15:10
Manual Integration Reason: Split Peak

Client ID:
Compound Name: Iodomethane
Instrument ID: a3ux11.i
File Name: UXJ5196.D
Inj. Date and Time: 26-JAN-2011 15:10
Manual Integration Reason: Split Peak

Client ID:
Compound Name: Trichlorofluoromethane
Instrument ID: a3ux11.i
File Name: UXJ5197.D
Inj. Date and Time: 26-JAN-2011 15:32
Manual Integration Reason: Split Peak

Client ID:
Compound Name: Trichlorofluoromethane
Instrument ID: a3ux11.i
File Name: UXJ5196.D
Inj. Date and Time: 26-JAN-2011 15:10
Manual Integration Reason: Split Peak

Client ID:
Compound Name: Iodomethane
Instrument ID: a3ux11.i
File Name: UXJ5196.D
Inj. Date and Time: 26-JAN-2011 15:10
Manual Integration Reason: Split Peak

MANUAL INTEGRATION SUMMARY

Lot A1A210536 (Continued)

Client ID:
Compound Name: Trichlorofluoromethane
Instrument ID: a3ux11.i
File Name: UXJ5196.D
Inj. Date and Time: 26-JAN-2011 15:10
Manual Integration Reason: Split Peak

Client ID:
Compound Name: Iodomethane
Instrument ID: a3ux11.i
File Name: UXJ5196.D
Inj. Date and Time: 26-JAN-2011 15:10
Manual Integration Reason: Split Peak

Client ID:
Compound Name: Trichlorofluoromethane
Instrument ID: a3ux11.i
File Name: UXJ5197.D
Inj. Date and Time: 26-JAN-2011 15:32
Manual Integration Reason: Split Peak

Client ID: INTRA-LAB CHECK
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: MDL461AC.D
Inj. Date and Time: 01-FEB-2011 12:36
Manual Integration Reason: Poor Chromatography

Client ID: INTRA-LAB CHECK
Compound Name: Benzoic Acid
Instrument ID: a4hp9.i
File Name: MDL461AD.D
Inj. Date and Time: 01-FEB-2011 12:55
Manual Integration Reason: Poor Chromatography

ANALYTICAL METHODS SUMMARY

A1A210536

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.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GCMS VOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 2.3 °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– Jan 13, 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 methylene chloride 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?	✓			1/24/2011	LCG Table 1 R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. Was a MRL Level Verification run at the beginning and end of every daily sequence or every 12 hours?	✓				LCG Table 1
16. Were the QC/MRL recoveries 70-130%?		✓		The opening and closing MRL check analyzed 1/26/2011 recovered outside control limits of 70-130% at 69% in the opening MRL and 134% in the closing MRL. All methylene chloride results were qualified as estimated, "UJ".	LCG Table 1 >130%=J; 70-60%=J/UJ; <60%=J/R
17. Was a second source verification (ICV) analyzed? Were results 80-120%?	✓			1/13/2011 @1314	LCG Table 1, <60%=J/R >120%=J; 60-80%=J/UJ
18. Was a CCV run every 12 hours?	✓			1/26/11 @ 1002	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%?	✓			1,1,2,2-tetrachloroethane had a %D below 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
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.	LCG Table 1 <5/10X =B

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
27. Was a field blank (equipment and/or trip) collected and analyzed?	✓			FWGEQUIPRinse5-1701-GW	
28. Were target analytes detected in the field blank analyses >1/2 the MRL?	✓			• FWGTEAM1-Trip had acetone detected at 11ug/L. • FWGTEAM3-Trip had acetone detected at 12ug/L. • FWGTEAM2-Trip had acetone detected at 11ug/L and 2-butanone at 0.572ug/L. • 2-butanone was detected in FWGEQUIPRinse5-1702-GW at 1.9ug/L, acetone at 7.0ug/L and chloroform at 0.76ug/L. The acetone result for sample FWGEQUIPRinse5-1702-GW was 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
32. Were the LCS recoveries within limits specified in Appendix C of the LCG?	✓			ADR checked section;	LCG Appendix C >UL=J; 30%-LL=J/UJ; <30%=J/R
33. Was a MS/MSD prepared with each batch?	✓				LCG Table 1
34. Was the MS/MSD parent sample a Ravenna sample?	✓				
35. Were MS/MSD recoveries 70-130% and RPD values ≤20%?		✓		The matrix spike and duplicate analyzed on sampleFWGDA2mw-110c-1665-GW recovered below control limits for bromomethane at 64% and 66%, respectively. No qualification was made as there were no other bromomethane QC outliers.	LCG Table 1 Pj
36. Were surrogate recoveries 50-150%?	✓				LCG Table 1 >150%=J; 10% - 50%=J/UJ; <10%=J/R
37. Were reported sample concentrations within calibration range?	✓				

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 8260B

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
38. Were laboratory-generated Quality Control Exception Reports issued? If yes, summarize contents.		✓			
39. Were lab comments included in report? If yes, summarize contents.		✓			

References:
Louisville Chemistry Guidelines (LCG), USACE June 2002 version 5; Section I "Chemical Analysis Criteria" Table 1 and Attachment A "Data Validation Guidelines:
Final Quality Assurance Project Plan (QAPP) Addendum for the Facility-Wide Groundwater Monitoring Program Ravenna Army Ammunition Plant, Ravenna, OH, Portage Environmental September 2004

Additional Comments:

Table1- CCCs

Analyte
1,1-Dichloroethene
Chloroform
1,2-Dichloropropane
Toluene
Ethylbenzene
Vinyl chloride

Table 2- SPCCs

Analyte	Minimum RF
Chloromethane	0.10
1,1-Dichlorethane	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A210536-001 Work Order #...: MDK0M1AA Matrix.....: WQ
Date Sampled...: 01/21/11 08:00 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 01/26/11
Prep Batch #...: 1026147
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	11	10	ug/L	1.1
Carbon disulfide	ND	1.0	ug/L	0.13
1,1-Dichloroethene	ND	1.0	ug/L	0.19
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.34
Chloroform	ND	1.0	ug/L	0.16
1,2-Dichloroethane	ND	1.0	ug/L	0.22
2-Butanone	ND	10	ug/L	0.57
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
Carbon tetrachloride	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
Trichloroethene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.18
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Benzene	ND	1.0	ug/L	0.13
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Bromoform	ND	1.0	ug/L	0.64
4-Methyl-2-pentanone	ND	10	ug/L	0.32
2-Hexanone	ND	10	ug/L	0.41
Tetrachloroethene	ND	1.0	ug/L	0.29
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18
Toluene	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Ethylbenzene	ND	1.0	ug/L	0.17

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM1-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A210536-001 Work Order #...: MDK0M1AA 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	76	(50 - 150)
Toluene-d8	84	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-106C-1663-GW

GC/MS Volatiles

Lot-Sample #...: A1A210536-002 Work Order #...: MDK0Q1AA Matrix.....: WG
Date Sampled...: 01/21/11 09:17 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 01/26/11
Prep Batch #...: 1026147
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: FWGDA2mw-106C-1663-GW

GC/MS Volatiles

Lot-Sample #...: A1A210536-002 Work Order #...: MDK0Q1AA 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	77	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A210536-004 Work Order #...: MDK0V1AA Matrix.....: WQ
Date Sampled...: 01/21/11 08:00 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 01/26/11
Prep Batch #...: 1026147
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	11	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	0.57 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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM2-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A210536-004 Work Order #...: MDK0V1AA 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	79	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GW

GC/MS Volatiles

Lot-Sample #...: A1A210536-005 Work Order #...: MDK0X1AA Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 01/26/11
Prep Batch #...: 1026147
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: FWGDA2mw-107C-1664-GW

GC/MS Volatiles

Lot-Sample #...: A1A210536-005 Work Order #...: MDK0X1AA 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	77	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	82	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A210536-007 Work Order #...: MDK021AA Matrix.....: WQ
Date Sampled...: 01/21/11 08:00 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 01/26/11
Prep Batch #...: 1026147
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	12	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: FWGTEAM3-TRIP

GC/MS Volatiles

Lot-Sample #...: A1A210536-007 Work Order #...: MDK021AA 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	75	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GW

GC/MS Volatiles

Lot-Sample #...: A1A210536-008	Work Order #...: MDK051AA	Matrix.....: WG	
Date Sampled...: 01/21/11 09:15	Date Received..: 01/21/11		
Prep Date.....: 01/26/11	Analysis Date..: 01/26/11		
Prep Batch #...: 1026147			
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: FWGDA2mw-110C-1665-GW

GC/MS Volatiles

Lot-Sample #...: A1A210536-008 Work Order #...: MDK051AA 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	76	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	83	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

GC/MS Volatiles

Lot-Sample #...: A1A210536-010 Work Order #...: MDK081AA Matrix.....: WQ
Date Sampled...: 01/21/11 10:05 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 01/26/11
Prep Batch #...: 1026147
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	7.0 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	1.9 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	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: FWGEQUIPRINSE5-1702-GW

GC/MS Volatiles

Lot-Sample #...: A1A210536-010 Work Order #...: MDK081AA 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	77	(50 - 150)
Toluene-d8	83	(50 - 150)
4-Bromofluorobenzene	84	(50 - 150)

NOTE(S):

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A210536 Work Order #...: MDP0F1AA Matrix.....: WATER
MB Lot-Sample #: A1A260000-147

Prep Date.....: 01/26/11 Final Wgt/Vol..: 5 mL
Analysis Date..: 01/26/11 Prep Batch #...: 1026147
Dilution Factor: 1 Initial Wgt/Vol: 5 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A210536 Work Order #...: MDP0F1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	83	(50 - 150)
1,2-Dichloroethane-d4	80	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	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 Volatiles

Client Lot #...: A1A210536 Work Order #...: MDP0F1AC Matrix.....: WATER
LCS Lot-Sample#: A1A260000-147
Prep Date.....: 01/26/11 Analysis Date..: 01/26/11
Prep Batch #...: 1026147
Dilution Factor: 1 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
cis-1,2-Dichloroethene	97	(73 - 133)	SW846 8260B
trans-1,2-Dichloroethene	90	(75 - 134)	SW846 8260B
1,2-Dibromoethane	89	(75 - 127)	SW846 8260B
Bromochloromethane	99	(75 - 127)	SW846 8260B
m-Xylene & p-Xylene	92	(75 - 122)	SW846 8260B
o-Xylene	93	(75 - 118)	SW846 8260B
Chloromethane	78	(58 - 135)	SW846 8260B
Bromomethane	69	(35 - 153)	SW846 8260B
Vinyl chloride	99	(73 - 134)	SW846 8260B
Chloroethane	79	(72 - 129)	SW846 8260B
Methylene chloride	81	(69 - 118)	SW846 8260B
Acetone	77	(51 - 157)	SW846 8260B
Carbon disulfide	85	(74 - 123)	SW846 8260B
1,1-Dichloroethene	91	(75 - 125)	SW846 8260B
1,1-Dichloroethane	95	(75 - 133)	SW846 8260B
1,2-Dichloroethene (total)	93	(85 - 111)	SW846 8260B
Chloroform	99	(74 - 127)	SW846 8260B
1,2-Dichloroethane	94	(67 - 132)	SW846 8260B
2-Butanone	84	(45 - 150)	SW846 8260B
1,1,1-Trichloroethane	90	(70 - 127)	SW846 8260B
Carbon tetrachloride	92	(71 - 132)	SW846 8260B
Bromodichloromethane	99	(70 - 130)	SW846 8260B
1,2-Dichloropropane	97	(75 - 127)	SW846 8260B
cis-1,3-Dichloropropene	92	(73 - 132)	SW846 8260B
Trichloroethene	101	(67 - 128)	SW846 8260B
Dibromochloromethane	95	(74 - 145)	SW846 8260B
1,1,2-Trichloroethane	92	(75 - 136)	SW846 8260B
Benzene	99	(75 - 126)	SW846 8260B
trans-1,3-Dichloropropene	90	(74 - 131)	SW846 8260B
Bromoform	96	(72 - 136)	SW846 8260B
4-Methyl-2-pentanone	88	(59 - 150)	SW846 8260B
2-Hexanone	80	(53 - 139)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A210536 Work Order #...: MDP0F1AC Matrix.....: WATER
LCS Lot-Sample#: A1A260000-147

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Tetrachloroethene	90	(75 - 129)	SW846 8260B
1,1,2,2-Tetrachloroethane	79	(68 - 129)	SW846 8260B
Toluene	92	(75 - 125)	SW846 8260B
Chlorobenzene	93	(75 - 127)	SW846 8260B
Ethylbenzene	95	(75 - 120)	SW846 8260B
Styrene	97	(75 - 130)	SW846 8260B
Xylenes (total)	92	(90 - 114)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	87	(50 - 150)
1,2-Dichloroethane-d4	82	(50 - 150)
Toluene-d8	82	(50 - 150)
4-Bromofluorobenzene	89	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A210536 Work Order #...: MDK051AG-MS Matrix.....: WG
MS Lot-Sample #: A1A210536-008 MDK051AH-MSD
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11
Prep Date.....: 01/26/11 Analysis Date..: 01/26/11
Prep Batch #...: 1026147
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
	98	(70 - 130)	0.75	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	92	(70 - 130)			SW846 8260B
	91	(70 - 130)	1.9	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(70 - 130)			SW846 8260B
	89	(70 - 130)	1.4	(0-30)	SW846 8260B
Bromochloromethane	102	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.9	(0-30)	SW846 8260B
m-Xylene & p-Xylene	94	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.61	(0-30)	SW846 8260B
o-Xylene	94	(70 - 130)			SW846 8260B
	97	(70 - 130)	2.9	(0-30)	SW846 8260B
Chloromethane	77	(70 - 130)			SW846 8260B
	76	(70 - 130)	1.6	(0-30)	SW846 8260B
Bromomethane	64 a	(70 - 130)			SW846 8260B
	66 a	(70 - 130)	3.0	(0-30)	SW846 8260B
Vinyl chloride	96	(70 - 130)			SW846 8260B
	93	(70 - 130)	2.6	(0-30)	SW846 8260B
Chloroethane	75	(70 - 130)			SW846 8260B
	77	(70 - 130)	1.8	(0-30)	SW846 8260B
Methylene chloride	82	(70 - 130)			SW846 8260B
	81	(70 - 130)	0.66	(0-30)	SW846 8260B
Acetone	78	(70 - 130)			SW846 8260B
	78	(70 - 130)	0.11	(0-30)	SW846 8260B
Carbon disulfide	83	(70 - 130)			SW846 8260B
	83	(70 - 130)	0.54	(0-30)	SW846 8260B
1,1-Dichloroethene	91	(70 - 130)			SW846 8260B
	91	(70 - 130)	0.96	(0-30)	SW846 8260B
1,1-Dichloroethane	95	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.23	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	95	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.3	(0-30)	SW846 8260B
Chloroform	99	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.38	(0-30)	SW846 8260B
1,2-Dichloroethane	97	(70 - 130)			SW846 8260B
	94	(70 - 130)	3.5	(0-30)	SW846 8260B
2-Butanone	87	(70 - 130)			SW846 8260B
	86	(70 - 130)	0.89	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A210536 Work Order #...: MDK051AG-MS Matrix.....: WG
MS Lot-Sample #: A1A210536-008 MDK051AH-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1,1-Trichloroethane	90	(70 - 130)			SW846 8260B
	90	(70 - 130)	0.77	(0-30)	SW846 8260B
Carbon tetrachloride	94	(70 - 130)			SW846 8260B
	91	(70 - 130)	3.0	(0-30)	SW846 8260B
Bromodichloromethane	98	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.0	(0-30)	SW846 8260B
1,2-Dichloropropane	98	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.59	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	92	(70 - 130)			SW846 8260B
	90	(70 - 130)	1.6	(0-30)	SW846 8260B
Trichloroethene	99	(70 - 130)			SW846 8260B
	102	(70 - 130)	2.8	(0-30)	SW846 8260B
Dibromochloromethane	92	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.9	(0-30)	SW846 8260B
1,1,2-Trichloroethane	93	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.7	(0-30)	SW846 8260B
Benzene	99	(70 - 130)			SW846 8260B
	99	(70 - 130)	0.49	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	89	(70 - 130)			SW846 8260B
	90	(70 - 130)	1.3	(0-30)	SW846 8260B
Bromoform	88	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.7	(0-30)	SW846 8260B
4-Methyl-2-pentanone	90	(70 - 130)			SW846 8260B
	90	(70 - 130)	0.23	(0-30)	SW846 8260B
2-Hexanone	85	(70 - 130)			SW846 8260B
	86	(70 - 130)	0.50	(0-30)	SW846 8260B
Tetrachloroethene	93	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.01	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	77	(70 - 130)			SW846 8260B
	77	(70 - 130)	0.20	(0-30)	SW846 8260B
Toluene	92	(70 - 130)			SW846 8260B
	92	(70 - 130)	0.53	(0-30)	SW846 8260B
Chlorobenzene	93	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.3	(0-30)	SW846 8260B
Ethylbenzene	95	(70 - 130)			SW846 8260B
	96	(70 - 130)	0.54	(0-30)	SW846 8260B
Styrene	96	(70 - 130)			SW846 8260B
	98	(70 - 130)	2.6	(0-30)	SW846 8260B
Xylenes (total)	94	(70 - 130)			SW846 8260B
	95	(70 - 130)	0.56	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A210536 Work Order #...: MDK051AG-MS Matrix.....: WG
MS Lot-Sample #: A1A210536-008 MDK051AH-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	86	(50 - 150)
	86	(50 - 150)
1,2-Dichloroethane-d4	83	(50 - 150)
	81	(50 - 150)
Toluene-d8	83	(50 - 150)
	82	(50 - 150)
4-Bromofluorobenzene	88	(50 - 150)
	85	(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.

1/26/11 @ 1047

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\UXJ5185.D
Report Date: 27-Jan-2011 11:24

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\8260LLUX11.m
Misc Info: J10126A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	0.8316	83.16	70-130
	42	Trichloroethene	1.000	0.9939	99.39	70-130
	59	Chlorobenzene	1.000	1.064	106.38	70-130
	50	Toluene	1.000	1.023	102.34	70-130
	41	Benzene	1.000	1.063	106.27	70-130
	16	Acetone	2.000	2.339	116.96	70-130
	20	Carbon Disulfide	1.000	0.8356	83.56	70-130
	9	Chloromethane	1.000	0.9896	98.96	70-130
	11	Bromomethane	1.000	0.7672	76.72	70-130
	10	Vinyl Chloride	1.000	1.092	109.23	70-130
	12	Chloroethane	1.000	0.8708	87.08	70-130
	21	Methylene Chloride	1.000	0.6928	69.29*	70-130
	28	1,1-Dichloroethane	1.000	0.9263	92.63	70-130
M	31	1,2-Dichloroethene	2.000	1.876	93.80	70-130
	35	Chloroform	1.000	1.008	100.83	70-130
	40	1,2-Dichloroethane	1.000	0.9851	98.51	70-130
	30	2-Butanone	2.000	2.224	111.22	70-130
	37	1,1,1-Trichloroeth	1.000	0.8930	89.30	70-130
	39	Carbon Tetrachlori	1.000	0.8904	89.05	70-130
	46	Bromodichlorometha	1.000	0.9591	95.91	70-130
	43	1,2-Dichloropropan	1.000	1.005	100.48	70-130
	48	cis-1,3-Dichloropr	1.000	0.8875	88.75	70-130
	54	1,3-Dichloropropan	1.000	0.9980	99.80	70-130
	57	Dibromochlorometha	1.000	0.9365	93.65	70-130
	53	1,1,2-Trichloroeth	1.000	0.9598	95.98	70-130
	51	trans-1,3-Dichloro	1.000	0.8236	82.36	70-130
	49	4-Methyl-2-pentano	2.000	2.135	106.75	70-130
	56	2-Hexanone	2.000	1.813	90.66	70-130
	55	Tetrachloroethene	1.000	0.9525	95.25	70-130
	68	1,1,2,2-Tetrachlor	1.000	0.9108	91.08	70-130
	66	Bromoform	1.000	0.7560	75.60	70-130
	61	Ethylbenzene	1.000	0.9868	98.68	70-130
	65	Styrene	1.000	0.9068	90.68	70-130
M	63	Xylenes (total)	3.000	2.875	95.82	70-130
	32	cis-1,2-dichloroet	1.000	0.9920	99.20	70-130
	25	trans-1,2-Dichloro	1.000	0.8839	88.39	70-130
	8	Dichlorodifluorome	1.000	1.178	117.77	70-130
	13	Trichlorofluoromet	1.000	1.002	100.16	70-130

70	1,2,3-Trichloropro	1.000	0.8920	89.20	70-130
18	Freon-113	1.000	0.9267	92.67	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\UXJ5185.D
Report Date: 27-Jan-2011 11:24

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.8833	88.33	70-130
58 1,2-Dibromoethane	1.000	0.9817	98.17	70-130
67 Isopropylbenzene	1.000	0.8995	89.95	70-130
80 1,3-Dichlorobenzen	1.000	0.9916	99.17	70-130
81 1,4-Dichlorobenzen	1.000	1.004	100.43	70-130
83 1,2-Dichlorobenzen	1.000	1.033	103.29	70-130
84 1,2-Dibromo-3-chlo	1.000	0.6406	NT 64.06*	70-130
85 1,2,4-Trichloroben	1.000	0.6608	NT 66.08*	70-130
98 Cyclohexane	1.000	0.9388	93.88	70-130
143 Methyl Acetate	2.000	2.041	102.06	70-130
144 Methylcyclohexane	1.000	0.9304	93.04	70-130
71 Bromobenzene	1.000	0.8429	84.29	70-130
34 Bromochloromethane	1.000	0.9714	97.14	70-130
82 n-Butylbenzene	1.000	0.8799	87.99	70-130
78 sec-Butylbenzene	1.000	0.8133	81.33	70-130
76 tert-Butylbenzene	1.000	0.8418	84.19	70-130
73 2-Chlorotoluene	1.000	0.8680	86.80	70-130
75 4-Chlorotoluene	1.000	0.8468	84.68	70-130
45 Dibromomethane	1.000	1.108	110.81	70-130
33 2,2-Dichloropropan	1.000	0.8406	84.06	70-130
38 1,1-Dichloropropen	1.000	1.033	103.29	70-130
86 Hexachlorobutadien	1.000	0.6870	NT 68.70*	70-130
19 Iodomethane	1.000	0.9342	93.42	70-130
79 4-Isopropyltoluene	1.000	0.8727	87.27	70-130
87 Naphthalene	1.000	0.6086	NT 60.86*	70-130
72 n-Propylbenzene	1.000	0.8153	81.53	70-130
60 1,1,1,2-Tetrachlor	1.000	0.9112	91.12	70-130
88 1,2,3-Trichloroben	1.000	0.6805	NT 68.05*	70-130
77 1,2,4-Trimethylben	1.000	0.8290	82.90	70-130
74 1,3,5-Trimethylben	1.000	0.8066	80.66	70-130
150 Vinyl Acetate-86	1.000	0.8600	86.00	70-130
62 m + p-Xylene	2.000	1.881	94.05	70-130
64 Xylene-o	1.000	0.9937	99.37	70-130
49 4-Methyl-2-pentano	2.000	2.135	106.75	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	8.282	82.82	75-121
$ 5 1,2-Dichloroethane	10.000	7.926	79.26	63-129
$ 6 Toluene-d8	10.000	8.378	83.78	74-115
$ 7 Bromofluorobenzene	10.000	8.582	85.82	66-117

1/26/11
01554

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\UXJ5198.D
Report Date: 27-Jan-2011 11:17

TestAmerica North Canton

RECOVERY REPORT

Client Name: Client SDG: SDGa01304
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: QCMRL
Level: LOW Operator: 43582
Data Type: MS DATA SampleType: MRL
SpikeList File: MRL.spk Quant Type: ISTD
Sublist File: 4-8260+IX.sub
Method File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\8260LLUX11.m
Misc Info: J10126A,8260LLUX11,,43582,3

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	17	1,1-Dichloroethene	1.000	0.8386	83.86	70-130
	42	Trichloroethene	1.000	1.085	108.46	70-130
	59	Chlorobenzene	1.000	1.117	111.67	70-130
	50	Toluene	1.000	1.119	111.89	70-130
	41	Benzene	1.000	1.151	115.07	70-130
	16	Acetone	2.000	1.578	78.91	70-130
	20	Carbon Disulfide	1.000	0.7833	78.33	70-130
	9	Chloromethane	1.000	0.9970	99.70	70-130
	11	Bromomethane	1.000	0.9104	91.04	70-130
	10	Vinyl Chloride	1.000	1.101	110.06	70-130
	12	Chloroethane	1.000	0.9605	96.05	70-130
	21	Methylene Chloride	1.000	1.341	134.10*	70-130
	28	1,1-Dichloroethane	1.000	1.066	106.60	70-130
M	31	1,2-Dichloroethene	2.000	2.247	112.34	70-130
	35	Chloroform	1.000	1.160	115.99	70-130
	40	1,2-Dichloroethane	1.000	1.077	107.75	70-130
	30	2-Butanone	2.000	1.918	95.90	70-130
	37	1,1,1-Trichloroeth	1.000	1.002	100.26	70-130
	39	Carbon Tetrachlori	1.000	0.8139	81.39	70-130
	46	Bromodichlorometha	1.000	0.9956	99.56	70-130
	43	1,2-Dichloropropan	1.000	1.142	114.18	70-130
	48	cis-1,3-Dichloropr	1.000	0.9469	94.69	70-130
	54	1,3-Dichloropropan	1.000	1.094	109.40	70-130
	57	Dibromochlorometha	1.000	0.9229	92.29	70-130
	53	1,1,2-Trichloroeth	1.000	1.148	114.76	70-130
	51	trans-1,3-Dichloro	1.000	0.8263	82.63	70-130
	49	4-Methyl-2-pentano	2.000	1.818	90.93	70-130
	56	2-Hexanone	2.000	1.569	78.46	70-130
	55	Tetrachloroethene	1.000	0.9770	97.70	70-130
	68	1,1,2,2-Tetrachlor	1.000	0.9047	90.47	70-130
	66	Bromoform	1.000	0.8020	80.20	70-130
	61	Ethylbenzene	1.000	1.060	105.98	70-130
	65	Styrene	1.000	1.010	101.01	70-130
M	63	Xylenes (total)	3.000	3.065	102.17	70-130
	32	cis-1,2-dichloroet	1.000	1.212	121.23	70-130
	25	trans-1,2-Dichloro	1.000	1.034	103.45	70-130
	8	Dichlorodifluorome	1.000	0.8491	84.91	70-130
	13	Trichlorofluoromet	1.000	0.8305	83.05	70-130

70	1,2,3-Trichloropro	1.000	0.9148	91.48	70-130
18	Freon-113	1.000	0.5816	58.16*	70-130

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\UXJ5198.D
Report Date: 27-Jan-2011 11:17

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
24 Methyl tert-butyl	1.000	0.9715	97.15	70-130
58 1,2-Dibromoethane	1.000	1.052	105.21	70-130
67 Isopropylbenzene	1.000	0.9597	95.97	70-130
80 1,3-Dichlorobenzen	1.000	1.085	108.54	70-130
81 1,4-Dichlorobenzen	1.000	1.158	115.78	70-130
83 1,2-Dichlorobenzen	1.000	1.205	120.46	70-130
84 1,2-Dibromo-3-chlo	1.000	0.8750	87.50	70-130
85 1,2,4-Trichloroben	1.000	0.9092	90.92	70-130
98 Cyclohexane	1.000	0.7673	76.73	70-130
143 Methyl Acetate	2.000	2.092	104.58	70-130
144 Methylcyclohexane	1.000	0.6768	NT 67.68*	70-130
71 Bromobenzene	1.000	0.9587	95.87	70-130
34 Bromochloromethane	1.000	1.071	107.06	70-130
82 n-Butylbenzene	1.000	0.9255	92.55	70-130
78 sec-Butylbenzene	1.000	0.8007	80.07	70-130
76 tert-Butylbenzene	1.000	0.8224	82.24	70-130
73 2-Chlorotoluene	1.000	0.9095	90.95	70-130
75 4-Chlorotoluene	1.000	0.8700	87.00	70-130
45 Dibromomethane	1.000	1.141	114.11	70-130
33 2,2-Dichloropropan	1.000	0.8722	87.22	70-130
38 1,1-Dichloropropen	1.000	0.9983	99.83	70-130
86 Hexachlorobutadien	1.000	0.8370	83.70	70-130
19 Iodomethane	1.000	0.9860	98.61	70-130
79 4-Isopropyltoluene	1.000	0.8577	85.77	70-130
87 Naphthalene	1.000	0.8899	88.99	70-130
72 n-Propylbenzene	1.000	0.7628	76.28	70-130
60 1,1,1,2-Tetrachlor	1.000	0.9607	96.07	70-130
88 1,2,3-Trichloroben	1.000	0.9661	96.61	70-130
77 1,2,4-Trimethylben	1.000	0.8774	87.74	70-130
74 1,3,5-Trimethylben	1.000	0.8592	85.92	70-130
150 Vinyl Acetate-86	1.000	0.7504	75.05	70-130
62 m + p-Xylene	2.000	2.001	100.04	70-130
64 Xylene-o	1.000	1.064	106.43	70-130
49 4-Methyl-2-pentano	2.000	1.818	90.93	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Dibromofluorometha	10.000	8.390	83.90	75-121
$ 5 1,2-Dichloroethane	10.000	7.831	78.31	63-129
$ 6 Toluene-d8	10.000	8.346	83.46	74-115
$ 7 Bromofluorobenzene	10.000	8.465	84.65	66-117

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\UXJ5183.D
Report Date: 26-Jan-2011 10:53

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 26-JAN-2011 10:02
Lab File ID: UXJ5183.D Init. Cal. Date(s): 17-JUN-2010 13-JAN-2011
Analysis Type: WATER Init. Cal. Times: 12:26 12:51
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 4 Dibromofluoromethane	0.24903	0.21612	0.21612	0.010	13.21323	50.00000	Averaged	
$ 5 1,2-Dichloroethane-d4	0.36095	0.29297	0.29297	0.010	18.83411	50.00000	Averaged	
$ 6 Toluene-d8	1.48909	1.23323	1.23323	0.010	17.18180	50.00000	Averaged	
$ 7 Bromofluorobenzene	0.50167	0.44034	0.44034	0.010	12.22510	50.00000	Averaged	
8 Dichlorodifluoromethane	0.14711	0.17259	0.17259	0.010	-17.32115	50.00000	Averaged	
9 Chloromethane	0.30282	0.28294	0.28294	0.100	6.56611	50.00000	Averaged	
10 Vinyl Chloride	0.27707	0.31542	0.31542	0.010	-13.84346	20.00000	Averaged	
11 Bromomethane	0.13161	0.11836	0.11836	0.010	10.06625	50.00000	Averaged	
12 Chloroethane	0.14785	0.13554	0.13554	0.010	8.32254	50.00000	Averaged	
13 Trichlorofluoromethane	0.29270	0.30232	0.30232	0.010	-3.28755	50.00000	Averaged	
15 Acrolein	0.03561	0.03613	0.03613	0.010	-1.47590	50.00000	Averaged	
16 Acetone	100	95.03118	0.07508	0.010	4.96882	0.000e+000	Wt Linear	
17 1,1-Dichloroethene	0.21872	0.19576	0.19576	0.010	10.49749	20.00000	Averaged	
18 Freon-113	0.12016	0.11306	0.11306	0.010	5.90569	50.00000	Averaged	
19 Iodomethane	0.26267	0.23774	0.23774	0.010	9.48988	50.00000	Averaged	
20 Carbon Disulfide	0.54866	0.48085	0.48085	0.010	12.35888	50.00000	Averaged	
21 Methylene Chloride	50.00000	41.23416	0.20394	0.010	17.53169	0.000e+000	Wt Linear	
22 Acetonitrile	0.02786	0.02486	0.02486	0.010	10.75353	50.00000	Averaged	
23 Acrylonitrile	0.08858	0.08746	0.08746	0.010	1.25866	50.00000	Averaged	
24 Methyl tert-butyl ether	0.79526	0.66071	0.66071	0.010	16.91811	50.00000	Averaged	
25 trans-1,2-Dichloroethene	0.28264	0.26116	0.26116	0.010	7.60196	50.00000	Averaged	
26 Hexane	0.07934	0.08236	0.08236	0.010	-3.80103	20.00000	Averaged	
27 Vinyl acetate	0.40247	0.42992	0.42992	0.010	-6.81891	50.00000	Averaged	
28 1,1-Dichloroethane	0.49684	0.46720	0.46720	0.100	5.96512	50.00000	Averaged	
29 tert-Butyl Alcohol	0.01907	0.01495	0.01495	0.010	21.57954	50.00000	Averaged	
30 2-Butanone	0.11159	0.10352	0.10352	0.010	7.22850	50.00000	Averaged	
M 31 1,2-Dichloroethene (total)	0.28935	0.27595	0.27595	0.010	4.62919	50.00000	Averaged	
32 cis-1,2-dichloroethene	0.29605	0.29075	0.29075	0.010	1.79102	50.00000	Averaged	
33 2,2-Dichloropropane	0.29625	0.24028	0.24028	0.010	18.89185	50.00000	Averaged	
34 Bromochloromethane	0.13541	0.13539	0.13539	0.010	0.01217	50.00000	Averaged	
35 Chloroform	0.46541	0.47047	0.47047	0.010	-1.08635	20.00000	Averaged	
36 Tetrahydrofuran	0.07688	0.06208	0.06208	0.010	19.24597	50.00000	Averaged	
37 1,1,1-Trichloroethane	0.36552	0.31579	0.31579	0.010	13.60482	50.00000	Averaged	
38 1,1-Dichloropropene	0.40421	0.40325	0.40325	0.010	0.23785	50.00000	Averaged	
39 Carbon Tetrachloride	0.32778	0.28542	0.28542	0.010	12.92437	50.00000	Averaged	
40 1,2-Dichloroethane	0.41241	0.39242	0.39242	0.010	4.84830	50.00000	Averaged	
41 Benzene	1.16071	1.15718	1.15718	0.010	0.30471	50.00000	Averaged	
42 Trichloroethene	0.29439	0.29469	0.29469	0.010	-0.09952	50.00000	Averaged	
43 1,2-Dichloropropane	0.28755	0.28764	0.28764	0.010	-0.03170	20.00000	Averaged	
44 1,4-Dioxane	0.00234	0.00190	0.00190	0.010	19.00774	50.00000	Averaged	<-
45 Dibromomethane	0.15874	0.15890	0.15890	0.010	-0.10590	50.00000	Averaged	
46 Bromodichloromethane	0.33142	0.34141	0.34141	0.010	-3.01486	50.00000	Averaged	
47 2-Chloroethyl vinyl ether	0.17455	0.16744	0.16744	0.010	4.07108	50.00000	Averaged	

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\UXJ5183.D
Report Date: 26-Jan-2011 10:53

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 26-JAN-2011 10:02
Lab File ID: UXJ5183.D Init. Cal. Date(s): 17-JUN-2010 13-JAN-2011
Analysis Type: WATER Init. Cal. Times: 12:26 12:51
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
48 cis-1,3-Dichloropropene	0.42697	0.43079	0.43079	0.010	-0.89433	50.00000	Averaged
49 4-Methyl-2-pentanone	0.23371	0.21334	0.21334	0.010	8.71385	50.00000	Averaged
50 Toluene	1.75446	1.65827	1.65827	0.010	5.48256	20.00000	Averaged
51 trans-1,3-Dichloropropene	0.51970	0.50478	0.50478	0.010	2.87094	50.00000	Averaged
52 Ethyl Methacrylate	0.48698	0.42640	0.42640	0.010	12.44071	50.00000	Averaged
53 1,1,2-Trichloroethane	0.32381	0.30601	0.30601	0.010	5.49744	50.00000	Averaged
54 1,3-Dichloropropane	0.60931	0.57389	0.57389	0.010	5.81292	50.00000	Averaged
55 Tetrachloroethene	0.32386	0.30698	0.30698	0.010	5.21213	50.00000	Averaged
56 2-Hexanone	0.21564	0.18744	0.18744	0.010	13.07536	50.00000	Averaged
57 Dibromochloroethane	0.31437	0.32438	0.32438	0.010	-3.18397	50.00000	Averaged
58 1,2-Dibromoethane	0.31507	0.29878	0.29878	0.010	5.17078	50.00000	Averaged
59 Chlorobenzene	1.08411	1.04995	1.04995	0.300	3.15164	50.00000	Averaged
60 1,1,1,2-Tetrachloroethane	0.35234	0.34438	0.34438	0.010	2.26152	50.00000	Averaged
61 Ethylbenzene	0.59455	0.58326	0.58326	0.010	1.89866	20.00000	Averaged
62 m + p-Xylene	0.75868	0.72334	0.72334	0.010	4.65894	50.00000	Averaged
M 63 Xylenes (total)	0.74401	0.71183	0.71183	0.010	4.32585	50.00000	Averaged
64 Xylene-o	0.71467	0.68881	0.68881	0.010	3.61863	50.00000	Averaged
65 Styrene	1.13529	1.15502	1.15502	0.010	-1.73854	50.00000	Averaged
66 Bromoform	0.16749	0.17156	0.17156	0.100	-2.43140	50.00000	Averaged
67 Isopropylbenzene	1.81338	1.74881	1.74881	0.010	3.56076	50.00000	Averaged
68 1,1,2,2-Tetrachloroethane	0.86453	0.68552	0.68552	0.300	20.70629	50.00000	Averaged
69 1,4-Dichloro-2-butene	50.00000	44.71980	0.18622	0.010	10.56041	0.000e+000	Wt Linear
70 1,2,3-Trichloropropane	0.30139	0.21140	0.21140	0.010	29.85763	50.00000	Averaged
71 Bromobenzene	1.04387	0.81506	0.81506	0.010	21.91912	50.00000	Averaged
72 n-Propylbenzene	1.21740	0.94721	0.94721	0.010	22.19399	50.00000	Averaged
73 2-Chlorotoluene	1.02828	0.82827	0.82827	0.010	19.45113	50.00000	Averaged
74 1,3,5-Trimethylbenzene	3.43147	2.78021	2.78021	0.010	18.97909	50.00000	Averaged
75 4-Chlorotoluene	1.05740	0.86684	0.86684	0.010	18.02176	50.00000	Averaged
76 tert-Butylbenzene	2.96050	2.35912	2.35912	0.010	20.31343	50.00000	Averaged
77 1,2,4-Trimethylbenzene	3.32668	2.76350	2.76350	0.010	16.92932	50.00000	Averaged
78 sec-Butylbenzene	4.08908	3.33346	3.33346	0.010	18.47891	50.00000	Averaged
79 4-Isopropyltoluene	3.16892	2.74430	2.74430	0.010	13.39958	50.00000	Averaged
80 1,3-Dichlorobenzene	1.65207	1.48166	1.48166	0.010	10.31498	50.00000	Averaged
81 1,4-Dichlorobenzene	1.64353	1.52597	1.52597	0.010	7.15265	50.00000	Averaged
82 n-Butylbenzene	2.46859	2.25300	2.25300	0.010	8.73352	50.00000	Averaged
83 1,2-Dichlorobenzene	1.35463	1.31167	1.31167	0.010	3.17143	50.00000	Averaged
84 1,2-Dibromo-3-chloropropane	0.08117	0.05566	0.05566	0.010	31.41904	50.00000	Averaged
85 1,2,4-Trichlorobenzene	0.69024	0.43691	0.43691	0.010	36.70241	50.00000	Averaged
86 Hexachlorobutadiene	0.27406	0.17271	0.17271	0.010	36.98196	50.00000	Averaged
87 Naphthalene	1.56286	0.92681	0.92681	0.010	40.69808	50.00000	Averaged
88 1,2,3-Trichlorobenzene	0.62745	0.38475	0.38475	0.010	38.67993	50.00000	Averaged
98 Cyclohexane	0.45337	0.39692	0.39692	0.010	12.45220	50.00000	Averaged
143 Methyl Acetate	0.20799	0.18527	0.18527	0.010	10.92499	50.00000	Averaged

Data File: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\UXJ5183.D
Report Date: 26-Jan-2011 10:53

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a3ux11.i Injection Date: 26-JAN-2011 10:02
Lab File ID: UXJ5183.D Init. Cal. Date(s): 17-JUN-2010 13-JAN-2011
Analysis Type: WATER Init. Cal. Times: 12:26 12:51
Lab Sample ID: 50NG-CC Quant Type: ISTD
Method: \\cansvr11\dd\chem\MSV\a3ux11.i\J10126A.b\8260LLUX11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
144 Methylcyclohexane	0.49589	0.46453	0.46453	0.010	6.32252	50.00000	Averaged
141 1,3,5-Trichlorobenzene	0.73281	0.56317	0.56317	0.010	23.14908	50.00000	Averaged
150 Vinyl Acetate-86	0.04244	0.04522	0.04522	0.010	-6.55284	50.00000	Averaged

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

GCMS SEMIVOLATILE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 2.3 °C.	QAPP Table 4-2
3. Were samples extracted using the correct preparation, clean-up methods?	✓				QAPP Table 4-2
4. Were samples extracted within required holding times (7 days - water)?	✓				QAPP Table 4-2 J/UJ/R
5. Were samples analyzed within required holding times (40 days after extraction)?	✓				QAPP Table 4-2 J/UJ/R
6. Were sample storage requirements met?	✓				QAPP Table 4-2
7. Were QAPP specified PQLs achieved?	✓				QAPP Table 3-4 and 3-6
8. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-4 and 3-6
9. Was the GC/MS system tuned with decafluorotriphenylphosphine (DFTPP)?	✓				LCG Table 2
10. Were the criteria met during each 12 hour shift?	✓				LCG Table 2
11. Did the initial calibration curve consist of 5 concentration levels, with the low standard near but above the MDL?	✓			A4HP9-1/31/2011 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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
15. If a different calibration option was used, was the correlation coefficient (r^2) or the coefficient of determination ≥0.99?	✓			Benzoic acid, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, bis(2-ethylhexyl)phthalate 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%?	✓				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%?	✓			1/31/11 @ 1411	LCG Table 2 >130%=J; <50%=J/R 50-70%=J/UJ;
20. Was a CCV analyzed every 12 hours?	✓			2/1/11 @ 1056	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
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

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 8270C (including PAHs)

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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%?	✓				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 benzoic acid LCS and LCD recoveries for batch 1024039 recovered below control limits at 18% and 13%. All benzoic acid results 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%?			✓		LCG Table 2 Pj
38. Were surrogate recoveries within 50-150%?	✓			Checked by ADR.	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.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 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: FWGDA2mw-106C-1663-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-002 Work Order #...: MDK0Q1AC Matrix.....: WG
Date Sampled...: 01/21/11 09:17 Date Received..: 01/21/11
Prep Date.....: 01/24/11 Analysis Date..: 02/01/11
Prep Batch #...: 1024039
Dilution Factor: 1 Initial Wgt/Vol: 1020 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-106C-1663-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-002 Work Order #...: MDK0Q1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-106C-1663-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-002 Work Order #...: MDK0Q1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(50 - 150)
2-Fluorobiphenyl	58	(50 - 150)
Terphenyl-d14	58	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	84	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-005 Work Order #...: MDK0X1AC Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11
Prep Date.....: 01/24/11 Analysis Date..: 02/01/11
Prep Batch #...: 1024039
Dilution Factor: 1 Initial Wgt/Vol: 950 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
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
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
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-005 Work Order #...: MDK0X1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-005 Work Order #...: MDK0X1AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(50 - 150)
2-Fluorobiphenyl	55	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	64	(50 - 150)
2-Fluorophenol	64	(50 - 150)
2,4,6-Tribromophenol	77	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-008 Work Order #...: MDK051AC Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11
Prep Date.....: 01/24/11 Analysis Date..: 02/01/11
Prep Batch #...: 1024039
Dilution Factor: 1 Initial Wgt/Vol: 960 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-008 Work Order #...: MDK051AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
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
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-008 Work Order #...: MDK051AC Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(50 - 150)
2-Fluorobiphenyl	55	(50 - 150)
Terphenyl-d14	72	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	62	(50 - 150)
2,4,6-Tribromophenol	74	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-010 Work Order #...: MDK081AC Matrix.....: WQ
Date Sampled...: 01/21/11 10:05 Date Received..: 01/21/11
Prep Date.....: 01/24/11 Analysis Date..: 02/01/11
Prep Batch #...: 1024039
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

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-010 Work Order #...: MDK081AC Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	2.4
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
2,4-Dinitrotoluene	ND	5.0	ug/L	0.27
2,6-Dinitrotoluene	ND	5.0	ug/L	0.80
Di-n-octyl phthalate	ND	1.0	ug/L	0.80
Fluoranthene	ND	0.20	ug/L	0.10
Fluorene	ND	0.20	ug/L	0.10
Hexachlorobenzene	ND	0.20	ug/L	0.10
Hexachlorobutadiene	ND	1.0	ug/L	0.27
Hexachloroethane	ND	1.0	ug/L	0.80
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.10
Isophorone	ND	1.0	ug/L	0.27
2-Methylnaphthalene	ND	0.20	ug/L	0.10
2-Methylphenol	ND	1.0	ug/L	0.80
4-Methylphenol	ND	1.0	ug/L	0.80
Naphthalene	ND	0.20	ug/L	0.10
2-Nitroaniline	ND	2.0	ug/L	0.80
3-Nitroaniline	ND	2.0	ug/L	0.28
4-Nitroaniline	ND	2.0	ug/L	0.80
Nitrobenzene	ND	1.0	ug/L	0.040
2-Nitrophenol	ND	2.0	ug/L	0.28
4-Nitrophenol	ND	5.0	ug/L	2.4
N-Nitrosodiphenylamine	ND	1.0	ug/L	0.31
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L	0.80
2,2'-oxybis (1-Chloropropane)	ND	1.0	ug/L	0.40
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenanthrene	ND	0.20	ug/L	0.10
Phenol	ND	1.0	ug/L	0.60
Pyrene	ND	0.20	ug/L	0.10
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.28
2,4,5-Trichloro-phenol	ND	5.0	ug/L	0.30
2,4,6-Trichloro-phenol	ND	5.0	ug/L	0.80
Hexachlorocyclopenta-diene	ND	10	ug/L	0.80

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

GC/MS Semivolatiles

Lot-Sample #...: A1A210536-010 Work Order #...: MDK081AC Matrix.....: WQ

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(50 - 150)
2-Fluorobiphenyl	61	(50 - 150)
Terphenyl-d14	76	(50 - 150)
Phenol-d5	67	(50 - 150)
2-Fluorophenol	68	(50 - 150)
2,4,6-Tribromophenol	68	(50 - 150)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A210536 Work Order #...: MDL461AA Matrix.....: WATER
MB Lot-Sample #: A1A240000-039

Prep Date.....: 01/24/11 Final Wgt/Vol..: 2 mL
Analysis Date..: 02/01/11 Prep Batch #...: 1024039
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

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A210536 Work Order #...: MDL461AA 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	69	(50 - 150)
2-Fluorobiphenyl	57	(50 - 150)
Terphenyl-d14	75	(50 - 150)
Phenol-d5	63	(50 - 150)
2-Fluorophenol	62	(50 - 150)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1A210536 Work Order #...: MDL461AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4,6-Tribromophenol	71	(50 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A210536 Work Order #...: MDL461AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A1A240000-039 MDL461AD-LCSD
Prep Date.....: 01/24/11 Analysis Date..: 02/01/11
Prep Batch #...: 1024039
Dilution Factor: 1 Final Wgt/Vol..: 2 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	59	(30 - 120)			SW846 8270C
	59	(30 - 120)	1.5	(0-30)	SW846 8270C
Acenaphthene	67	(31 - 120)			SW846 8270C
	65	(31 - 120)	3.4	(0-30)	SW846 8270C
2,4-Dinitrotoluene	82	(34 - 151)			SW846 8270C
	78	(34 - 151)	4.3	(0-30)	SW846 8270C
Pyrene	68	(35 - 139)			SW846 8270C
	66	(35 - 139)	2.3	(0-30)	SW846 8270C
N-Nitrosodi-n-propyl-amine	68	(30 - 132)			SW846 8270C
	67	(30 - 132)	1.4	(0-30)	SW846 8270C
1,4-Dichlorobenzene	58	(30 - 115)			SW846 8270C
	59	(30 - 115)	1.3	(0-30)	SW846 8270C
Pentachlorophenol	53	(30 - 150)			SW846 8270C
	54	(30 - 150)	1.4	(0-30)	SW846 8270C
Phenol	74	(30 - 115)			SW846 8270C
	74	(30 - 115)	0.49	(0-30)	SW846 8270C
2-Chlorophenol	77	(30 - 120)			SW846 8270C
	77	(30 - 120)	0.50	(0-30)	SW846 8270C
4-Chloro-3-methylphenol	83	(31 - 121)			SW846 8270C
	77	(31 - 121)	7.5	(0-30)	SW846 8270C
4-Nitrophenol	96	(30 - 138)			SW846 8270C
	90	(30 - 138)	6.3	(0-30)	SW846 8270C
1,2-Dichlorobenzene	61	(30 - 120)			SW846 8270C
	60	(30 - 120)	1.1	(0-30)	SW846 8270C
1,3-Dichlorobenzene	56	(30 - 120)			SW846 8270C
	55	(30 - 120)	0.60	(0-30)	SW846 8270C
2,4,5-Trichloro-phenol	83	(36 - 135)			SW846 8270C
	75	(36 - 135)	9.7	(0-30)	SW846 8270C
4-Methylphenol	74	(31 - 115)			SW846 8270C
	73	(31 - 115)	1.4	(0-30)	SW846 8270C
4-Nitroaniline	68	(30 - 140)			SW846 8270C
	64	(30 - 140)	6.0	(0-30)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A210536 Work Order #...: MDL461AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A1A240000-039 MDL461AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthylene	70	(37 - 115)			SW846 8270C
	66	(37 - 115)	5.7	(0-30)	SW846 8270C
Anthracene	67	(45 - 118)			SW846 8270C
	67	(45 - 118)	0.14	(0-30)	SW846 8270C
Benzo(a)anthracene	66	(43 - 138)			SW846 8270C
	66	(43 - 138)	0.40	(0-30)	SW846 8270C
Benzo(a)pyrene	59	(38 - 144)			SW846 8270C
	58	(38 - 144)	1.4	(0-30)	SW846 8270C
Benzo(b)fluoranthene	65	(31 - 146)			SW846 8270C
	72	(31 - 146)	10	(0-30)	SW846 8270C
Benzo(ghi)perylene	71	(35 - 129)			SW846 8270C
	69	(35 - 129)	3.2	(0-30)	SW846 8270C
Benzo(k)fluoranthene	73	(40 - 127)			SW846 8270C
	63	(40 - 127)	15	(0-30)	SW846 8270C
bis(2-Chloroethoxy) methane	75	(30 - 115)			SW846 8270C
	71	(30 - 115)	5.6	(0-30)	SW846 8270C
bis(2-Chloroethyl)-ether	72	(30 - 115)			SW846 8270C
	71	(30 - 115)	2.5	(0-30)	SW846 8270C
bis(2-Chloroisopropyl) ether	67	(50 - 150)			SW846 8270C
	67	(50 - 150)	0.14	(0-30)	SW846 8270C
bis(2-Ethylhexyl) phthalate	73	(30 - 154)			SW846 8270C
	71	(30 - 154)	2.1	(0-30)	SW846 8270C
2,4,6-Trichloro-phenol	80	(39 - 115)			SW846 8270C
	75	(39 - 115)	5.9	(0-30)	SW846 8270C
2,4-Dichlorophenol	79	(34 - 115)			SW846 8270C
	74	(34 - 115)	5.3	(0-30)	SW846 8270C
2,4-Dimethylphenol	59	(31 - 120)			SW846 8270C
	57	(31 - 120)	3.0	(0-30)	SW846 8270C
2,4-Dinitrophenol	48	(29 - 146)			SW846 8270C
	40	(29 - 146)	19	(0-30)	SW846 8270C
2,6-Dinitrotoluene	82	(43 - 122)			SW846 8270C
	76	(43 - 122)	7.1	(0-30)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A210536 Work Order #...: MDL461AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A1A240000-039 MDL461AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Chloronaphthalene	68	(35 - 115)			SW846 8270C
	66	(35 - 115)	3.1	(0-30)	SW846 8270C
2-Methylnaphthalene	78	(32 - 115)			SW846 8270C
	76	(32 - 115)	2.3	(0-30)	SW846 8270C
2-Methylphenol	74	(30 - 116)			SW846 8270C
	72	(30 - 116)	2.5	(0-30)	SW846 8270C
2-Nitroaniline	74	(36 - 140)			SW846 8270C
	71	(36 - 140)	5.0	(0-30)	SW846 8270C
2-Nitrophenol	81	(33 - 115)			SW846 8270C
	79	(33 - 115)	1.5	(0-30)	SW846 8270C
3,3'-Dichlorobenzidine	48	(30 - 160)			SW846 8270C
	47	(30 - 160)	0.43	(0-30)	SW846 8270C
3-Nitroaniline	66	(30 - 138)			SW846 8270C
	63	(30 - 138)	5.4	(0-30)	SW846 8270C
4,6-Dinitro-2-methylphenol	74	(42 - 144)			SW846 8270C
	68	(42 - 144)	7.6	(0-30)	SW846 8270C
4-Bromophenyl phenyl ether	75	(43 - 118)			SW846 8270C
	74	(43 - 118)	2.2	(0-30)	SW846 8270C
4-Chloroaniline	58	(30 - 133)			SW846 8270C
	56	(30 - 133)	3.2	(0-30)	SW846 8270C
4-Chlorophenyl phenyl ether	74	(40 - 115)			SW846 8270C
	71	(40 - 115)	4.3	(0-30)	SW846 8270C
Butyl benzyl phthalate	74	(37 - 136)			SW846 8270C
	70	(37 - 136)	5.9	(0-30)	SW846 8270C
Carbazole	68	(49 - 126)			SW846 8270C
	66	(49 - 126)	3.0	(0-30)	SW846 8270C
Chrysene	66	(42 - 142)			SW846 8270C
	64	(42 - 142)	2.9	(0-30)	SW846 8270C
Dibenz(a,h)anthracene	71	(38 - 130)			SW846 8270C
	70	(38 - 130)	2.0	(0-30)	SW846 8270C
Dibenzofuran	70	(40 - 115)			SW846 8270C
	67	(40 - 115)	3.6	(0-30)	SW846 8270C
Diethyl phthalate	78	(43 - 132)			SW846 8270C
	74	(43 - 132)	5.3	(0-30)	SW846 8270C
Dimethyl phthalate	76	(42 - 116)			SW846 8270C
	73	(42 - 116)	5.1	(0-30)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A210536 Work Order #...: MDL461AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A1A240000-039 MDL461AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Di-n-octyl phthalate	70	(36 - 151)			SW846 8270C
	68	(36 - 151)	2.4	(0-30)	SW846 8270C
Fluoranthene	71	(47 - 132)			SW846 8270C
	69	(47 - 132)	2.4	(0-30)	SW846 8270C
Fluorene	69	(41 - 115)			SW846 8270C
	66	(41 - 115)	4.5	(0-30)	SW846 8270C
Hexachlorobenzene	73	(42 - 123)			SW846 8270C
	70	(42 - 123)	4.9	(0-30)	SW846 8270C
Hexachlorobutadiene	47	(30 - 120)			SW846 8270C
	49	(30 - 120)	3.5	(0-30)	SW846 8270C
Hexachloroethane	49	(30 - 120)			SW846 8270C
	49	(30 - 120)	0.77	(0-30)	SW846 8270C
Isophorone	74	(33 - 115)			SW846 8270C
	71	(33 - 115)	3.6	(0-30)	SW846 8270C
Naphthalene	66	(30 - 119)			SW846 8270C
	65	(30 - 119)	2.8	(0-30)	SW846 8270C
Nitrobenzene	82	(31 - 115)			SW846 8270C
	77	(31 - 115)	5.7	(0-30)	SW846 8270C
N-Nitrosodiphenylamine	64	(35 - 124)			SW846 8270C
	62	(35 - 124)	2.9	(0-30)	SW846 8270C
Phenanthrene	68	(45 - 117)			SW846 8270C
	68	(45 - 117)	0.12	(0-30)	SW846 8270C
Indeno(1,2,3-cd)pyrene	70	(37 - 130)			SW846 8270C
	69	(37 - 130)	1.2	(0-30)	SW846 8270C
Di-n-butyl phthalate	73	(46 - 123)			SW846 8270C
	71	(46 - 123)	2.3	(0-30)	SW846 8270C
Hexachlorocyclopenta-diene	33	(30 - 115)			SW846 8270C
	32	(30 - 115)	3.2	(0-30)	SW846 8270C
Benzoic acid	18 a	(30 - 136)			SW846 8270C
	13 a,p	(30 - 136)	35	(0-30)	SW846 8270C
Benzyl alcohol	78	(29 - 115)			SW846 8270C
	76	(29 - 115)	1.6	(0-30)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(50 - 150)
	76	(50 - 150)
2-Fluorobiphenyl	67	(50 - 150)
	63	(50 - 150)
Terphenyl-d14	81	(50 - 150)
	77	(50 - 150)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1A210536 Work Order #...: MDL461AC-LCS Matrix.....: WATER
LCS Lot-Sample#: A1A240000-039 MDL461AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Phenol-d5	74	(50 - 150)
	73	(50 - 150)
2-Fluorophenol	73	(50 - 150)
	71	(50 - 150)
2,4,6-Tribromophenol	88	(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.

p Relative percent difference (RPD) is outside stated control limits.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

PESTICIDE DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 2.3°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 1/31/11, 1/25/11 (toxaphene) 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 12/24/10	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%?		✓		• On 2/9/11, the MRL at 0951(pest 9) had beta-BHC recover above control limits at 132% and alpha BHC at 225%. • On 2/9/11, the MRL at 1922(pest 9) had alpha BHC recover above control limits at 213%. No qualifications were made as there were no detected concentrations reported for the bracketed field samples and all MRL outliers were above control limits.	LCG Table 4 >130%=J; 65-70%%=J/UJ; <65%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
14. Was a second source (ICV) verification analyzed after the ICAL? Were results 85-115%?		✓		Instrument A2HP9 2/7/11 @ 1142, tox 1/25/11 @ 1729	LCG Table 4 >115%=J; 80-85%=J/UJ; <80%=J/R
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%?	✓			• The CCV analyzed 2/4/11 @ 0904(pest 9) had an average %D of 17.1%. All target analytes with outlier %D were above control limits. • The CCV analyzed 2/4/11 @ 1859(pest 9) had an average %D of 17.6%. All target analytes with outlier %D were above control limits. Alpha BHC was above control limits with a %D of 31% and delta BHC at 36%. • The CCV analyzed 2/4/11 @ 1859(pest 9r) had an average %D of 15.6%. All target analytes with outlier %D were above control limits. No qualifications were made as there were no detected concentrations reported for the bracketed field samples and all CCV outliers were above control limits.	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*

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 8081A

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
26. Were surrogate recoveries 50-150%?		✓		The surrogate, DCB, recovered below control limits for FWGDA2mw-106c-1663-GW at 35% and FWGDA2mw-110c-1665-GW at 43%. The results for FWGDA2mw-106c-1663-GW and FWGDA2mw-110c-1665-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?	✓				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

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-106C-1663-GW

GC Semivolatiles

Lot-Sample #...: A1A210536-002 Work Order #...: MDK0Q1AD Matrix.....: WG
Date Sampled...: 01/21/11 09:17 Date Received..: 01/21/11
Prep Date.....: 01/22/11 Analysis Date..: 02/04/11
Prep Batch #...: 1022011
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	74	(50 - 150)
Decachlorobiphenyl	35 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GW

GC Semivolatiles

Lot-Sample #...: A1A210536-005 Work Order #...: MDK0X1AD Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11
Prep Date.....: 01/22/11 Analysis Date..: 02/04/11
Prep Batch #...: 1022011
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	78	(50 - 150)
Decachlorobiphenyl	61	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GW

GC Semivolatiles

Lot-Sample #...: A1A210536-008 Work Order #...: MDK051AD Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11
Prep Date.....: 01/22/11 Analysis Date..: 02/04/11
Prep Batch #...: 1022011
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	84	(50 - 150)
Decachlorobiphenyl	43 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

GC Semivolatiles

Lot-Sample #...: A1A210536-010 Work Order #...: MDK081AD Matrix.....: WQ
Date Sampled...: 01/21/11 10:05 Date Received..: 01/21/11
Prep Date.....: 01/22/11 Analysis Date..: 02/04/11
Prep Batch #...: 1022011
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	76	(50 - 150)
Decachlorobiphenyl	88	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1A210536 Work Order #...: MDLHL1AA Matrix.....: WATER
MB Lot-Sample #: A1A220000-011

Prep Date.....: 01/22/11 Final Wgt/Vol..: 5 mL
Analysis Date..: 02/04/11 Prep Batch #...: 1022011
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	87	(50 - 150)
Decachlorobiphenyl	97	(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 #...: A1A210536 Work Order #...: MDLHL1AC Matrix.....: WATER
LCS Lot-Sample#: A1A220000-011
Prep Date.....: 01/22/11 Analysis Date..: 02/04/11
Prep Batch #...: 1022011
Dilution Factor: 2 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	92	(50 - 135)	SW846 8081A
delta-BHC	83	(58 - 160)	SW846 8081A
gamma-BHC (Lindane)	95	(58 - 127)	SW846 8081A
Heptachlor	79	(48 - 150)	SW846 8081A
Aldrin	95	(53 - 128)	SW846 8081A
Heptachlor epoxide	94	(50 - 127)	SW846 8081A
Endosulfan I	56	(50 - 160)	SW846 8081A
Dieldrin	100	(50 - 124)	SW846 8081A
4,4'-DDE	102	(50 - 130)	SW846 8081A
Endrin	82	(50 - 137)	SW846 8081A
Endosulfan II	65	(50 - 144)	SW846 8081A
4,4'-DDD	99	(50 - 137)	SW846 8081A
Endosulfan sulfate	97	(50 - 160)	SW846 8081A
4,4'-DDT	82	(50 - 145)	SW846 8081A
Methoxychlor	86	(50 - 160)	SW846 8081A
Endrin ketone	87	(50 - 150)	SW846 8081A
Endrin aldehyde	73	(30 - 160)	SW846 8081A
alpha-Chlordane	95	(50 - 122)	SW846 8081A
gamma-Chlordane	96	(50 - 130)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(50 - 150)
Decachlorobiphenyl	93	(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 #...: A1A210536 Work Order #...: MDJN41AJ-MS Matrix.....: WATER
MS Lot-Sample #: A1A200532-021 MDJN41AK-MSD
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11
Prep Date.....: 01/22/11 Analysis Date..: 02/04/11
Prep Batch #...: 1022011
Dilution Factor: 2 Initial Wgt/Vol: 450 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
alpha-BHC	101	(50 - 150)			SW846 8081A
	99	(50 - 150)	2.3	(0-50)	SW846 8081A
beta-BHC	106	(50 - 150)			SW846 8081A
	101	(50 - 150)	4.5	(0-50)	SW846 8081A
delta-BHC	96	(50 - 150)			SW846 8081A
	94	(50 - 150)	2.4	(0-50)	SW846 8081A
gamma-BHC (Lindane)	111	(50 - 150)			SW846 8081A
	106	(50 - 150)	4.0	(0-50)	SW846 8081A
Heptachlor	92	(50 - 150)			SW846 8081A
	88	(50 - 150)	4.3	(0-50)	SW846 8081A
Aldrin	105	(50 - 150)			SW846 8081A
	103	(50 - 150)	2.1	(0-50)	SW846 8081A
Heptachlor epoxide	107	(50 - 150)			SW846 8081A
	105	(50 - 150)	2.3	(0-50)	SW846 8081A
Endosulfan I	68	(50 - 150)			SW846 8081A
	67	(50 - 150)	1.1	(0-50)	SW846 8081A
Dieldrin	113	(50 - 150)			SW846 8081A
	108	(50 - 150)	4.4	(0-50)	SW846 8081A
4,4'-DDE	114	(50 - 150)			SW846 8081A
	110	(50 - 150)	3.2	(0-50)	SW846 8081A
Endrin	96	(50 - 150)			SW846 8081A
	92	(50 - 150)	4.2	(0-50)	SW846 8081A
Endosulfan II	75	(50 - 150)			SW846 8081A
	73	(50 - 150)	3.9	(0-50)	SW846 8081A
4,4'-DDD	117	(50 - 150)			SW846 8081A
	110	(50 - 150)	5.7	(0-50)	SW846 8081A
Endosulfan sulfate	106	(50 - 150)			SW846 8081A
	104	(50 - 150)	2.4	(0-50)	SW846 8081A
4,4'-DDT	95	(50 - 150)			SW846 8081A
	89	(50 - 150)	6.9	(0-50)	SW846 8081A
Methoxychlor	95	(50 - 150)			SW846 8081A
	91	(50 - 150)	4.9	(0-50)	SW846 8081A
Endrin ketone	97	(50 - 150)			SW846 8081A
	91	(50 - 150)	5.6	(0-50)	SW846 8081A
Endrin aldehyde	83	(50 - 150)			SW846 8081A
	79	(50 - 150)	4.6	(0-50)	SW846 8081A
alpha-Chlordane	108	(50 - 150)			SW846 8081A
	104	(50 - 150)	4.2	(0-50)	SW846 8081A
gamma-Chlordane	110	(50 - 150)			SW846 8081A
	106	(50 - 150)	3.5	(0-50)	SW846 8081A

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1A210536 **Work Order #...:** MDJN41AJ-MS **Matrix.....:** WATER
MS Lot-Sample #: A1A200532-021 MDJN41AK-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	101	(50 - 150)
	94	(50 - 150)
Decachlorobiphenyl	111	(50 - 150)
	100	(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\GCS\a2hp9.i\110204-1.b\004F0401.D Page 1
Report Date: 04-Feb-2011 09:20

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 04-FEB-2011 09:04
Lab File ID: 004F0401.D Init. Cal. Date(s): 15-DEC-2010 31-JAN-2011
Analysis Type: Init. Cal. Times: 12:37 17:20
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\PEST9.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	59095449	63907760	63907760	0.000	-8.14328	15.00000	Averaged	
4 alpha-BHC	0.02500	0.03121	119448840	0.010	-24.84537	0.000e+000	Linear	
5 gamma-BHC (Lindane)	47584539	54708960	54708960	0.010	-14.97213	15.00000	Averaged	
6 beta-BHC	36066303	43973080	43973080	0.010	-21.92289	15.00000	Averaged	<-
7 delta-BHC	0.02500	0.03316	104190880	0.010	-32.64332	0.000e+000	Quadratic	
8 Heptachlor	80656599	85018920	85018920	0.010	-5.40851	15.00000	Averaged	
10 Aldrin	37840080	44517160	44517160	0.010	-17.64552	15.00000	Averaged	<-
12 Heptachlor epoxide	25077703	28800000	28800000	0.010	-14.84306	15.00000	Averaged	
13 gamma-Chlordane	26777567	31338520	31338520	0.010	-17.03274	15.00000	Averaged	<-
14 alpha-Chlordane	28159995	33331400	33331400	0.010	-18.36437	15.00000	Averaged	<-
15 Endosulfan I	74346287	83782240	83782240	0.010	-12.69190	15.00000	Averaged	
16 4,4'-DDE	86281014	108173880	108173880	0.010	-25.37391	15.00000	Averaged	<-
17 Dieldrin	30853326	36267160	36267160	0.010	-17.54700	15.00000	Averaged	<-
18 Endrin	27833898	31430640	31430640	0.010	-12.92217	15.00000	Averaged	
20 4,4'-DDD	52503270	62357440	62357440	0.010	-18.76868	15.00000	Averaged	<-
22 Endosulfan II	29222613	33868680	33868680	0.010	-15.89887	15.00000	Averaged	<-
23 4,4'-DDT	59086707	65046040	65046040	0.010	-10.08574	15.00000	Averaged	
25 Endrin aldehyde	22043850	25270960	25270960	0.010	-14.63950	15.00000	Averaged	
27 Methoxychlor	30076656	35207520	35207520	0.010	-17.05929	15.00000	Averaged	<-
28 Endosulfan sulfate	29287313	34198440	34198440	0.010	-16.76879	15.00000	Averaged	<-
29 Endrin ketone	33862696	38406680	38406680	0.010	-13.41885	15.00000	Averaged	
$ 30 Decachlorobiphenyl	34680842	43777680	43777680	0.010	-26.23015	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 17.14664
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

Data File: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\006F0601.D Page 1
Report Date: 04-Feb-2011 10:23

TestAmerica North Canton

RECOVERY REPORT

2/4/11 @ 0951

Client Name: Client SDG: SDGa00713
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\PEST9.m
Misc Info:

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.01126	225.26*	70-130
5 gamma-BHC (Lindane	0.005000	0.006194	123.87	70-130
6 beta-BHC	0.005000	0.006623	132.47*	70-130
7 delta-BHC	0.005000	0.005795	115.89	70-130
8 Heptachlor	0.005000	0.006156	123.13	70-130
10 Aldrin	0.005000	0.006308	126.16	70-130
12 Heptachlor epoxide	0.005000	0.006187	123.74	70-130
13 gamma-Chlordane	0.005000	0.006004	120.08	70-130
14 alpha-Chlordane	0.005000	0.006140	122.80	70-130
15 Endosulfan I	0.005000	0.006046	120.91	70-130
16 4,4'-DDE	0.005000	0.006266	125.32	70-130
17 Dieldrin	0.005000	0.005899	117.98	70-130
18 Endrin	0.005000	0.005801	116.03	70-130
20 4,4'-DDD	0.005000	0.005637	112.74	70-130
22 Endosulfan II	0.005000	0.005763	115.27	70-130
23 4,4'-DDT	0.005000	0.005060	101.19	70-130
25 Endrin aldehyde	0.005000	0.005259	105.18	70-130
27 Methoxychlor	0.005000	0.006048	120.95	70-130
28 Endosulfan sulfate	0.005000	0.005736	114.73	70-130
29 Endrin ketone	0.005000	0.005565	111.30	70-130

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 04-FEB-2011 18:59
Lab File ID: 029F2901.D Init. Cal. Date(s): 15-DEC-2010 31-JAN-2011
Analysis Type: Init. Cal. Times: 12:37 17:20
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\PEST9.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	59095449	68172640	68172640	0.000	-15.36022	15.00000	Averaged	<-
4 alpha-BHC	0.02500	0.03282	127159080	0.010	-31.27435	0.000e+000	Linear	
5 gamma-BHC (Lindane)	47584539	58003640	58003640	0.010	-21.89598	15.00000	Averaged	<-
6 beta-BHC	36066303	43220800	43220800	0.010	-19.83707	15.00000	Averaged	<-
7 delta-BHC	0.02500	0.03412	107225720	0.010	-36.49423	0.000e+000	Quadratic	
8 Heptachlor	80656599	91830080	91830080	0.010	-13.85315	15.00000	Averaged	
10 Aldrin	37840080	47517600	47517600	0.010	-25.57479	15.00000	Averaged	<-
12 Heptachlor epoxide	25077703	29981840	29981840	0.010	-19.55577	15.00000	Averaged	<-
13 gamma-Chlordane	26777567	31527640	31527640	0.010	-17.73900	15.00000	Averaged	<-
14 alpha-Chlordane	28159995	33690040	33690040	0.010	-19.63795	15.00000	Averaged	<-
15 Endosulfan I	74346287	84182000	84182000	0.010	-13.22960	15.00000	Averaged	
16 4,4'-DDE	86281014	110890640	110890640	0.010	-28.52264	15.00000	Averaged	<-
17 Dieldrin	30853326	36386560	36386560	0.010	-17.93400	15.00000	Averaged	<-
18 Endrin	27833898	32028760	32028760	0.010	-15.07106	15.00000	Averaged	<-
20 4,4'-DDD	52503270	62305640	62305640	0.010	-18.67002	15.00000	Averaged	<-
22 Endosulfan II	29222613	32617000	32617000	0.010	-11.61562	15.00000	Averaged	
23 4,4'-DDT	59086707	63387240	63387240	0.010	-7.27834	15.00000	Averaged	
25 Endrin aldehyde	22043850	24355200	24355200	0.010	-10.48524	15.00000	Averaged	
27 Methoxychlor	30076656	32690640	32690640	0.010	-8.69107	15.00000	Averaged	
28 Endosulfan sulfate	29287313	32365440	32365440	0.010	-10.51011	15.00000	Averaged	
29 Endrin ketone	33862696	36105760	36105760	0.010	-6.62400	15.00000	Averaged	
$ 30 Decachlorobiphenyl	34680842	40864040	40864040	0.010	-17.82886	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 17.62196
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

TestAmerica North Canton

RECOVERY REPORT

2/4/11
D1922

Client Name: Client SDG: SDGa00713
Sample Matrix: LIQUID Fraction: Pesticides
Lab Smp Id: MRL
Level: LOW Operator: 093905
Data Type: GC MULTI COMP SampleType: MRL
SpikeList File: MRL.spk Quant Type: ESTD
Sublist File: mrl.sub
Method File: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\PEST9.m
Misc Info:

SPIKE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
4 alpha-BHC	0.005000	0.01065	212.97*	70-130
5 gamma-BHC (Lindane	0.005000	0.005311	106.22	70-130
6 beta-BHC	0.005000	0.005755	115.09	70-130
7 delta-BHC	0.005000	0.005106	102.12	70-130
8 Heptachlor	0.005000	0.005267	105.35	70-130
10 Aldrin	0.005000	0.005725	114.50	70-130
12 Heptachlor epoxide	0.005000	0.005588	111.76	70-130
13 gamma-Chlordane	0.005000	0.005421	108.42	70-130
14 alpha-Chlordane	0.005000	0.005672	113.45	70-130
15 Endosulfan I	0.005000	0.005436	108.72	70-130
16 4,4'-DDE	0.005000	0.005901	118.02	70-130
17 Dieldrin	0.005000	0.005549	110.99	70-130
18 Endrin	0.005000	0.005452	109.05	70-130
20 4,4'-DDD	0.005000	0.005647	112.94	70-130
22 Endosulfan II	0.005000	0.005542	110.84	70-130
23 4,4'-DDT	0.005000	0.004681	93.62	70-130
25 Endrin aldehyde	0.005000	0.005332	106.64	70-130
27 Methoxychlor	0.005000	0.005702	114.04	70-130
28 Endosulfan sulfate	0.005000	0.005667	113.34	70-130
29 Endrin ketone	0.005000	0.005421	108.41	70-130

TestAmerica North Canton

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: a2hp9.i Injection Date: 04-FEB-2011 18:59
Lab File ID: 029F2901.D Init. Cal. Date(s): 15-DEC-2010 31-JAN-2011
Analysis Type: Init. Cal. Times: 12:37 17:20
Lab Sample ID: AB3 E212 Quant Type: ESTD
Method: \\cansvr11\dd\chem\GCS\a2hp9.i\110204-1.b\PEST9.m\PEST9r.m

COMPOUND	RRF / AMOUNT	RF0.025	CCAL RRF0.025	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 Tetrachloro-m-xylene	55508805	63436600	63436600	0.000	-14.28205	15.00000	Averaged	
4 alpha-BHC	96790282	122441560	122441560	0.010	-26.50192	15.00000	Averaged	<-
5 gamma-BHC (Lindane)	80506127	95918040	95918040	0.010	-19.14378	15.00000	Averaged	<-
6 beta-BHC	15030233	18404200	18404200	0.010	-22.44787	15.00000	Averaged	<-
7 delta-BHC	82408586	99741440	99741440	0.010	-21.03283	15.00000	Averaged	<-
8 Heptachlor	80036901	86865320	86865320	0.010	-8.53159	15.00000	Averaged	
10 Aldrin	96112506	117335920	117335920	0.010	-22.08184	15.00000	Averaged	<-
12 Heptachlor epoxide	27429668	32407800	32407800	0.010	-18.14871	15.00000	Averaged	<-
13 gamma-Chlordane	28612927	33597920	33597920	0.010	-17.42217	15.00000	Averaged	<-
14 alpha-Chlordane	72741141	86215840	86215840	0.010	-18.52418	15.00000	Averaged	<-
15 Endosulfan I	26503379	29863480	29863480	0.010	-12.67801	15.00000	Averaged	
16 4,4'-DDE	28215398	36664400	36664400	0.010	-29.94465	15.00000	Averaged	<-
17 Dieldrin	72530529	86171880	86171880	0.010	-18.80774	15.00000	Averaged	<-
18 Endrin	26771362	29766480	29766480	0.010	-11.18777	15.00000	Averaged	
21 4,4'-DDD	20828548	24292600	24292600	0.010	-16.63127	15.00000	Averaged	<-
22 Endosulfan II	29663011	32326080	32326080	0.010	-8.97774	15.00000	Averaged	
24 4,4'-DDT	20952748	21836000	21836000	0.010	-4.21545	15.00000	Averaged	
25 Endrin aldehyde	20116298	22028400	22028400	0.010	-9.50524	15.00000	Averaged	
26 Endosulfan sulfate	26179615	28997480	28997480	0.010	-10.76358	15.00000	Averaged	
27 Methoxychlor	24006083	26219080	26219080	0.010	-9.21848	15.00000	Averaged	
29 Endrin ketone	29120147	30719840	30719840	0.010	-5.49342	15.00000	Averaged	
$ 30 Decachlorobiphenyl	28990364	34340080	34340080	0.010	-18.45343	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 15.63608
Maximun Average %D/Drift = 15.00000
* Failed Average %D/Drift Test.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

POLYCHLORINATED BIPHENYLS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 8082

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 2.3°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 1/19/11 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?	✓			No data provided for evaluation.	LCG Table 3 R
10. Was a MRL Level Verification performed at the beginning and end of the sequence or every 12 hours? Were the results 70-130%	✓				LCG Table 3 >130%=J; 65-70%=J/UJ; <65%=J/R
11. Was a second source (ICV) verification performed after the ICAL? Were results 85-115%?	✓			1/19/11@ 2317	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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 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 FWGDA2mw-106c-1663-GW at 29% and FWGDA2mw-110c-1665-GW at 36%. The results for FWGDA2mw-106c-1663-GW and FWGDA2mw-110c-1665-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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 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: As the second column is used only for confirmation and there were no detected aroclors in the samples, only the front column was evaluated.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-106C-1663-GW

GC Semivolatiles

Lot-Sample #...:	A1A210536-002	Work Order #...:	MDK0Q1AF	Matrix.....:	WG
Date Sampled...:	01/21/11 09:17	Date Received..:	01/21/11		
Prep Date.....:	01/22/11	Analysis Date..:	01/31/11		
Prep Batch #...:	1022012				
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	29 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GW

GC Semivolatiles

Lot-Sample #...:	A1A210536-005	Work Order #...:	MDK0X1AF	Matrix.....:	WG
Date Sampled...:	01/21/11 09:15	Date Received..:	01/21/11		
Prep Date.....:	01/22/11	Analysis Date..:	01/31/11		
Prep Batch #...:	1022012				
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	84	(50 - 150)
Decachlorobiphenyl	56	(50 - 150)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GW

GC Semivolatiles

Lot-Sample #...: A1A210536-008	Work Order #...: MDK051AF	Matrix.....: WG	
Date Sampled...: 01/21/11 09:15	Date Received..: 01/21/11		
Prep Date.....: 01/22/11	Analysis Date..: 01/31/11		
Prep Batch #...: 1022012			
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	86	(50 - 150)
Decachlorobiphenyl	36 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

GC Semivolatiles

Lot-Sample #...: A1A210536-010 Work Order #...: MDK081AF Matrix.....: WQ
Date Sampled...: 01/21/11 10:05 Date Received..: 01/21/11
Prep Date.....: 01/22/11 Analysis Date..: 01/31/11
Prep Batch #...: 1022012
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	81	(50 - 150)
Decachlorobiphenyl	84	(50 - 150)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1A210536 Work Order #...: MDLHM1AA Matrix.....: WATER
MB Lot-Sample #: A1A220000-012

Prep Date.....: 01/22/11 Final Wgt/Vol..: 5 mL
Analysis Date..: 01/31/11 Prep Batch #...: 1022012
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	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 #...: A1A210536 Work Order #...: MDLHM1AC Matrix.....: WATER
LCS Lot-Sample#: A1A220000-012
Prep Date.....: 01/22/11 Analysis Date..: 01/31/11
Prep Batch #...: 1022012
Dilution Factor: 2 Final Wgt/Vol..: 5 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**89**	**(58 - 141)**	**SW846 8082**
Aroclor 1260	**104**	**(71 - 143)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(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 #...: A1A210536 Work Order #...: MDJN41AQ-MS Matrix.....: WATER
MS Lot-Sample #: A1A200532-021 MDJN41AR-MSD
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11
Prep Date.....: 01/22/11 Analysis Date..: 01/31/11
Prep Batch #...: 1022012
Dilution Factor: 2 Initial Wgt/Vol: 440 mL Final Wgt/Vol..: 5 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	87	(50 - 150)			SW846 8082
	73	(50 - 150)	17	(0-50)	SW846 8082
Aroclor 1260	99	(50 - 150)			SW846 8082
	84	(50 - 150)	17	(0-50)	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(50 - 150)
	76	(50 - 150)
Decachlorobiphenyl	93	(50 - 150)
	78	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

METALS DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 2.3°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3-8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 3 standards and a blank?	✓				LCG Table 7 R
8. Was the ICAL performed daily?	✓				LCG Table 7 R
9. Was the correlation coefficient r≥0.995 for each analyte?	✓				LCG Table 7 R<0.995=J/R
10. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓			ICP- 11/11/10 ICPMS-11/5/10 Hg-11/2/10	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 1/25/11 had thallium detected at 0.18ug/L. There were no thallium concentrations reported for the associated field samples, so no qualifications were made. No qualifications were made for ICP or ICPMS due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 7 < 5x = U

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 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 1/25/11 had detected thallium from 0.14ug/L to 0.25ug/L and sodium at 11.8ug/L to 20.9ug/L. There were no thallium concentrations reported for the associated field samples, so no qualifications were made. The sodium result for sample FWGEQUIPRinse5-1702-GW was qualified "B". 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; The method blank had sodium detected at 57.9ug/L, vanadium at 2.4ug/L, chromium at 2.0ug/L and zinc at 3.8ug/L. The following sample results were qualified, "B", due to sample results <5x blank contamination; • Zinc results for samples FWGDA2mw-106C-1663-GF and FWGDA2mw-107C-1664-GF. • Sodium result for sample FWGEQUIPRinse5-1702-GW.	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; FWGEQUIPRinse5-1702-GW had sodium detected at 21.5ug/L. No qualifications were made as detected sodium concentrations in the field samples were >5x blank contamination.	<5x=B
25. Was a LCS prepared and analyzed with each batch?	✓				LCG Table 7

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 6010B/6020

Review Questions:	Yes	No	N/A	Comments	Qual/Criteria
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%?	✓				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%?		✓		No field sample collected.	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 **SDG:** A1A210536 R0
Sample Event: January 2010 **Analysis:** SW846 7470A
Data Reviewer/Date: Angye Dragotta/ March 8, 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 1.2 and 2.3°C.	QAPP Table 4-2
3. Were holding times met?	✓				QAPP Table 4-2 J/UJ/R
4. Were sample storage requirements met?	✓				QAPP Table 4-2
5. Were QAPP specified RLs achieved?	✓				QAPP Table 3.8
6. Were all QAPP-specified target analytes reported?	✓				QAPP Table 3-8
7. Did the initial calibration curve range include 5 standards and a blank?	✓				LCG Table 9 R
8. Was the correlation coefficient ≥ 0.995 for Hg?	✓				LCG Table 9 R<0.995=J/R
9. Was a MDL Level Verification performed once per quarter with all target analytes detected?	✓				LCG Table 9 R
10. Was a MRL Level Verification performed at the beginning of every daily analytical sequence with 70-130%?	✓				LCG Table 9 >130%=J; 70-65%=J/UJ; <65%=J/R
11. Was the ICV analyzed after the ICAL but before samples with recoveries between 80-120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R
12. Was the ICB analyzed after the ICAL with results <1/2 the MRL?	✓			No qualifications were made due to negative blanks greater than ½ MRL, since the LCG doesn't specifically address negative blank values.	LCG Table 9 <5x = U
13. Were the CCVs analyzed every 10 samples and at the end of the analytical sequence?	✓				LCG Table 9
14. Were CCV results within 80 to 120%?	✓				LCG Table 9 >120%=J; 80-75%=J/UJ; <75%=J/R

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2010
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 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: January 2010
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 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: FWGDA2mw-106C-1663-GF

TOTAL Metals

Lot-Sample #...: A1A210536-003 Matrix.....: WG
Date Sampled...: 01/21/11 09:17 Date Received..: 01/21/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024019						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AN
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	109	50.0	ug/L	SW846 6020	01/24-01/25/11	MDK0R1AA
		Dilution Factor: 1		Analysis Time..: 20:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AK
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	43.1	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AP
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDK0R1AC
		Dilution Factor: 1		Analysis Time..: 20:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	126000	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AQ
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDK0R1AD
		Dilution Factor: 1		Analysis Time..: 20:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	8.6	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AR
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AT
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AU
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-106C-1663-GF

TOTAL Metals

Lot-Sample #...: A1A210536-003 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	518	50.0	ug/L	SW846 6020	01/24-01/25/11	MDK0R1AE
		Dilution Factor: 1		Analysis Time..: 20:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDK0R1A2
		Dilution Factor: 1		Analysis Time..: 12:27	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	1420	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AV
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	43200	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AW
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	4850	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AX
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	13800 J	1000	ug/L	SW846 6020	01/24-01/25/11	MDK0R1AJ
		Dilution Factor: 1		Analysis Time..: 20:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	7.9 B	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1A0
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AL
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDK0R1AF
		Dilution Factor: 1		Analysis Time..: 20:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1AM
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-106C-1663-GF

TOTAL Metals

Lot-Sample #...: A1A210536-003 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDK0R1AH
		Dilution Factor: 1		Analysis Time..: 20:47	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK0R1A1
		Dilution Factor: 1		Analysis Time..: 18:47	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	6.8 B,J	10.0	ug/L	SW846 6020	01/24-01/25/11	MDK0R1AG
		Dilution Factor: 1		Analysis Time..: 20:47	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: FWGDA2mw-107C-1664-GF

TOTAL Metals

Lot-Sample #...: A1A210536-006 Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024019						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK011AR
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDK011AE
		Dilution Factor: 1		Analysis Time..: 20:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK011AN
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	34.0	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK011AT
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDK011AF
		Dilution Factor: 1		Analysis Time..: 20:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	85500	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK011AU
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDK011AG
		Dilution Factor: 1		Analysis Time..: 20:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK011AV
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK011AW
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK011AX
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GF

TOTAL Metals

Lot-Sample #...: A1A210536-006 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	310	50.0	ug/L	SW846 6020	01/24-01/25/11	MDK011AH
		Dilution Factor: 1		Analysis Time..: 20:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDK011AD
		Dilution Factor: 1		Analysis Time..: 12:32	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	1530	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK011A0
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	28500	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK011A1
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	322	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK011A2
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	9260 J	1000	ug/L	SW846 6020	01/24-01/25/11	MDK011AM
		Dilution Factor: 1		Analysis Time..: 20:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK011AA
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDK011AP
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDK011AJ
		Dilution Factor: 1		Analysis Time..: 20:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK011AQ
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GF

TOTAL Metals

Lot-Sample #...: A1A210536-006 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDK011AL
		Dilution Factor: 1		Analysis Time..: 20:51	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK011AC
		Dilution Factor: 1		Analysis Time..: 18:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	2.4 B,J	10.0	ug/L	SW846 6020	01/24-01/25/11	MDK011AK
		Dilution Factor: 1		Analysis Time..: 20:51	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: FWGDA2mw-110C-1665-GF

TOTAL Metals

Lot-Sample #...: A1A210536-009 Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024019						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK071AR
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	212	50.0	ug/L	SW846 6020	01/24-01/25/11	MDK071AE
		Dilution Factor: 1		Analysis Time..: 21:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK071AN
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	11.1	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK071AT
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDK071AF
		Dilution Factor: 1		Analysis Time..: 21:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	54500	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK071AU
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDK071AG
		Dilution Factor: 1		Analysis Time..: 21:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK071AV
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK071AW
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK071AX
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GF

TOTAL Metals

Lot-Sample #...: A1A210536-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDK071AH
		Dilution Factor: 1		Analysis Time..: 21:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDK071AD
		Dilution Factor: 1		Analysis Time..: 12:29	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	1050	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK071A0
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	16700	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK071A1
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	37.4	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK071A2
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	4540 J	1000	ug/L	SW846 6020	01/24-01/25/11	MDK071AM
		Dilution Factor: 1		Analysis Time..: 21:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK071AA
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDK071AP
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDK071AJ
		Dilution Factor: 1		Analysis Time..: 21:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK071AQ
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GF

TOTAL Metals

Lot-Sample #...: A1A210536-009 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDK071AL
		Dilution Factor: 1		Analysis Time..: 21:08	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK071AC
		Dilution Factor: 1		Analysis Time..: 18:59	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDK071AK
		Dilution Factor: 1		Analysis Time..: 21:08	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: FWGEQUIPRINSE5-1702-GW

TOTAL Metals

Lot-Sample #...: A1A210536-010 Matrix.....: WQ
Date Sampled...: 01/21/11 10:05 Date Received..: 01/21/11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1024019						
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK081AU
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDK081AG
		Dilution Factor: 1		Analysis Time..: 21:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 19.0		
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK081AQ
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Barium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK081AV
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.8		
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDK081AH
		Dilution Factor: 1		Analysis Time..: 21:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.20		
Calcium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK081AW
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 634		
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDK081AJ
		Dilution Factor: 1		Analysis Time..: 21:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK081AX
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.5		
Chromium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK081A0
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK081A1
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.4		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

TOTAL Metals

Lot-Sample #...: A1A210536-010 Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDK081AK
		Dilution Factor: 1		Analysis Time..: 21:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 26.0		
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDK081A7
		Dilution Factor: 1		Analysis Time..: 12:08	Analyst ID.....: 002260	
		Instrument ID..: H4		MDL.....: 0.16		
Potassium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK081A2
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 300		
Magnesium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDK081A3
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 122		
Manganese	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK081A4
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.8		
Sodium	21.5 B,J	1000	ug/L	SW846 6020	01/24-01/25/11	MDK081AP
		Dilution Factor: 1		Analysis Time..: 21:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 6.9		
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK081A5
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.2		
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDK081AR
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.7		
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDK081AL
		Dilution Factor: 1		Analysis Time..: 21:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.13		
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDK081AT
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 4.0		

(Continued on next page)

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

TOTAL Metals

Lot-Sample #...: A1A210536-010 Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDK081AN
		Dilution Factor: 1		Analysis Time..: 21:13	Analyst ID.....: 000079	
		Instrument ID..: I8		MDL.....: 0.14		
Vanadium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDK081A6
		Dilution Factor: 1		Analysis Time..: 19:17	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.3		
Zinc	ND	10.0	ug/L	SW846 6020	01/24-01/25/11	MDK081AM
		Dilution Factor: 1		Analysis Time..: 21:13	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.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1A210536 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1A240000-019 **Prep Batch #...:** 1024019						
Aluminum	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDL351AA
		Dilution Factor: 1				
		Analysis Time..: 19:01		Analyst ID.....: 000079	Instrument ID..: I8	
Antimony	ND	2.0	ug/L	SW846 6020	01/24-01/25/11	MDL351AF
		Dilution Factor: 1				
		Analysis Time..: 19:01		Analyst ID.....: 000079	Instrument ID..: I8	
Arsenic	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDL351AK
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Barium	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDL351AP
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Beryllium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDL351AC
		Dilution Factor: 1				
		Analysis Time..: 19:01		Analyst ID.....: 000079	Instrument ID..: I8	
Cadmium	ND	0.50	ug/L	SW846 6020	01/24-01/25/11	MDL351AD
		Dilution Factor: 1				
		Analysis Time..: 19:01		Analyst ID.....: 000079	Instrument ID..: I8	
Calcium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDL351AQ
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Chromium	**2.0 B**	**5.0**	ug/L	**SW846 6010B**	**01/24-01/25/11**	**MDL351AT**
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Cobalt	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDL351AR
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Copper	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDL351AU
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Iron	ND	50.0	ug/L	SW846 6020	01/24-01/25/11	MDL351AE
		Dilution Factor: 1				
		Analysis Time..: 19:01		Analyst ID.....: 000079	Instrument ID..: I8	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1A210536 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	3.0	ug/L	SW846 6010B	01/24-01/25/11	MDL351AL
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Magnesium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDL351AW
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Manganese	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDL351AX
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Mercury	ND	0.20	ug/L	SW846 7470A	01/24-01/28/11	MDL351A2
		Dilution Factor: 1				
		Analysis Time..: 11:59		Analyst ID.....: 002260	Instrument ID..: H4	
Nickel	ND	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDL351A0
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Potassium	ND	1000	ug/L	SW846 6010B	01/24-01/25/11	MDL351AV
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Selenium	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDL351AM
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Silver	ND	5.0	ug/L	SW846 6010B	01/24-01/25/11	MDL351AN
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Sodium	57.9 B	1000	ug/L	SW846 6020	01/24-01/25/11	MDL351AJ
		Dilution Factor: 1				
		Analysis Time..: 19:01		Analyst ID.....: 000079	Instrument ID..: I8	
Thallium	ND	1.0	ug/L	SW846 6020	01/24-01/25/11	MDL351AH
		Dilution Factor: 1				
		Analysis Time..: 19:01		Analyst ID.....: 000079	Instrument ID..: I8	
Vanadium	2.4 B	10.0	ug/L	SW846 6010B	01/24-01/25/11	MDL351A1
		Dilution Factor: 1				
		Analysis Time..: 16:56		Analyst ID.....: 001637	Instrument ID..: I5	
Zinc	3.8 B	10.0	ug/L	SW846 6020	01/24-01/25/11	MDL351AG
		Dilution Factor: 1				
		Analysis Time..: 19:01		Analyst ID.....: 000079	Instrument ID..: I8	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A1A210536 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 #...: A1A210536 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A1A240000-019 Prep Batch #...: 1024019					
Aluminum	93	(80 - 120)	SW846 6020	01/24-01/25/11	MDL351A3
		Dilution Factor: 1	Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Beryllium	96	(80 - 120)	SW846 6020	01/24-01/25/11	MDL351A4
		Dilution Factor: 1	Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Cadmium	96	(80 - 120)	SW846 6020	01/24-01/25/11	MDL351A5
		Dilution Factor: 1	Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Iron	99	(80 - 120)	SW846 6020	01/24-01/25/11	MDL351A6
		Dilution Factor: 1	Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Antimony	94	(80 - 120)	SW846 6020	01/24-01/25/11	MDL351A7
		Dilution Factor: 1	Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Zinc	101	(80 - 120)	SW846 6020	01/24-01/25/11	MDL351A8
		Dilution Factor: 1	Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Thallium	84	(80 - 120)	SW846 6020	01/24-01/25/11	MDL351A9
		Dilution Factor: 1	Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Sodium	93	(80 - 120)	SW846 6020	01/24-01/25/11	MDL351CA
		Dilution Factor: 1	Analysis Time..: 19:06	Analyst ID.....: 000079	
		Instrument ID..: I8			
Arsenic	96	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CC
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Lead	88	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CD
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A210536 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	96	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CE
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Silver	94	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CF
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Barium	101	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CG
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Calcium	90	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CH
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Cobalt	93	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CJ
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Chromium	94	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CK
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Copper	100	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CL
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Potassium	99	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CM
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Magnesium	90	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CN
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Manganese	100	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CP
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Nickel	98	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CQ
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A210536 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	96	(80 - 120)	SW846 6010B	01/24-01/25/11	MDL351CR
		Dilution Factor: 1	Analysis Time..: 17:02	Analyst ID.....: 001637	
		Instrument ID..: I5			
Mercury	118	(80 - 120)	SW846 7470A	01/24-01/28/11	MDL351CT
		Dilution Factor: 1	Analysis Time..: 12:01	Analyst ID.....: 002260	
		Instrument ID..: H4			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A210536 Matrix.....: WATER
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1A200532-022 Prep Batch #...: 1024019					
Aluminum	100	(75 - 125)	SW846 6020	01/24-01/25/11	MDJN51AM
		Dilution Factor: 1	Analysis Time..: 20:09	Instrument ID..: I8	
		Analyst ID.....: 000079			
Antimony	102	(75 - 125)	SW846 6020	01/24-01/25/11	MDJN51A2
		Dilution Factor: 1	Analysis Time..: 20:09	Instrument ID..: I8	
		Analyst ID.....: 000079			
Arsenic	101	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51CF
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Barium	108	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51CU
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Beryllium	102	(75 - 125)	SW846 6020	01/24-01/25/11	MDJN51AQ
		Dilution Factor: 1	Analysis Time..: 20:09	Instrument ID..: I8	
		Analyst ID.....: 000079			
Cadmium	102	(75 - 125)	SW846 6020	01/24-01/25/11	MDJN51AU
		Dilution Factor: 1	Analysis Time..: 20:09	Instrument ID..: I8	
		Analyst ID.....: 000079			
Calcium	92	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51CX
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Chromium	93	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51C5
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Cobalt	97	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51C2
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Copper	106	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51C8
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A210536 Matrix.....: WATER
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	104	(75 - 125)	SW846 6020	01/24-01/25/11	MDJN51AX
		Dilution Factor: 1	Analysis Time..: 20:09	Instrument ID..: I8	
		Analyst ID.....: 000079			
Lead	94	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51CJ
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Magnesium	96	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51DF
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Manganese	106	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51DJ
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Mercury	106	(80 - 120)	SW846 7470A	01/24-01/28/11	MDJN51AJ
		Dilution Factor: 1	Analysis Time..: 12:03	Instrument ID..: H4	
		Analyst ID.....: 002260			
Nickel	101	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51AC
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Potassium	107	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51DC
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Selenium	102	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51CM
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Silver	90	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51CQ
		Dilution Factor: 1	Analysis Time..: 18:12	Instrument ID..: I5	
		Analyst ID.....: 001637			
Sodium	99	(75 - 125)	SW846 6020	01/24-01/25/11	MDJN51CC
		Dilution Factor: 1	Analysis Time..: 20:09	Instrument ID..: I8	
		Analyst ID.....: 000079			
Thallium	95	(75 - 125)	SW846 6020	01/24-01/25/11	MDJN51A8
		Dilution Factor: 1	Analysis Time..: 20:09	Instrument ID..: I8	
		Analyst ID.....: 000079			

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A1A210536 Matrix.....: WATER
Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	102	(75 - 125)	SW846 6010B	01/24-01/25/11	MDJN51AF
		Dilution Factor: 1	Analysis Time..: 18:12		Instrument ID..: I5
		Analyst ID.....: 001637			
Zinc	102	(75 - 125)	SW846 6020	01/24-01/25/11	MDJN51A5
		Dilution Factor: 1	Analysis Time..: 20:09		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 #...: A1A210536 Work Order #...: MDJN5-SMP MDJN5-DUP Matrix.....: WATER

Date Sampled...: 01/20/11 09:10 Date Received..: 01/20/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic						SD Lot-Sample #: A1A200532-022		
	47.5	43.3	ug/L	9.2	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Lead						SD Lot-Sample #: A1A200532-022		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Selenium						SD Lot-Sample #: A1A200532-022		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Silver						SD Lot-Sample #: A1A200532-022		
	3.8 B	ND	ug/L	200	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Barium						SD Lot-Sample #: A1A200532-022		
	155	159	ug/L	2.5	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Calcium						SD Lot-Sample #: A1A200532-022		
	58200	59100	ug/L	1.5	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Potassium						SD Lot-Sample #: A1A200532-022		
	2420	2400	ug/L	0.85	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Magnesium						SD Lot-Sample #: A1A200532-022		
	24100	24400	ug/L	1.1	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Manganese						SD Lot-Sample #: A1A200532-022		
	34.7	35.1	ug/L	0.88	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1A210536-000 **Work Order #...:** MDJN5-SMP MDJN5-DUP **Matrix.....:** WATER

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: A1A200532-022		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 20:09	Analyst ID.....: 000079	
			Instrument ID..: I8					
Zinc						SD Lot-Sample #: A1A200532-022		
	2.5 B,J	3.0 B	ug/L	19	(0-20)	SW846 6020	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 20:09	Analyst ID.....: 000079	
			Instrument ID..: I8					
Thallium						SD Lot-Sample #: A1A200532-022		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 20:09	Analyst ID.....: 000079	
			Instrument ID..: I8					
Nickel						SD Lot-Sample #: A1A200532-022		
	3.8 B	ND	ug/L	200	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Vanadium						SD Lot-Sample #: A1A200532-022		
	2.5 B,J	ND	ug/L	200	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Mercury						SD Lot-Sample #: A1A200532-022		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	01/24-01/28/11	1024019
			Dilution Factor: 1			Analysis Time..: 12:03	Analyst ID.....: 002260	
			Instrument ID..: H4					
Aluminum						SD Lot-Sample #: A1A200532-022		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 20:09	Analyst ID.....: 000079	
			Instrument ID..: I8					
Beryllium						SD Lot-Sample #: A1A200532-022		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 20:09	Analyst ID.....: 000079	
			Instrument ID..: I8					
Cadmium						SD Lot-Sample #: A1A200532-022		
	ND	ND	ug/L	0	(0-20)	SW846 6020	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 20:09	Analyst ID.....: 000079	
			Instrument ID..: I8					

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: A1A210536-000 Work Order #...: MDJN5-SMP MDJN5-DUP Matrix.....: WATER

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Iron						SD Lot-Sample #: A1A200532-022		
	424	423	ug/L	0.38	(0-20)	SW846 6020	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 20:09	Analyst ID.....: 000079	
			Instrument ID..: I8					
Cobalt						SD Lot-Sample #: A1A200532-022		
	3.1 B	ND	ug/L	200	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Chromium						SD Lot-Sample #: A1A200532-022		
	3.3 B,J	ND	ug/L	200	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Copper						SD Lot-Sample #: A1A200532-022		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 18:12	Analyst ID.....: 001637	
			Instrument ID..: I5					
Sodium						SD Lot-Sample #: A1A200532-022		
	33000 J	33600	ug/L	1.9	(0-20)	SW846 6020	01/24-01/25/11	1024019
			Dilution Factor: 1			Analysis Time..: 20:09	Analyst ID.....: 000079	
			Instrument ID..: I8					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

TestAmerica North Canton

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 180125B.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 1/25/2011 2:37 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	6.9	U								
Thallium	205	1	**0.18**	**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 North Canton

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: I80125B.csv

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 1/25/2011 3:06 PM Found	Q	CCB 4 1/25/2011 6:56 PM Found	Q	CCB 5 1/25/2011 7:59 PM Found	Q	CCB 6 1/25/2011 9:03 PM Found	Q	CCB 7 1/25/2011 10:10 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	6.9	U	**11.8**	**B**	**14.8**	**B**	**18.5**	**B**	**20.9**	**B**
Thallium	205	1	**0.25**	**B**	0.14	U	**0.14**	**B**	**0.18**	**B**	**0.27**	**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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

GENERAL CHEMISTRY DATA

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 R0
Analysis: SW846 9012

Review Questions:	Yes	No	N/A	Comments	QUAL/Criteria
1. Did Chain-of-Custody information agree with laboratory report?	✓				
2. Were samples preserved properly and received in good condition?	✓			The coolers were received between 1.2 and 2.3°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: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 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 recovery was below control limits at 68% on the spike analysis analyzed on sample FWGEBGmw-126c-1668-GW. Another matrix spike analysis was performed on sample FWGCPmw-005c-1661-GW, where the MSD recovered below control limits at 74% with an MS/MSD RPD of 41%. The cyanide results for this SDG were qualified as estimated, "UJ".	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.		✓			

Ravenna, OH Data Review Checklist

Project Number: 030240.0006
Sample Event: January 2011
Data Reviewer/Date: Angye Dragotta/ March 8, 2011

SDG: A1A210536 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: FWGDA2mw-106C-1663-GW

General Chemistry

Lot-Sample #...: A1A210536-002 Work Order #...: MDK0Q Matrix.....: WG
Date Sampled...: 01/21/11 09:17 Date Received..: 01/21/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/27/11	1027316

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-107C-1664-GW

General Chemistry

Lot-Sample #...: A1A210536-005 Work Order #...: MDK0X Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/27/11	1027316

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGDA2mw-110C-1665-GW

General Chemistry

Lot-Sample #...: A1A210536-008 Work Order #...: MDK05 Matrix.....: WG
Date Sampled...: 01/21/11 09:15 Date Received..: 01/21/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/27/11	1027316

Dilution Factor: 1 MDL.....: 0.0050

Environmental Quality Mgt., Inc.

Client Sample ID: FWGEQUIPRINSE5-1702-GW

General Chemistry

Lot-Sample #...: A1A210536-010 Work Order #...: MDK08 Matrix.....: WQ
Date Sampled...: 01/21/11 10:05 Date Received..: 01/21/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	01/27/11	1027316

Dilution Factor: 1 MDL.....: 0.0050

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1A210536 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MDTFR1AA		MB Lot-Sample #:	A1A270000-316	
	ND	0.010	mg/L	SW846 9012A	01/27/11	1027316
		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 #...: A1A210536 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MDTFR1AC	LCS Lot-Sample#: A1A270000-316		
	83	(80 - 120)	SW846 9012A	01/27/11	1027316
		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 #...: A1A210536 Matrix.....: WATER
Date Sampled...: 01/20/11 09:23 Date Received..: 01/20/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: MDJNC1AG-MS/MDJNC1AH-MSD				MS Lot-Sample #: A1A200532-002	
	68 N	(80 - 120)			SW846 9012A	01/27/11	1027316
	83	(80 - 120)	20	(0-20)	SW846 9012A	01/27/11	1027316
		Dilution Factor: 1					
Cyanide, Total		WO#: MDJN41AM-MS/MDJN41AN-MSD				MS Lot-Sample #: A1A200532-021	
	113	(80 - 120)			SW846 9012A	01/27/11	1027316
	74 N,*	(80 - 120)	41	(0-20)	SW846 9012A	01/27/11	1027316
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

Appendix 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

Category	Code
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: A1A210536										
6010B	FWGDA2mw-106C-1663-GF	AQ	N							
				Nickel	10.0	7.9B		J	ug/L	L
6020	FWGDA2mw-106C-1663-GF	AQ	N							
				Zinc	10.0	6.8B J		JB	ug/L	L,F
6020	FWGDA2mw-107C-1664-GF	AQ	N							
				Zinc	10.0	2.4B J		JB	ug/L	L,F
6020	FWGEQUIPRINSE5-1702-GW	AQ	EB							
				Sodium	1000	21.5B J		UJB	ug/L	Cb,F,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: A1A210536										
8081A	FWGDA2mw-106C-1663-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: A1A210536										
8081A	FWGDA2mw-110C-1665-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
8082	FWGDA2mw-106C-1663-GW	AQ	N							
				Aroclor 1016	0.50	0.50U		UJ	ug/L	G
				Aroclor 1221	0.50	0.50U		UJ	ug/L	G
				Aroclor 1232	0.50	0.50U		UJ	ug/L	G
				Aroclor 1242	0.50	0.50U		UJ	ug/L	G
				Aroclor 1248	0.50	0.50U		UJ	ug/L	G
				Aroclor 1254	0.50	0.50U		UJ	ug/L	G
				Aroclor 1260	0.50	0.50U		UJ	ug/L	G

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Overall Qualified Results

Analytical Method	Field Sample ID	Matrix	Sample Type	Analyte	RL	Lab Result	Unc / Error	Overall Qualifier	Units	Reason Code
SDG: A1A210536										
8082	FWGDA2mw-110C-1665-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	FWGDA2mw-106C-1663-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGDA2mw-107C-1664-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGDA2mw-110C-1665-GW	AQ	N							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGEQUIPRINSE5-1702-GW	AQ	EB							
				2-Butanone	10	1.9J		J	ug/L	L
				Acetone	10	7.0J		JB	ug/L	O,L
				Chloroform	1.0	0.76J		J	ug/L	L
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGTEAM1-TRIP	AQ	TB							
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGTEAM2-TRIP	AQ	TB							
				2-Butanone	10	0.57J		J	ug/L	L
				Methylene chloride	2.0	2.0U		UJ	ug/L	Pj
8260B	FWGTEAM3-TRIP	AQ	TB							
				Methylene chloride	2.0	2.0U		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: A1A210536										
8270C	FWGDA2mw-106C-1663-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	K
8270C	FWGDA2mw-107C-1664-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	K
8270C	FWGDA2mw-110C-1665-GW	AQ	N							
				Benzoic acid	10	10U		UJ	ug/L	K
8270C	FWGEQUIPRINSE5-1702-GW	AQ	EB							
				Benzoic acid	10	10U		UJ	ug/L	K
9012A	FWGDA2mw-106C-1663-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGDA2mw-107C-1664-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGDA2mw-110C-1665-GW	AQ	N							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H
9012A	FWGEQUIPRINSE5-1702-GW	AQ	EB							
				Cyanide	0.010	0.010U		UJ	mg/L	I,H

N = Normal Sample *TB = Trip Blank*
FD = Field Duplicate *FB = Field Blank*

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGDA2mw-106C-1663-GF **Lab Report Batch :** A1A210536 **Lab ID :** TALCAN

Sample Date : 01/21/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A210536003

Reviewed By / Date : ASD 3/8/2011 **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	7.9		ug/L	B	YES	J								J							L
Analysis Method : 6020						**Dilution: 1**															
Zinc	6.8		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 : FWGDA2mw-106C-1663-GW **Lab Report Batch :** A1A210536 **Lab ID :** TALCAN

Sample Date : 01/21/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A210536002

Reviewed By / Date : ASD 3/8/2011 **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 : FWGDA2mw-106C-1663-GW **Lab Report Batch :** A1A210536 **Lab ID :** TALCAN

Sample Date : 01/21/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A210536002

Reviewed By / Date : ASD 3/8/2011 **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**															
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											K
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGDA2mw-107C-1664-GF **Lab Report Batch :** A1A210536 **Lab ID :** TALCAN

Sample Date : 01/21/2011 **Analysis Type:** RES/TOT **Sample Matrix :** AQ

Lab Sample ID: A1A210536006

Reviewed By / Date : ASD 3/8/2011 **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	2.4		ug/L	B J	YES	U/ JB			Y 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 : FWGDA2mw-107C-1664-GW **Lab Report Batch :** A1A210536 **Lab ID :** TALCAN

Sample Date : 01/21/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A210536005

Reviewed By / Date : ASD 3/8/2011 **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**															
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											K
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGDA2mw-110C-1665-GW **Lab Report Batch :** A1A210536 **Lab ID :** TALCAN

Sample Date : 01/21/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A210536008

Reviewed By / Date : ASD 3/8/2011 **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 : FWGDA2mw-110C-1665-GW **Lab Report Batch :** A1A210536 **Lab ID :** TALCAN

Sample Date : 01/21/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A210536008

Reviewed By / Date : ASD 3/8/2011 **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**															
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											K
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE5-1702-GW **Lab Report Batch :** A1A210536 **Lab ID :** TALCAN

Sample Date : 01/21/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A210536010

Reviewed By / Date : ASD 3/8/2011 **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	1.9		ug/L	J	YES	J								J							L
Acetone	7.0		ug/L	J	YES	~~UJ~~ JB								J		JB					O,L
Chloroform	0.76		ug/L	J	YES	J								J							L
Methylene chloride	2.0		ug/L	U	YES	UJ															Pj
Analysis Method : 8270C						**Dilution: 1**															
Benzoic acid	10		ug/L	U	YES	UJ				UJ											K
Analysis Method : 9012A						**Dilution: 1**															
Cyanide	0.010		mg/L	U	YES	UJ					UJ										I,H

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report with Reason Codes (All Qualified Results sorted by Client Sample ID)

Client Sample ID : FWGEQUIPRINSE5-1702-GW **Lab Report Batch :** A1A210536 **Lab ID :** TALCAN

Sample Date : 01/21/2011 **Analysis Type: RES/TOT** **Sample Matrix :** AQ

Lab Sample ID: A1A210536010

Reviewed By / Date : ASD 3/8/2011 **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**															
Sodium	21.5		ug/L	B J	YES	UJB			UB					J							Cb,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 : FWGTEAM1-TRIP
Lab Report Batch : A1A210536
Lab ID : TALCAN
Sample Date : 01/21/2011
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A1A210536001

Reviewed By / Date : ASD 3/8/2011
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**															
Methylene chloride	2.0		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 : FWGTEAM2-TRIP **Lab Report Batch :** A1A210536 **Lab ID :** TALCAN

Sample Date : 01/21/2011 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: A1A210536004

Reviewed By / Date : ASD 3/8/2011 **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	0.57		ug/L	J	YES	J								J							L
Methylene chloride	2.0		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 : FWGTEAM3-TRIP
Lab Report Batch : A1A210536
Lab ID : TALCAN
Sample Date : 01/21/2011
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: A1A210536007

Reviewed By / Date : ASD 3/8/2011
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**															
Methylene chloride	2.0		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

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: A1A210536 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
FWGEQUIPRINSE5-1702	A1A210536010	6010B	AQ	Calcium	U	1000	100.00	ug/L
				Magnesium	U	1000	100.00	ug/L
				Potassium	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: A1A210536 **Lab ID:** TALCAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
FWGDA2mw-106C-1663-	A1A210536003	6010B	AQ	Nickel	B	7.9	10.0	ug/L
		6020		Zinc	B J	6.8	10.0	ug/L
FWGDA2mw-107C-1664-	A1A210536006			Zinc	B J	2.4	10.0	ug/L
FWGEQUIPRINSE5-1702	A1A210536010			Sodium	B J	21.5	1000	ug/L
		8260B		2-Butanone	J	1.9	10	ug/L
				Acetone	J	7.0	10	ug/L
				Chloroform	J	0.76	1.0	ug/L
FWGTEAM2-TRIP	A1A210536004			2-Butanone	J	0.57	10	ug/L

QC Outlier Report: Trip Blank

Lab Reporting Batch : A1A210536
Lab ID: TALCAN
Method/Preparation Batch : 1026147 / 1026147
Analysis Date : 01/26/2011
Client Sample ID : FWGTEAM1-TRIP
Preparation Date : 01/26/2011
Lab Sample ID : A1A210536001
Preparation Type : 5030B

Analysis Method : 8260B

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	11	10	ug/L		Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	0.57	10	ug/L	J	Common Contaminant

2-Butanone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	11	10	ug/L		Common Contaminant

Acetone contamination found in the trip blank did not qualify any samples.

Acetone	Result	Reporting Limit	Units	Lab Qual	Comments
Trip Blank Result:	12	10	ug/L		Common Contaminant

Acetone was qualified due to trip blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Unit
FWGEQUIPRINSE5-1702-G	A1A210536010	1	7.0	J	ug/L

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 1026147 **Analysis Method :** 8260B **Analysis Date :** 01/26/2011

Preparation Batch : 1026147 **Preparation Type :** 5030B **Preparation Date :** 01/26/2011

Lab Reporting Batch : A1A210536 **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
FWGDA2mw-110C-1665-	A1A210536008S	AQ	Bromomethane	64		0.00	70.00	130.00	30.00
FWGDA2mw-110C-1665-	A1A210536008D		Bromomethane	66		0.00	70.00	130.00	30.00

Associated Samples: Parent sample only	
Client Sample ID	**Lab Sample ID**
FWGDA2mw-110C-1665-GW	A1A210536008

* 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 : 1024039 **Analysis Method :** 8270C **Analysis Date :** 02/01/2011

Preparation Batch : 1024039 **Preparation Type :** 3520C **Preparation Date :** 01/24/2011

Lab Reporting Batch : A1A210536 **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
A1A240000039L	AQ	Benzoic acid	13	35	10.00	10.00	136.00	30.00

Associated Samples

Client Sample ID	Lab Sample ID
FWGDA2mw-106C-1663-GW	A1A210536002
FWGDA2mw-107C-1664-GW	A1A210536005
FWGDA2mw-110C-1665-GW	A1A210536008
FWGEQUIPRINSE5-1702-GW	A1A210536010

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: Equipment Blank

Lab Reporting Batch : A1A210536
Lab ID: TALCAN
Method/Preparation Batch : 1024019 / 1024019
Analysis Date : 01/25/2011
Client Sample ID : FWGEQUIPRINSE5-1702-GW
Preparation Date : 01/24/2011
Lab Sample ID : A1A210536010
Preparation Type : 3005A

Analysis Method : 6020

Sodium	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	21.5	1000	ug/L	B J	

Sodium contamination found in the equipment blank did not qualify any samples.

2-Butanone	Result	Reporting Limit	Units	Lab Qual	Comments
Equipment Blank Result:	1.9	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:	7.0	10	ug/L	J	Common Contaminant

Acetone contamination found in the equipment blank did not qualify any samples.

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.

Surrogate Recovery Outlier Report

Lab Report Batch: A1A210536 **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
FWGDA2mw-106C-1663-GW	A1A210536002	8081A	1	AQ	Decachlorobiphenyl	35	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	29	50.0	150.0	10.0	All Target
FWGDA2mw-110C-1665-GW	A1A210536008	8081A	1	AQ	Decachlorobiphenyl	43	50.0	150.0	10.0	All Target
		8082			Decachlorobiphenyl	36	50.0	150.0	10.0	All Target

Method Blank Outlier Report

Lab Reporting Batch : A1A210536
Lab ID: TALCAN
Analysis Method : 6010B
Analysis Date : 01/25/2011
Preparation Type : 3005A
Preparation Date : 01/24/2011
Method Blank Lab Sample ID : A1A240000019B
Preparation Batch : 1024019

Chromium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	2.0	5.0	ug/L	B	

Chromium contamination found in the method blank did not qualify any samples.

Vanadium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	2.4	10.0	ug/L	B	

Vanadium contamination found in the method blank did not qualify any samples.

Sodium	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	57.9	1000	ug/L	B	

Sodium was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
FWGEQUIPRINSE5-1702-G	A1A210536010	1	21.5	B J	ug/L

Zinc	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	3.8	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
FWGDA2mw-106C-1663-GF	A1A210536003	1	6.8	B J	ug/L
FWGDA2mw-107C-1664-GF	A1A210536006	1	2.4	B J	ug/L

APPENDIX E

INVESTIGATIVE DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLANS

Ohio | Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

February 22, 2011

RE: RAVENNA ARMY AMMUNITION PLANT, PORTAGE/TRUMBULL COUNTIES, DRAFT, INVESTIGATION DERIVED WASTE AND DISPOSAL PLAN, FWGWMP, JANUARY 2011 SAMPLING EVENT

Mr. Mark Patterson
Installation Manager
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, OH 44266

CERTIFIED MAIL
7008 3230 0003 5419 9406

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Draft, Investigation-Derived Waste Characterization and Disposal Plan (IDW), for the Facility-Wide Groundwater Monitoring Program, January 2011 Sampling Event, at the Ravenna Army Ammunition Plant, Ravenna, OH" document. This document was received at Ohio EPA, Northeast District Office (NEDO), Division of Emergency and Remedial response (DERR), on February 11, 2011, and is dated February 10, 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.

The report is approved and Ohio EPA concurs that the IDW (groundwater and decontamination fluids) from the January 2011 Sampling Event may be disposed of as contaminated, non-hazardous waste and that it be sent off-site for disposal to a permitted water treatment facility.

If you have any questions, please call me at (330) 963-1207.

Sincerely,

Vicki Deppisch
Project Coordinator
Division of Emergency and Remedial Response

VD/kss

ec: Eileen Mohr, Ohio EPA, NEDO, DERR
Katie Tait, OHARNG RTLS
Glen Beckham, USACE Louisville
Mark Krivansky, AEC
Mike Eberle, Ohio EPA, NEDO, DERR
John Miller, EQM
Maj. Ed Meade, OHARNG RTLS
Mark Nichter, USACE Louisville
Justin Burke, Ohio EPA, CO, DERR
Todd Fisher, Ohio EPA, NEDO, DERR

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087-1924

330 | 963 1200
330 | 487 0769 (fax)
www.epa.ohio.gov

Environmental Quality Management, Inc.
1800 Carillon Boulevard
Cincinnati, Ohio 45240
(513) 825-7500
FAX (513) 825-7495
www.eqm.com

February 10, 2011

Ms. Vicki Deppisch
Ohio Environmental Protection Agency, NE District Office
Division of Emergency and Remedial Response
2110 E. Aurora Road
Twinsburg, OH 44087

Re: IDW Report – January 2011 Sampling Event
Ravenna Army Ammunition Plant
Ravenna, Ohio

Dear Ms. Deppisch:

Enclosed for your review is one (1) copy of the Investigation-Derived Waste Characterization and Disposal Plan for the Facility-Wide Groundwater Monitoring Program sampling event from January 2011 at the Ravenna Army Ammunition Plant in Ravenna, Ohio. This copy is being provided to the Ohio EPA for your approval prior to disposal of the investigative derived waste. I have also sent you, via email, an electronic copy of this document.

If you have any questions or require further clarification concerning this submittal, please call me at (513) 825-7500, or Mr. Mark Nichter of the USACE at (502) 315-6375.

Sincerely,

ENVIRONMENTAL QUALITY MANAGEMENT, INC.

John M. Miller, CHMM
Project Manager

cc: M. Nichter – USACE
M. Patterson – RVAAP (BRAC)

DRAFT

FACILITY-WIDE GROUNDWATER MONITORING PROGRAM

INVESTIGATION-DERIVED WASTE CHARACTERIZATION AND DISPOSAL PLAN JANUARY 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

February 10, 2011

CONTENTS

CONTENTS i
TABLES i
APPENDICES i
ACRONYMS ii
1.0 INTRODUCTION 1
2.0 OPERATIONAL HISTORY AND WASTE GENERATION 1
3.0 MANAGEMENT OF ENVIRONMENTAL MEDIA 2
4.0 DISCUSSION OF ANALYTICAL RESULTS 2
5.0 RECOMMENDATIONS FOR DISPOSAL 3
5.1 Groundwater 3
5.2 Decontamination Fluids 3
5.3 Summary of Disposal Recommendations 4
6.0 REFERENCES 5

TABLES

Table 2.1 IDW Inventory of Drums 2
Table 5.1 Detected Analytical Results When Compared to USEPA Regulatory Characteristic Levels (40 CFR 261.20 – 24) 4
Table 5.2 Summary of Drum Containers, TCLP Criteria, and Disposal Recommendations 5

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 January 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 January 2011 sampling event (49 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 2011-1	55 Gal. Steel	Purge Water	~30-gallons	Equipment Rinse/Decontamination
EQM 2011-2	55 Gal. Steel	Decontamination/Rinse Water	~45-gallons	*
EQM 2011-30	55 Gal. Steel	Purge water	~45-gallons	*
EQM 2011-4	55 Gal. Steel	Purge water	~45-gallons	*

* = Load Lines1, 2, 3, 4,; Ramsdell Quarry Landfill, Open Demolition Area 2, Erie Burning Grounds, NACA Test Area, Central Burn Pits, Cobbs Pond, Winklepeck Burning Grounds, Landfill N. of Winklepeck, Mustard Burning Site, Fuze and Booster Quarry, 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 January 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 it be sent off-site for disposal to a permitted water treatment facility in accordance with the *Facility-Wide SAP* (SAIC, 2001) guidance under Section 7.0 "Investigation-Derived Waste".

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-MWPURGEJAN2011	Barium	0.011 mg/L J B	100 mg/L	No
	Lead	0.0024 mg/L J	5.0 mg/L	No
	Flashpoint	>180°F	<140°F	No
	pH	7.4	<2 or >12.5	No
FWG-IDW-MWDECONJAN2011	Selenium	0.0046 mg/L J	5.0 mg/L	No
	Barium	0.21 mg/L J	100 mg/L	No
	Chromium	0.0022 mg/L J	5.0 mg/L	No
	Lead	0.0034 mg/L J	5.0 mg/L	No
	2-Butanone (MEK)	0.11 mg/L J	200 mg/L	No
	Flashpoint	>180°F	<140°F	No
	pH	9.1	<2 or >12.5	No
TRIP BLANK	None Detected			

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 2011-1	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2011-2	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2011-30	Water	Maximum Concentration of Contaminants NOT exceeded	Off-Site Non-Hazardous Disposal
EQM 2011-4	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 #: A1A210550

Erik Corbin

Environmental Quality Mgt., I
1800 Carillon Blvd
Cincinnati, OH 45240

TESTAMERICA LABORATORIES, INC.

Approved for release.
Mark J. Loeb
Project Manager II
2/8/2011 10:47 AM

Mark J. Loeb
Project Manager
mark.loeb@testamericainc.com

February 07, 2011

ACCREDITED IN ACCORDANCE WITH nelac

4101 Shuffel Street, N.W. North Canton, OH 44720 tel 330.497.9396 fax 330.497.0772 www.testamericainc.com

CASE NARRATIVE

A1A210550

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 January 21, 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 February 01, 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 4.9°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.

The matrix spike/matrix spike duplicate(s) for batch(es) 1025275 and 1027305 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GC/MS SEMIVOLATILES

The analytical results met the requirements of the laboratory's QA/QC program.

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

Serial dilution of a sample in this lot indicates that physical and chemical interferences were present. Refer to the sample report pages for the affected analytes flagged with "E".

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analyte(s).

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a hold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

EXECUTIVE SUMMARY - Detection Highlights

A1A210550

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FWG-IDW-MWDECONJAN2011 01/21/11 10:45 002				
Barium - TCLP	0.021	10.0	mg/L	SW846 6010B
	Qualifiers: B,J,E			
Chromium - TCLP	0.0022 B	0.50	mg/L	SW846 6010B
Lead - TCLP	0.0034 B	0.50	mg/L	SW846 6010B
Selenium - TCLP	0.0046 B	0.25	mg/L	SW846 6010B
2-Butanone (MEK)	0.11 J	0.25	mg/L	SW846 8260B
Flashpoint	>180		deg F	SW846 1010
pH (liquid)	9.1		No Units	SW846 9040B
FWG-IDW-MWPURGEJAN2011 01/21/11 10:40 003				
Barium - TCLP	0.11 B,J	10.0	mg/L	SW846 6010B
Lead - TCLP	0.0024 B	0.50	mg/L	SW846 6010B
Flashpoint	>180		deg F	SW846 1010
pH (liquid)	7.4		No Units	SW846 9040B

ANALYTICAL METHODS SUMMARY

A1A210550

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

A1A210550

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDK28	001	TRIPBLANK-IDW	01/21/11	08:00
MDK3E	002	FWG-IDW-MWDECONJAN2011	01/21/11	10:45
MDK3K	003	FWG-IDW-MWPURGEJAN2011	01/21/11	10:40

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: TRIPBLANK-IDW

GC/MS Volatiles

Lot-Sample #...: A1A210550-001 **Work Order #...:** MDK281AA **Matrix.....:** WQ
Date Sampled...: 01/21/11 08:00 **Date Received..:** 01/21/11
Prep Date.....: 01/25/11 **Analysis Date..:** 01/25/11
Prep Batch #...: 1025275
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	5.0	ug/L	0.13
2-Butanone (MEK)	ND	20	ug/L	0.57
Carbon tetrachloride	ND	5.0	ug/L	0.13
Chlorobenzene	ND	5.0	ug/L	0.15
Chloroform	ND	5.0	ug/L	0.16
1,2-Dichloroethane	ND	5.0	ug/L	0.22
1,1-Dichloroethylene	ND	5.0	ug/L	0.19
Tetrachloroethylene	ND	5.0	ug/L	0.29
Trichloroethylene	ND	5.0	ug/L	0.17
Vinyl chloride	ND	5.0	ug/L	0.22

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	90	(75 - 121)
Toluene-d8	100	(74 - 115)
4-Bromofluorobenzene	89	(66 - 117)
1,2-Dichloroethane-d4	92	(63 - 129)

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONJAN2011

TCLP GC/MS Volatiles

Lot-Sample #...: A1A210550-002	**Work Order #...:** MDK3E1AA	**Matrix.....:** WG
Date Sampled...: 01/21/11 10:45	**Date Received..:** 01/21/11	
Leach Date.....: 01/26/11	**Prep Date.....:** 01/27/11	**Analysis Date..:** 01/27/11
Leach Batch #..: P102601	**Prep Batch #...:** 1027305	
Dilution Factor: 1		
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	0.025	mg/L	0.00013
2-Butanone (MEK)	**0.11 J**	**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	95	(84 - 128)
1,2-Dichloroethane-d4	93	(80 - 121)
Toluene-d8	107	(90 - 115)
4-Bromofluorobenzene	110	(70 - 124)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONJAN2011

TCLP GC/MS Semivolatiles

Lot-Sample #...: A1A210550-002 **Work Order #...:** MDK3E1AD **Matrix.....:** WG
Date Sampled...: 01/21/11 10:45 **Date Received..:** 01/21/11
Leach Date.....: 01/26/11 **Prep Date.....:** 01/27/11 **Analysis Date..:** 01/28/11
Leach Batch #..: P102605 **Prep Batch #...:** 1027046
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	47	(27 - 110)
2-Fluorobiphenyl	48	(20 - 110)
Terphenyl-d14	68	(44 - 110)
Phenol-d5	35	(10 - 110)
2-Fluorophenol	29	(10 - 110)
2,4,6-Tribromophenol	45	(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-MWDECONJAN2011

TCLP Metals

Lot-Sample #...: A1A210550-002 **Matrix.....:** WG
Date Sampled...: 01/21/11 10:45 **Date Received..:** 01/21/11
Leach Date.....: 01/26/11 **Leach Batch #..:** P102605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1027104						
Mercury	ND	0.0020	mg/L	SW846 7470A	01/28/11	MDK3E1AN
		Dilution Factor: 1		MDL.....: 0.00012		
Arsenic	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDK3E1AF
		Dilution Factor: 1		MDL.....: 0.0032		
Barium	**0.021 B,J,E**	10.0	**mg/L**	**SW846 6010B**	**01/28-01/31/11**	**MDK3E1AG**
		Dilution Factor: 1		MDL.....: 0.00067		
Cadmium	ND	0.10	mg/L	SW846 6010B	01/28-01/31/11	MDK3E1AH
		Dilution Factor: 1		MDL.....: 0.00066		
Chromium	**0.0022 B**	**0.50**	**mg/L**	**SW846 6010B**	**01/28-01/31/11**	**MDK3E1AJ**
		Dilution Factor: 1		MDL.....: 0.0022		
Lead	**0.0034 B**	**0.50**	**mg/L**	**SW846 6010B**	**01/28-01/31/11**	**MDK3E1AK**
		Dilution Factor: 1		MDL.....: 0.0019		
Selenium	**0.0046 B**	**0.25**	**mg/L**	**SW846 6010B**	**01/28-01/31/11**	**MDK3E1AL**
		Dilution Factor: 1		MDL.....: 0.0041		
Silver	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDK3E1AM
		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.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWDECONJAN2011

General Chemistry

Lot-Sample #...: A1A210550-002 **Work Order #...:** MDK3E **Matrix.....:** WG
Date Sampled...: 01/21/11 10:45 **Date Received..:** 01/21/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)	**9.1**		**No Units**	**SW846 9040B**	**01/21/11**	**1021252**
	Dilution Factor: 1			MDL.....:		
Flashpoint	**>180**		**deg F**	**SW846 1010**	**01/25/11**	**1025251**
	Dilution Factor: 1			MDL.....:		

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJAN2011

TCLP GC/MS Volatiles

Lot-Sample #...: A1A210550-003 **Work Order #...:** MDK3K1AA **Matrix.....:** WG
Date Sampled...: 01/21/11 10:40 **Date Received..:** 01/21/11
Leach Date.....: 01/26/11 **Prep Date.....:** 01/27/11 **Analysis Date..:** 01/27/11
Leach Batch #..: P102601 **Prep Batch #...:** 1027305
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	94	(84 - 128)
1,2-Dichloroethane-d4	94	(80 - 121)
Toluene-d8	107	(90 - 115)
4-Bromofluorobenzene	111	(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-MWPURGEJAN2011

TCLP GC/MS Semivolatiles

Lot-Sample #...: A1A210550-003 **Work Order #...:** MDK3K1AD **Matrix.....:** WG
Date Sampled...: 01/21/11 10:40 **Date Received..:** 01/21/11
Leach Date.....: 01/26/11 **Prep Date.....:** 01/27/11 **Analysis Date..:** 01/28/11
Leach Batch #..: P102605 **Prep Batch #...:** 1027046
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	60	(27 - 110)
2-Fluorobiphenyl	48	(20 - 110)
Terphenyl-d14	77	(44 - 110)
Phenol-d5	35	(10 - 110)
2-Fluorophenol	39	(10 - 110)
2,4,6-Tribromophenol	44	(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-MWPURGEJAN2011

TCLP Metals

Lot-Sample #...: A1A210550-003 **Matrix.....:** WG
Date Sampled...: 01/21/11 10:40 **Date Received..:** 01/21/11
Leach Date.....: 01/26/11 **Leach Batch #..:** P102605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1027104						
Mercury	ND	0.0020	mg/L	SW846 7470A	01/28/11	MDK3K1AN
		Dilution Factor: 1		MDL.....: 0.00012		
Arsenic	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDK3K1AF
		Dilution Factor: 1		MDL.....: 0.0032		
Barium	**0.11 B,J**	10.0	**mg/L**	**SW846 6010B**	**01/28-01/31/11**	**MDK3K1AG**
		Dilution Factor: 1		MDL.....: 0.00067		
Cadmium	ND	0.10	mg/L	SW846 6010B	01/28-01/31/11	MDK3K1AH
		Dilution Factor: 1		MDL.....: 0.00066		
Chromium	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDK3K1AJ
		Dilution Factor: 1		MDL.....: 0.0022		
Lead	**0.0024 B**	0.50	**mg/L**	**SW846 6010B**	**01/28-01/31/11**	**MDK3K1AK**
		Dilution Factor: 1		MDL.....: 0.0019		
Selenium	ND	0.25	mg/L	SW846 6010B	01/28-01/31/11	MDK3K1AL
		Dilution Factor: 1		MDL.....: 0.0041		
Silver	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDK3K1AM
		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.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Environmental Quality Mgt., Inc.

Client Sample ID: FWG-IDW-MWPURGEJAN2011

General Chemistry

Lot-Sample #...: A1A210550-003 **Work Order #...:** MDK3K **Matrix.....:** WG
Date Sampled...: 01/21/11 10:40 **Date Received..:** 01/21/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)	7.4		No Units	SW846 9040B	01/21/11	1021252
		Dilution Factor: 1		MDL.....:		
Flashpoint	>180		deg F	SW846 1010	01/25/11	1025251
		Dilution Factor: 1		MDL.....:		

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A210550 **Work Order #...:** MDN6P1AA **Matrix.....:** WATER
MB Lot-Sample #: A1A250000-275

Prep Date.....: 01/24/11
Analysis Date..: 01/24/11 **Prep Batch #...:** 1025275
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	5.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	20	ug/L	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/L	SW846 8260B
Chlorobenzene	ND	5.0	ug/L	SW846 8260B
Chloroform	ND	5.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethylene	ND	5.0	ug/L	SW846 8260B
Tetrachloroethylene	ND	5.0	ug/L	SW846 8260B
Trichloroethylene	ND	5.0	ug/L	SW846 8260B
Vinyl chloride	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(75 - 121)
Toluene-d8	100	(74 - 115)
4-Bromofluorobenzene	89	(66 - 117)
1,2-Dichloroethane-d4	101	(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 #...: A1A210550 **Work Order #...:** MDPNA1AA **Matrix.....:** SOLID
MB Lot-Sample #: A1A260000-075
Leach Date.....: 01/26/11 **Prep Date.....:** 01/27/11 **Analysis Date..:** 01/27/11
Leach Batch #..: P102601 **Prep Batch #...:** 1027305
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	0.025	mg/L	SW846 8260B
2-Butanone (MEK)	ND	0.25	mg/L	SW846 8260B
Carbon tetrachloride	ND	0.025	mg/L	SW846 8260B
Chlorobenzene	ND	0.025	mg/L	SW846 8260B
Chloroform	ND	0.025	mg/L	SW846 8260B
1,2-Dichloroethane	ND	0.025	mg/L	SW846 8260B
1,1-Dichloroethylene	ND	0.070	mg/L	SW846 8260B
Tetrachloroethylene	ND	0.070	mg/L	SW846 8260B
Trichloroethylene	ND	0.050	mg/L	SW846 8260B
Vinyl chloride	ND	0.025	mg/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(86 - 125)
1,2-Dichloroethane-d4	93	(80 - 121)
Toluene-d8	107	(90 - 115)
4-Bromofluorobenzene	110	(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 #...: A1A210550 **Work Order #...:** MDQ881AA **Matrix.....:** WATER
MB Lot-Sample #: A1A270000-046
Leach Date.....: 01/26/11 **Prep Date.....:** 01/27/11 **Analysis Date..:** 01/28/11
Leach Batch #..: P102605 **Prep Batch #...:** 1027046
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	58	(27 - 110)
2-Fluorobiphenyl	52	(20 - 110)
Terphenyl-d14	72	(44 - 110)
Phenol-d5	47	(10 - 110)
2-Fluorophenol	53	(10 - 110)
2,4,6-Tribromophenol	62	(28 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A1A210550 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1A260000-170 **Prep Batch #...:** 1027104						
Leach Date.....: 01/26/11 **Leach Batch #..:** P102605						
Mercury	ND	0.0020	mg/L	SW846 7470A	01/28/11	MDP331AK
		Dilution Factor: 1				
Arsenic	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDP331AC
		Dilution Factor: 1				
Barium	**0.0025 B**	**10.0**	**mg/L**	**SW846 6010B**	**01/28-01/31/11**	**MDP331AD**
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	01/28-01/31/11	MDP331AE
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDP331AF
		Dilution Factor: 1				
Lead	**0.0019 B**	**0.50**	**mg/L**	**SW846 6010B**	**01/28-01/31/11**	**MDP331AG**
		Dilution Factor: 1				
Selenium	**0.011 B**	**0.25**	**mg/L**	**SW846 6010B**	**01/28-01/31/11**	**MDP331AH**
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDP331AJ
		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 #...: A1A210550 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A1A270000-104 **Prep Batch #...:** 1027104						
Mercury	ND	0.0020	mg/L	SW846 7470A	01/28/11	MDRFH1AJ
		Dilution Factor: 1				
Arsenic	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDRFH1AA
		Dilution Factor: 1				
Barium	**0.0014** B	10.0	**mg/L**	**SW846 6010B**	**01/28-01/31/11**	MDRFH1AC
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	01/28-01/31/11	MDRFH1AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDRFH1AE
		Dilution Factor: 1				
Lead	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDRFH1AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	01/28-01/31/11	MDRFH1AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	01/28-01/31/11	MDRFH1AH
		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.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A210550 **Work Order #...:** MDN6P1AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A250000-275
Prep Date.....: 01/24/11 **Analysis Date..:** 01/24/11
Prep Batch #...: 1025275
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Vinyl chloride	107	(53 - 127)	SW846 8260B
1,1-Dichloroethylene	**112**	**(78 - 131)**	**SW846 8260B**
Chloroform	106	(79 - 117)	SW846 8260B
1,2-Dichloroethane	109	(71 - 127)	SW846 8260B
2-Butanone (MEK)	121	(60 - 126)	SW846 8260B
Carbon tetrachloride	95	(66 - 128)	SW846 8260B
Trichloroethylene	**111**	**(76 - 117)**	**SW846 8260B**
Benzene	**105**	**(83 - 112)**	**SW846 8260B**
Tetrachloroethylene	122 a	(79 - 114)	SW846 8260B
Chlorobenzene	**99**	**(85 - 110)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(75 - 121)
Toluene-d8	103	(74 - 115)
4-Bromofluorobenzene	99	(66 - 117)
1,2-Dichloroethane-d4	101	(63 - 129)

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 #...: A1A210550 **Work Order #...:** MDTE11AA **Matrix.....:** SOLID
LCS Lot-Sample#: A1A270000-305
Prep Date.....: 01/27/11 **Analysis Date..:** 01/27/11
Prep Batch #...: 1027305
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	104	**(84 - 120)**	**SW846 8260B**
2-Butanone (MEK)	116	(49 - 120)	SW846 8260B
Carbon tetrachloride	91	(54 - 122)	SW846 8260B
Chlorobenzene	99	**(86 - 111)**	**SW846 8260B**
Chloroform	110	(87 - 123)	SW846 8260B
1,2-Dichloroethane	97	(81 - 114)	SW846 8260B
1,1-Dichloroethylene	107	**(71 - 133)**	**SW846 8260B**
Tetrachloroethylene	90	(79 - 134)	SW846 8260B
Trichloroethylene	95	**(78 - 130)**	**SW846 8260B**
Vinyl chloride	92	(56 - 111)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(84 - 128)
1,2-Dichloroethane-d4	98	(80 - 121)
Toluene-d8	111	(90 - 115)
4-Bromofluorobenzene	119	(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 #...: A1A210550 **Work Order #...:** MDQ881AC **Matrix.....:** WATER
LCS Lot-Sample#: A1A270000-046
Prep Date.....: 01/27/11 **Analysis Date..:** 01/28/11
Prep Batch #...: 1027046
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
o-Cresol	72	(23 - 110)	SW846 8270C
m-Cresol & p-Cresol	74	(28 - 110)	SW846 8270C
1,4-Dichlorobenzene	43	(13 - 110)	SW846 8270C
2,4-Dinitrotoluene	75	(45 - 119)	SW846 8270C
Hexachlorobenzene	68	(46 - 112)	SW846 8270C
Hexachlorobutadiene	40	(10 - 110)	SW846 8270C
Hexachloroethane	36	(10 - 110)	SW846 8270C
Nitrobenzene	70	(29 - 118)	SW846 8270C
Pentachlorophenol	70	(10 - 116)	SW846 8270C
Pyridine	67	(15 - 110)	SW846 8270C
2,4,5-Trichlorophenol	68	(36 - 110)	SW846 8270C
2,4,6-Trichlorophenol	70	(32 - 110)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(27 - 110)
2-Fluorobiphenyl	59	(20 - 110)
Terphenyl-d14	74	(44 - 110)
Phenol-d5	54	(10 - 110)
2-Fluorophenol	59	(10 - 110)
2,4,6-Tribromophenol	70	(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 #...: A1A210550 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A1A270000-104 **Prep Batch #...:** 1027104					
Mercury	108	(50 - 150)	SW846 7470A	01/28/11	MDRFH1AT
		Dilution Factor: 1			
Arsenic	96	(50 - 150)	SW846 6010B	01/28-01/31/11	MDRFH1AK
		Dilution Factor: 1			
Barium	98	(50 - 150)	SW846 6010B	01/28-01/31/11	MDRFH1AL
		Dilution Factor: 1			
Cadmium	94	(50 - 150)	SW846 6010B	01/28-01/31/11	MDRFH1AM
		Dilution Factor: 1			
Chromium	96	(50 - 150)	SW846 6010B	01/28-01/31/11	MDRFH1AN
		Dilution Factor: 1			
Lead	95	(50 - 150)	SW846 6010B	01/28-01/31/11	MDRFH1AP
		Dilution Factor: 1			
Selenium	97	(50 - 150)	SW846 6010B	01/28-01/31/11	MDRFH1AQ
		Dilution Factor: 1			
Silver	99	(50 - 150)	SW846 6010B	01/28-01/31/11	MDRFH1AR
		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 #...: A1A210550 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)		Work Order #: MDLCM1AA	LCS Lot-Sample#: A1A210000-252		
	100	(97 - 103)	SW846 9040B	01/21/11	1021252
		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 #...: A1A210550 **Work Order #...:** MDG4G1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A1A190530-002 MDG4G1AD-MSD
Date Sampled...: 01/19/11 10:35 **Date Received..:** 01/19/11
Prep Date.....: 01/25/11 **Analysis Date..:** 01/25/11
Prep Batch #...: 1025275
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethylene	**115**	**(74 - 135)**			**SW846 8260B**
	111	**(74 - 135)**	**3.6**	**(0-30)**	**SW846 8260B**
Vinyl chloride	112	(49 - 130)			SW846 8260B
	110	(49 - 130)	1.2	(0-30)	SW846 8260B
Chloroform	107	(76 - 118)			SW846 8260B
	107	(76 - 118)	0.21	(0-30)	SW846 8260B
1,2-Dichloroethane	106	(68 - 129)			SW846 8260B
	105	(68 - 129)	0.61	(0-30)	SW846 8260B
2-Butanone (MEK)	115	(54 - 129)			SW846 8260B
	115	(54 - 129)	0.43	(0-30)	SW846 8260B
Carbon tetrachloride	71	(59 - 129)			SW846 8260B
	75	(59 - 129)	6.1	(0-30)	SW846 8260B
Trichloroethylene	**116**	**(66 - 120)**			**SW846 8260B**
	116	**(66 - 120)**	**0.51**	**(0-30)**	**SW846 8260B**
Benzene	**110**	**(72 - 121)**			**SW846 8260B**
	109	**(72 - 121)**	**1.2**	**(0-30)**	**SW846 8260B**
Tetrachloroethylene	125 a	(70 - 117)			SW846 8260B
	122 a	(70 - 117)	2.4	(0-30)	SW846 8260B
Chlorobenzene	**102**	**(80 - 110)**			**SW846 8260B**
	103	**(80 - 110)**	**0.63**	**(0-30)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(75 - 121)
	94	(75 - 121)
Toluene-d8	102	(74 - 115)
	103	(74 - 115)
4-Bromofluorobenzene	94	(66 - 117)
	94	(66 - 117)
1,2-Dichloroethane-d4	90	(63 - 129)
	93	(63 - 129)

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

TCLP GC/MS Volatiles

Client Lot #...: A1A210550 **Work Order #...:** MDJLG1A1-MS **Matrix.....:** SOLID
MS Lot-Sample #: A1A200519-002 MDJLG1A2-MSD
Date Sampled...: 01/20/11 12:10 **Date Received..:** 01/20/11
Leach Date.....: 01/26/11 **Prep Date.....:** 01/27/11 **Analysis Date..:** 01/27/11
Leach Batch #..: P102601 **Prep Batch #...:** 1027305
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**109**	**(85 - 119)**			**SW846 8260B**
	110	**(85 - 119)**	**0.91**	**(0-30)**	**SW846 8260B**
2-Butanone (MEK)	121 a	(49 - 117)			SW846 8260B
	135 a	(49 - 117)	11	(0-30)	SW846 8260B
Carbon tetrachloride	89	(60 - 110)			SW846 8260B
	95	(60 - 110)	6.1	(0-30)	SW846 8260B
Chlorobenzene	**102**	**(85 - 113)**			**SW846 8260B**
	102	**(85 - 113)**	**0.25**	**(0-30)**	**SW846 8260B**
Chloroform	112	(86 - 124)			SW846 8260B
	117	(86 - 124)	4.3	(0-30)	SW846 8260B
1,2-Dichloroethane	102	(80 - 115)			SW846 8260B
	105	(80 - 115)	2.9	(0-30)	SW846 8260B
1,1-Dichloroethylene	**115**	**(67 - 139)**			**SW846 8260B**
	115	**(67 - 139)**	**0.53**	**(0-30)**	**SW846 8260B**
Tetrachloroethylene	93	(74 - 138)			SW846 8260B
	96	(74 - 138)	3.4	(0-30)	SW846 8260B
Trichloroethylene	**102**	**(75 - 134)**			**SW846 8260B**
	102	**(75 - 134)**	**0.51**	**(0-30)**	**SW846 8260B**
Vinyl chloride	100	(51 - 118)			SW846 8260B
	101	(51 - 118)	0.82	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(86 - 125)
	100	(86 - 125)
1,2-Dichloroethane-d4	98	(80 - 121)
	96	(80 - 121)
Toluene-d8	108	(90 - 115)
	110	(90 - 115)
4-Bromofluorobenzene	114	(70 - 124)
	120	(70 - 124)

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

Lot-Sample #...: A1A210550 **Work Order #...:** MDJLG1A0 **Matrix.....:** SOLID
MS Lot-Sample #: A1A200519-002
Date Sampled...: 01/20/11 12:10 **Date Received..:** 01/20/11
Prep Date.....: 01/27/11 **Analysis Date..:** 01/28/11
Prep Batch #...: 1027045
Dilution Factor: 1 **Percnt Moisture:** 4.2

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
o-Cresol	**65**	**(33 - 115)**	**SW846 8270C**
2-Methylphenol	**65**	**(33 - 115)**	**SW846 8270C**
m-Cresol & p-Cresol	**62**	**(46 - 109)**	**SW846 8270C**
1,4-Dichlorobenzene	**36**	**(18 - 110)**	**SW846 8270C**
2,4-Dinitrotoluene	**61**	**(31 - 131)**	**SW846 8270C**
Hexachlorobenzene	**57**	**(36 - 132)**	**SW846 8270C**
Hexachlorobutadiene	**36**	**(18 - 116)**	**SW846 8270C**
Hexachloroethane	**34**	**(18 - 110)**	**SW846 8270C**
Nitrobenzene	**61**	**(19 - 211)**	**SW846 8270C**
Pentachlorophenol	**64**	**(10 - 140)**	**SW846 8270C**
Pyridine	**60**	**(10 - 148)**	**SW846 8270C**
2,4,5-Trichloro-phenol	**57**	**(24 - 143)**	**SW846 8270C**
2,4,6-Trichloro-phenol	**57**	**(36 - 135)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(29 - 111)
2-Fluorobiphenyl	52	(22 - 110)
Terphenyl-d14	65	(40 - 119)
Phenol-d5	31	(10 - 110)
2-Fluorophenol	56	(10 - 110)
2,4,6-Tribromophenol	59	(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 #...: A1A210550 **Matrix.....:** WG
Date Sampled...: 01/21/11 10:45 **Date Received..:** 01/21/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A1A210550-002 **Prep Batch #...:** 1027104							
Leach Date.....: 01/26/11 **Leach Batch #..:** P102605							
Mercury	81	(50 - 150)			SW846 7470A	01/28/11	MDK3E1CC
	78	(50 - 150)	2.9	(0-20)	SW846 7470A	01/28/11	MDK3E1CD
		Dilution Factor: 1					
Arsenic	95	(50 - 150)			SW846 6010B	01/28-01/31/11	MDK3E1AV
	97	(50 - 150)	2.1	(0-20)	SW846 6010B	01/28-01/31/11	MDK3E1AW
		Dilution Factor: 5					
Barium	98	(50 - 150)			SW846 6010B	01/28-01/31/11	MDK3E1AX
	100	(50 - 150)	2.3	(0-20)	SW846 6010B	01/28-01/31/11	MDK3E1A0
		Dilution Factor: 5					
Cadmium	95	(50 - 150)			SW846 6010B	01/28-01/31/11	MDK3E1A1
	97	(50 - 150)	2.3	(0-20)	SW846 6010B	01/28-01/31/11	MDK3E1A2
		Dilution Factor: 5					
Chromium	97	(50 - 150)			SW846 6010B	01/28-01/31/11	MDK3E1A3
	99	(50 - 150)	2.3	(0-20)	SW846 6010B	01/28-01/31/11	MDK3E1A4
		Dilution Factor: 5					
Lead	97	(50 - 150)			SW846 6010B	01/28-01/31/11	MDK3E1A5
	99	(50 - 150)	2.3	(0-20)	SW846 6010B	01/28-01/31/11	MDK3E1A6
		Dilution Factor: 5					
Selenium	93	(50 - 150)			SW846 6010B	01/28-01/31/11	MDK3E1A7
	95	(50 - 150)	2.1	(0-20)	SW846 6010B	01/28-01/31/11	MDK3E1A8
		Dilution Factor: 5					
Silver	99	(50 - 150)			SW846 6010B	01/28-01/31/11	MDK3E1A9
	101	(50 - 150)	2.0	(0-20)	SW846 6010B	01/28-01/31/11	MDK3E1CA
		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 #...: A1A210550 **Work Order #...:** MDK3E-SMP MDK3E-DUP **Matrix.....:** WG

Date Sampled...: 01/21/11 10:45 **Date Received..:** 01/21/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (liquid)						SD Lot-Sample #: A1A210550-002		
	9.1	9.1	No Units	0.11	(0-20)	SW846 9040B	01/21/11	1021252

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A1A210550 **Work Order #...:** MDK3K-SMP MDK3K-DUP **Matrix.....:** WG

Date Sampled...: 01/21/11 10:40 **Date Received..:** 01/21/11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Flashpoint						SD Lot-Sample #: A1A210550-003		
	>180	>180	deg F	0.0	(0-20)	SW846 1010	01/25/11	1025251

Dilution Factor: 1

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: EQM	Project Manager: John Miller	Date: 1-21-11	Chain of Custody Number: 003151
Address: 1800 Carillon Blvd	Telephone Number (Area Code)/Fax Number: 513 825 7500 (7495)	Lab Number: 330	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.: 30240.0006.22			

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: TCLP VOC	TCLP SVOC	TCLP Metals	Reactive Cyanide	Reactive Sulfide	pH	Ignitability	VOC 8260	Special Instructions/ Conditions of Receipt
TripBlank-IDW	1/21/11	0800		X						1			~~X~~ Recd							X	L579
FWG-IDW-MWDECONJAN2011		1045		X			5						X	X	X	X	X	X	X		L579
FWG-IDW-MWPURGEJAN2011		1040		X			5						X	X	X	X	X	X	X		L579

35 of 53

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [X] 21 Days [ ] Other ____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Stephen Stuttgen	1-21-11	1300	1. Received By: TC Corbin	1/21/11	~~1300~~ 1301
2. Relinquished By: TC Corbin	1/21/11	1353	2. Received By: [signature]	1/21/11	1353
3. Relinquished By			3. Received By		

Comments: VOAs in L579

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

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 440210550
North Canton Facility

Client EQM Project RVAAP By: (Signature)
Cooler Received on 1/21/11 Opened on 1/21/11
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☒ Other
TestAmerica Cooler # 4597 Multiple Coolers ☐ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 1 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes ☒ No ☐
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other
6. Cooler temperature upon receipt 4.9 °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? 1/21/11 Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ ~~No ☒~~ Were VOAs on the COC? Yes ☐ No ☒ TCLP VOCs
    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

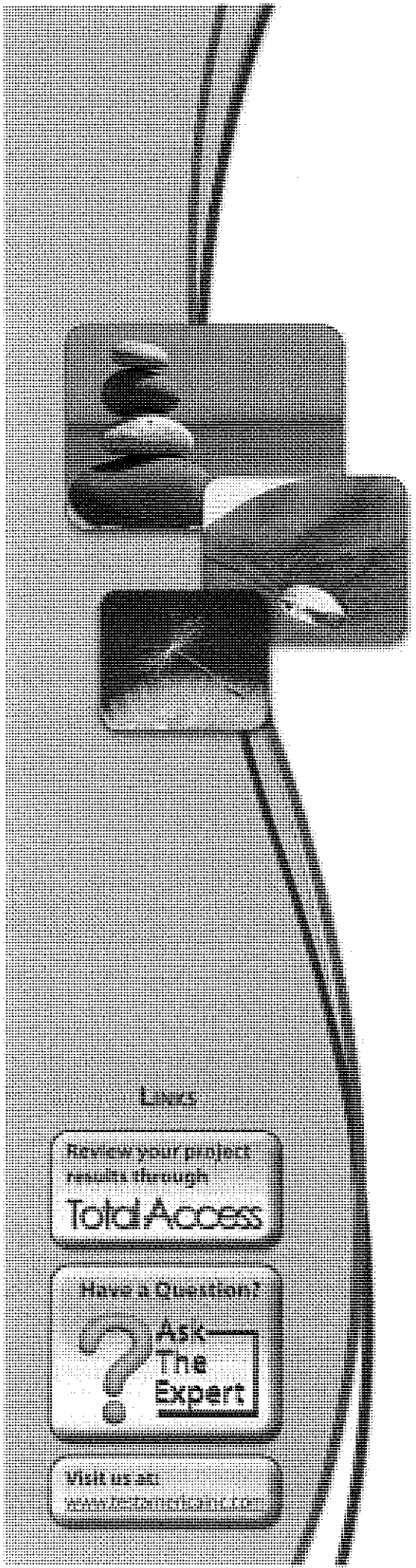
Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant

Discrepancies Cont'd:

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: 480-1123-1
Client Project/Site: A1A210550

For:
TestAmerica Laboratories, Inc.
4101 Shuffel Street NW
North Canton, Ohio 44720

Attn: Mark J. Loeb

Sally J Hoffman

Authorized for release by:
2/4/2011 12:03 PM

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.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
QC Sample Results 7
QC Association 8
Chronicle 9
Certification Summary 10
Method Summary 11
Sample Summary 12
Chain of Custody 13
Sample Receipt Checklist 14

Qualifier Definition/Glossary

Client: TestAmerica Laboratories, Inc.
Project/Site: A1A210550

TestAmerica Job ID: 480-1123-1

Glossary

Glossary	Glossary Description
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.

Job ID: 480-1123-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-1123-1

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: A1A210550

TestAmerica Job ID: 480-1123-1

Client Sample ID: FWG-IDW-MWDECONJAN2011 — **Lab Sample ID: 480-1123-1**

No Detections.

Client Sample ID: FWG-IDW-MWPURGEJAN2011 — **Lab Sample ID: 480-1123-2**

No Detections.

5

Client Sample ID: FWG-IDW-MWDECONJAN2011 — **Lab Sample ID: 480-1123-1**
Date Collected: 01/21/11 10:45 — **Matrix: Water**
Date Received: 01/22/11 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10.0		mg/L		01/26/11 14:25	01/26/11 14:25	1
Sulfide, Reactive	ND		10.0		mg/L		01/26/11 14:25	01/26/11 14:25	1

Client Sample ID: FWG-IDW-MWPURGEJAN2011 — **Lab Sample ID: 480-1123-2**
Date Collected: 01/21/11 10:40 — **Matrix: Water**
Date Received: 01/22/11 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10.0		mg/L		01/26/11 14:25	01/26/11 14:25	1
Sulfide, Reactive	ND		10.0		mg/L		01/26/11 14:25	01/26/11 14:25	1

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 480-3803/1-A
Matrix: Water
Analysis Batch: 3804

Client Sample ID: MB 480-3803/1-A
Prep Type: Total/NA
Prep Batch: 3803

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10.0		mg/L		01/26/11 14:25	01/26/11 14:25	1

Lab Sample ID: LCS 480-3803/2-A
Matrix: Water
Analysis Batch: 3804

Client Sample ID: LCS 480-3803/2-A
Prep Type: Total/NA
Prep Batch: 3803

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Cyanide, Reactive	1000	461.5		mg/L		46	10 - 100

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 480-3805/1-A
Matrix: Water
Analysis Batch: 3807

Client Sample ID: MB 480-3805/1-A
Prep Type: Total/NA
Prep Batch: 3805

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		10.0		mg/L		01/26/11 14:25	01/26/11 14:25	1

Lab Sample ID: LCS 480-3805/2-A
Matrix: Water
Analysis Batch: 3807

Client Sample ID: LCS 480-3805/2-A
Prep Type: Total/NA
Prep Batch: 3805

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Sulfide, Reactive	1000	481.2		mg/L		48	10 - 100

QC Association Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: A1A210550

TestAmerica Job ID: 480-1123-1

General Chemistry

Prep Batch: 3803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-3803/1-A	MB 480-3803/1-A	Total/NA	Water	7.3.3	
LCS 480-3803/2-A	LCS 480-3803/2-A	Total/NA	Water	7.3.3	
480-1123-1	FWG-IDW-MWDECONJAN2011	Total/NA	Water	7.3.3	
480-1123-2	FWG-IDW-MWPURGEJAN2011	Total/NA	Water	7.3.3	

Analysis Batch: 3804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-3803/1-A	MB 480-3803/1-A	Total/NA	Water	9012	3803
LCS 480-3803/2-A	LCS 480-3803/2-A	Total/NA	Water	9012	3803
480-1123-1	FWG-IDW-MWDECONJAN2011	Total/NA	Water	9012	3803
480-1123-2	FWG-IDW-MWPURGEJAN2011	Total/NA	Water	9012	3803

Prep Batch: 3805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-3805/1-A	MB 480-3805/1-A	Total/NA	Water	7.3.4	
LCS 480-3805/2-A	LCS 480-3805/2-A	Total/NA	Water	7.3.4	
480-1123-1	FWG-IDW-MWDECONJAN2011	Total/NA	Water	7.3.4	
480-1123-2	FWG-IDW-MWPURGEJAN2011	Total/NA	Water	7.3.4	

Analysis Batch: 3807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-3805/1-A	MB 480-3805/1-A	Total/NA	Water	9034	3805
LCS 480-3805/2-A	LCS 480-3805/2-A	Total/NA	Water	9034	3805
480-1123-1	FWG-IDW-MWDECONJAN2011	Total/NA	Water	9034	3805
480-1123-2	FWG-IDW-MWPURGEJAN2011	Total/NA	Water	9034	3805

Lab Chronicle

Client: TestAmerica Laboratories, Inc.
Project/Site: A1A210550

TestAmerica Job ID: 480-1123-1

Client Sample ID: FWG-IDW-MWDECONJAN2011 — **Lab Sample ID: 480-1123-1**
Date Collected: 01/21/11 10:45 — **Matrix: Water**
Date Received: 01/22/11 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	9012		1	3804	01/26/11 14:25	RF	TestAmerica Buffalo
Total/NA	Prep	7.3.3			3803	01/26/11 14:25	RF	TestAmerica Buffalo
Total/NA	Analysis	9034		1	3807	01/26/11 14:25	RF	TestAmerica Buffalo
Total/NA	Prep	7.3.4			3805	01/26/11 14:25	RF	TestAmerica Buffalo

Client Sample ID: FWG-IDW-MWPURGEJAN2011 — **Lab Sample ID: 480-1123-2**
Date Collected: 01/21/11 10:40 — **Matrix: Water**
Date Received: 01/22/11 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	9012		1	3804	01/26/11 14:25	RF	TestAmerica Buffalo
Total/NA	Prep	7.3.3			3803	01/26/11 14:25	RF	TestAmerica Buffalo
Total/NA	Analysis	9034		1	3807	01/26/11 14:25	RF	TestAmerica Buffalo
Total/NA	Prep	7.3.4			3805	01/26/11 14:25	RF	TestAmerica Buffalo

Certification Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: A1A210550

TestAmerica Job ID: 480-1123-1

Laboratory	Authority	Program	EPA Region	Certification ID	* Expiration Date
TestAmerica Buffalo		USDA		P330-08-00242	11/25/11
TestAmerica Buffalo	Arkansas	State Program	6	88-0686	07/06/11
TestAmerica Buffalo	California	NELAC	9	1169CA	09/30/11
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568	09/30/12
TestAmerica Buffalo	Florida	NELAC	4	E87672	06/30/11
TestAmerica Buffalo	Georgia	Georgia EPD	4	N/A	03/31/11
TestAmerica Buffalo	Georgia	State Program	4	956	04/01/10
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003	09/30/11
TestAmerica Buffalo	Iowa	State Program	7	374	03/01/11
TestAmerica Buffalo	Kansas	NELAC	7	E-10187	02/28/11
TestAmerica Buffalo	Kentucky	Kentucky UST	4	30	04/12/12
TestAmerica Buffalo	Kentucky	State Program	4	90029	12/31/11
TestAmerica Buffalo	Louisiana	NELAC	6	02031	06/30/11
TestAmerica Buffalo	Maine	State Program	1	NY0044	12/04/12
TestAmerica Buffalo	Maryland	State Program	3	294	03/31/11
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044	06/30/11
TestAmerica Buffalo	Michigan	State Program	5	9937	04/01/11
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337	12/31/11
TestAmerica Buffalo	New Hampshire	NELAC	1	2337	09/11/11
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281	11/17/11
TestAmerica Buffalo	New Jersey	NELAC	2	NY455	06/30/11
TestAmerica Buffalo	New York	NELAC	2	10026	04/01/11
TestAmerica Buffalo	North Dakota	State Program	8	R-176	03/31/11
TestAmerica Buffalo	Oklahoma	State Program	6	9421	09/30/11
TestAmerica Buffalo	Oregon	NELAC	10	NY200003	06/10/11
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281	07/31/11
TestAmerica Buffalo	Tennessee	State Program	4	TN02970	03/31/11
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX	07/31/11
TestAmerica Buffalo	Virginia	State Program	3	278	06/30/11
TestAmerica Buffalo	Washington	State Program	10	C1677	02/10/11
TestAmerica Buffalo	West Virginia	West Virginia DEP	3	252	09/30/11
TestAmerica Buffalo	Wisconsin	State Program	5	998310390	08/31/11

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.
* Any expired certifications in this list are currently pending renewal and are considered valid.

Method Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: A1A210550

TestAmerica Job ID: 480-1123-1

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: A1A210550

TestAmerica Job ID: 480-1123-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-1123-1	FWG-IDW-MWDECONJAN2011	Water	01/21/11 10:45	01/22/11 10:00
480-1123-2	FWG-IDW-MWPURGEJAN2011	Water	01/21/11 10:40	01/22/11 10:00

TestAmerica Laboratories, Inc.

SAMPLE ANALYSIS REQUISTION

Laboratory: TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228

Lab Request: SR123594

Report Package: Report I

Need Analytical Report: 2011-02-04

Client Code: 14091

Project Manager: MARK LOEB

Sample I.D.	Work Order Number	Client Sample ID	Sampling Date	Analysis Required
A1A210550-2	MDK3E	FWG-IDW-MWDECONJAN2011	2011-01-21 10:45	WATER, 7.3.3, Reactive Cyanide (Buffalo)
A1A210550-2	MDK3E	FWG-IDW-MWDECONJAN2011	2011-01-21 10:45	WATER, 7.3.4, Reactive Sulfide (Buffalo)
A1A210550-3	MDK3K	FWG-IDW-MWPURGEJAN2011	2011-01-21 10:40	WATER, 7.3.3, Reactive Cyanide (Buffalo)
A1A210550-3	MDK3K	FWG-IDW-MWPURGEJAN2011	2011-01-21 10:40	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 data included in report.

Please send a signed copy of this form with the report at completion of analysis.

Relinquished by: _____ Date/Time: 1/21/11 1535

Relinquished by: _____ Date/Time: _____

Received for lab by: _____ Date/Time: 1/22/11 0900 2.9°C

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

Login Sample Receipt Checklist

Client: TestAmerica Laboratories, Inc.

Job Number: 480-1123-1

Login Number: 1123
List Number: 1
Creator: Janish, Carl

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?	True	
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.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine 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 TABLE

Ohio | Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

July 19, 2011

RE: RAVENNA ARMY AMMUNITION PLANT,
PORTAGE/TRUMBULL COUNTIES,
FINAL, FWGWMP, JANUARY 2011
SAMPLING EVENT REPORT

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 "Final, Facility-Wide Groundwater Monitoring Program (FWGWMP) January 2011 Sampling Event" document. The document was received at Ohio EPA, Northeast District Office (NEDO), Division of Environmental Response and Revitalization (DERR) on July 18, 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.

The document is approved. If you have any questions, please call me at (330) 963-1207.

Sincerely,

Vicki Deppisch
Hydrogeologist/Project Coordinator
Division of Environmental Response and Revitalization

VD/ds

cc: Eileen Mohr, Ohio EPA, DERR, NEDO

ec: Katie Tait, OHARNG RTLS
Glen Beckham, USACE Louisville
John Miller, EQM
Conni McCambridge, Ohio EPA, DDAGW, NEDO
Mike Eberle, Ohio EPA, DERR, NEDO
Todd Fisher, Ohio EPA, DERR, NEDO
Rod Beals, Ohio EPA, DERR, NEDO
Maj. Ed Meade, OHARNG RTLS
Mark Krivansky, AEC
Mark Nichter, USACE Louisville

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087-1924

330 | 963 1200
330 | 487 0769 (fax)
www.epa.ohio.gov

Environmental
Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

June 27, 2011

RE: RAVENNA ARMY AMMUNITION PLANT,
PORTAGE/TRUMBULL COUNTIES, FWGWMP,
RESPONSE TO COMMENTS, DRAFT,
JANUARY 2011 SAMPLING EVENT REPORT,
DATED JUNE 22, 2011
ID NO. 278001505007

Mr. Mark Patterson
Installation Manager
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, OH 44266

CERTIFIED MAIL

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Response to Ohio EPA Comments, Draft, Facility-Wide Ground Water Monitoring Program (FWGWMP) January 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 June 23, 2011 and is dated June 22, 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).

The comment has been adequately addressed; however, please specify in the final document if the slight bend in the wells is at 6-8 inches or feet below the top of casing. Please forward the 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

VD/ams

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
Justin Burke, Ohio EPA, DERR, Central Office
Mike Eberle, Ohio EPA, NEDO, DERR
Todd Fisher, Ohio EPA, NEDO, DERR
Rod Beals, Ohio EPA, NEDO, DERR
Conni McCambridge, Ohio EPA, DDAGW, NEDO

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087-1924

330 | 963 1200
330 | 487 0769 (fax)
www.epa.ohio.gov

Ohio | Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

June 14, 2011

RE: RAVENNA ARMY AMMUNITION PLANT, PORTAGE/TRUMBULL COUNTIES, FWGWMP, DRAFT, JANUARY 2011 SAMPLING EVENT REPORT

CERTIFIED MAIL

Mr. Mark Patterson
Installation Manager
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, OH 44266

Dear Mr. Patterson:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the "Draft, Facility-Wide Ground Water Monitoring Program (FWGWMP) January 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 Emergency and Remedial response (DERR), on May 11, 2011 and is dated May 10, 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, e-mail from Mr. Mark Nichter, U.S. Army Corps of Engineers (January 2010 Report, Appendix A).

January 2011 Ground Water Sampling Event

Quarterly ground water elevation data were collected from the selected group of 49 monitoring wells during a five-day sampling event on January 17 through 21, 2011 (Section 2.2, page 8). The six Sharon Conglomerate wells were also included in the sampling event. Potentiometric surface maps were not generated from the January 2011 quarterly data.

Low flow purging and sampling techniques were used to minimize excessive turbidity in the wells. However, high turbidity values (>550 NTUs) continued to be a problem during purging activities in the following wells: LL1mw-067, CBPmw-004, CBPmw-006, EBGmw-124, and NTAmw-113. For these wells, purging was continued after the normal stabilization parameters (i.e., temperature, specific conductance, pH) reached stabilization in an attempt to reach turbidity values that are within 10% of each other (Section 2.2, pg. 8).

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087-1924

330 | 963 1200
330 | 487 0769 (fax)
www.epa.ohio.gov

Ground water samples were collected with bladder pump micro-purge equipment, except for DETmw-004, LL1mw-067, and LL1mw-085. The latter were sampled using a Teflon bailer (Section 2.2, pg. 8). The two Load Line 1 wells [LL1mw-067 and LL1mw-085] have historically been noted for either low water volumes or other well conditions. Filtered ground water samples were also collected for metal analyses from wells at the facility. Filtered samples collected through the bladder pump used an inline 0.45 micron filter emptying directly into sample bottles containing nitric acid (Section 2.2, pg. 9).

Ground water samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenols (PCBs), pesticides, propellants (i.e., nitroguandine, nitrocellulose), explosives (i.e., HMX, RDX, nitroaromatics and nitramines), cyanide, and target analyte list (TAL) metals. The Sharon Conglomerate Formation wells were also sampled for nitrate/nitrite (Section 2.3, pg. 9).

Five field duplicate and fifteen trip blank samples, and five quality control (MS/MSD) samples were collected to assess the quality and consistency of sample collection (Section 3.3, pg. 75; Section 2.3, pg. 10). One equipment rinse blank sample was collected each sampling day (Section 3.3, pg. 75).

Attached are two com ments, but only comment one requires a response. If you have any questions, please call me at (330) 963-1207.

Sincerely,

Vicki Deppisch
Project Coordinator
Division of Environmental Response and Revitalization

VD:bo

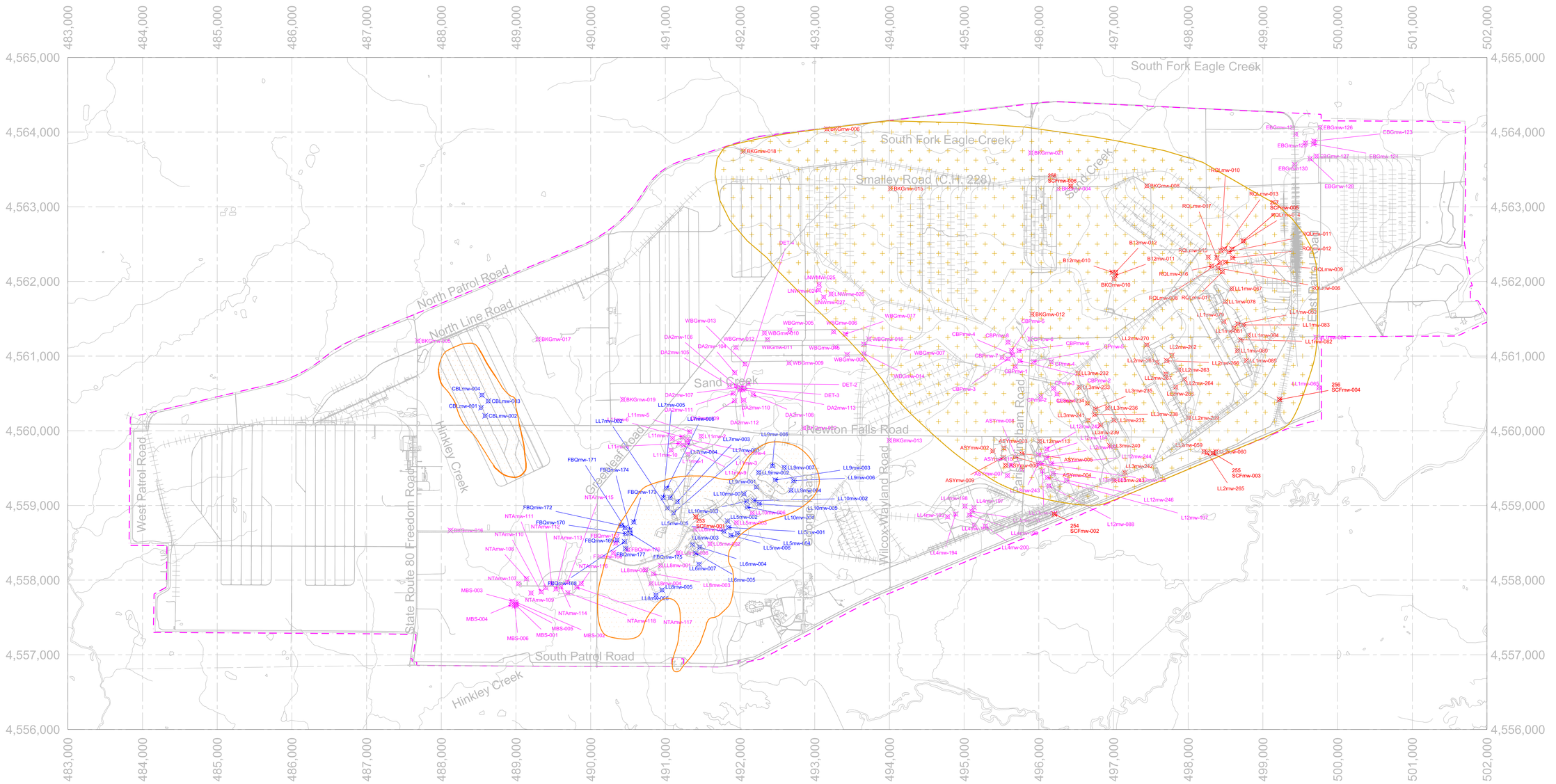
attachment(s)

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
Mike Eberle, Ohio EPA, DERR, NEDO
Todd Fisher, Ohio EPA, DERR, NEDO

PRELIMINARY DRAFT FACILITY-WIDE GROUNDWATER MONITORING PROGRAM
(REPORT ON THE JANUARY 2011 SAMPLING EVENT)
RAVENNA ARMY AMMUNITION PLANT, RAVENNA OHIO
COMMENT RESPONSE TABLE
June 14, 2011

Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response
			Ohio EPA (V. Deppisch/C. McCambridge)		
O-1	Page 8 (Section 2.2-Line 45)		The text indicates that two wells were sampled using bailers "*...due to either low water volumes or well conditions.*" The type of well conditions that would warrant the use of a bailer should be clarified in the submittal.	Please discuss in more detail an explanation as to the type of well condition(s) that would warrant the use of a bailer.	The following text will be added to Section 2.2: *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 feet 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.*
O-2	Page 70 (Section 3.2.5-Table 3-7)		Ohio EPA noted that Table 3-7 contains "rejected data" for PCBs in well SCFmw-005. During the October 2010 sampling only seven pieces of data out of 10,390 were rejected (Section 3.3., pg. 75).	With only seven data being rejected it appears that the RVAAP has addressed this on-going data quality issue. The new steps appear to have prevented the on-going problem of "rejected data" from reoccurring in this sampling event. Ohio EPA recommends that these QA/QC methods continue during future sampling events. No response required.	Noted.



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

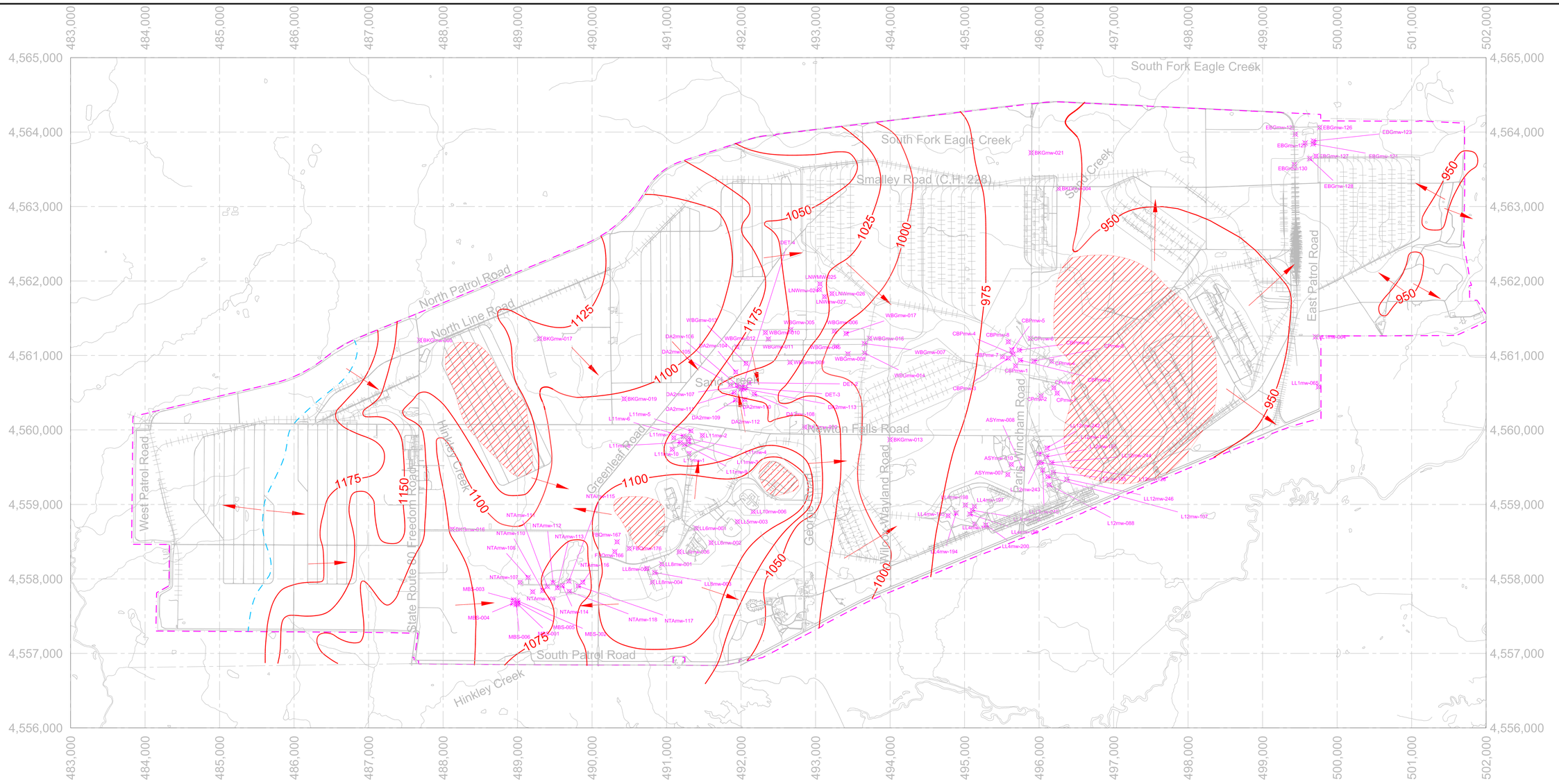
DRAWN	D.TOMO	10/22/07
CHECKED		
APPROVED		

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

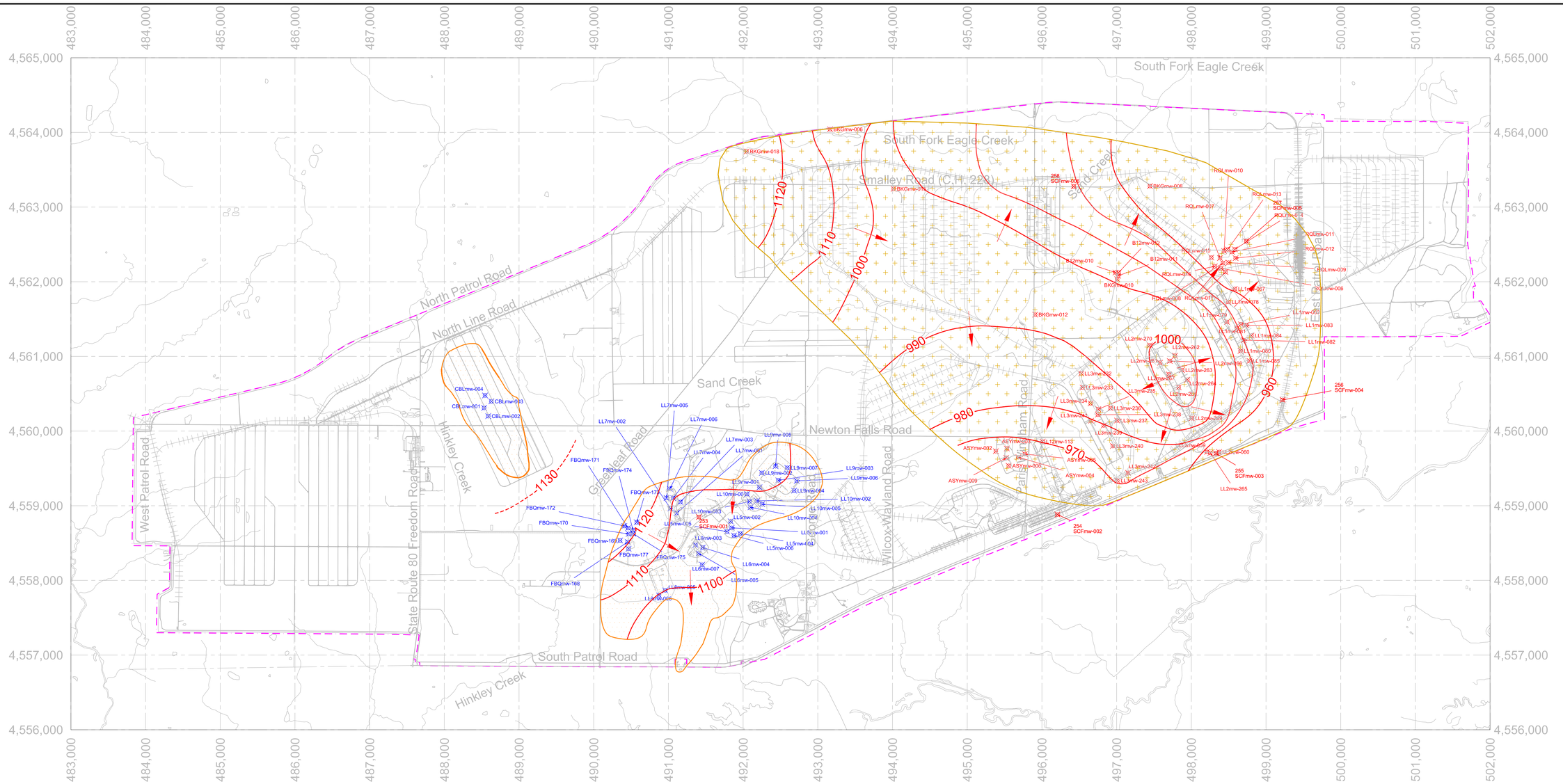
REVISIONS

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